



**WOMEN'S
REFUGEE
COMMISSION**



**MacArthur
Foundation**



**BASELINE SURVEY ON SAFE ACCESS TO AND USE OF
COOKING ENERGY IN NZULO CAMP AND
THE SURROUNDING VILLAGES IN NORTH KIVU,
DEMOCRATIC REPUBLIC OF THE CONGO**

**WOMEN'S REFUGEE COMMISSION
INTERNATIONAL RESCUE COMMITTEE**

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Photos: © Nadia Tabaro/WRC.

Cover photo: Selling firewood is the principal activity many women use to survive.

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Acronyms and Abbreviations

CF	Congolese franc
DRC	Democratic Republic of Congo
FARDC	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
WPE	Women's Protection and Empowerment (IRC program)
WRC	Women's Refugee Commission

INTRODUCTION

Context

The North Kivu Province in eastern Democratic Republic of Congo (DRC) is facing a violent conflict between the Forces Armées de la République Démocratique du Congo (FARDC) and the M23 militia, which has led to massive displacement of the population to internally displaced person (IDP) camps and to host communities. Some IDP camps have been established around Goma, the provincial capital. Some are public or structured permanent camps with humanitarian support; others are spontaneous. One spontaneous camp is Nzulo camp, which was the site for the Women's Refugee Commission (WRC)/International Rescue Committee (IRC) survey.

Geographical location

Nzulo IDP camp site was established in November 2012 after the fall of Goma to the M23. The camp is a 50- to 60-minute drive northwest of Goma, and a 10-minute walk off the main off the main road from Goma to Sake. It is situated on land close to Mazuku, where methane gas constitutes an imminent danger to people.

Site population

Currently Nzulo IDP has 8,116 residents living in 1,981 households. The surrounding village has about 420 households and members of Hutu, Hunde, Tembo and Pygmy communities.

Organization and site management

Households in Nzulo IDP camp are grouped in blocks of 50 to 70, with each block supervised by a block chief. There is a site committee with 15 members, including a president, a vice president, secretary and a committee of elders. The National Refugee Commission has managed the site since February 2013.

Humanitarian needs and living conditions in Nzulo

The IDPs in Nzulo desperately need access to livelihoods, as well as basic and survival needs. This includes food and non-food items such as shelter, bed covers, pans, clothes and hygiene kits. Nzulo camp receives very limited food distribution; according to camp inhabitants, the last food distribution was from a church structure (Armée du salut) in December 2012. The distribution comprised two glasses of rice, a small amount of oil and salt, and did not meet the needs of the community.

The site is the vicinity of FARDC and Congolese National Police (PNC) deployment. There is regular contact on security issues between the United Nations Organization Stabilization Mission in the Democratic Republic of the Congo (MONUSCO), Nzulo camp committee and PNC.

The most obvious tensions in Nzulo are between the host village inhabitants and the camp residents over access to livelihoods.

Survey Objective

The main objective of this survey was to assess the living conditions of IDPs in Nzulo camp and the surrounding village in North Kivu in relation to their acquisition and use of cooking fuel.

Specifically, the survey sought to:

- identify the Nzulo population's cooking fuel needs;
- identify the problems and risks related to firewood and charcoal collection;
- identify, using participatory methods, actions required to fully protect IDP girls and women from risks associated with collecting firewood and charcoal.

Survey Methodology

The survey was undertaken from April 2-20, 2013 and covered Nzulo IDP camp as well as the neighboring village. The data were collected from camp and village inhabitants, including the village leaders, through an individual survey questionnaire. Focus group discussions (FGDs) were conducted only in Nzulo camp.

WRC and IRC conducted four FGDs of 13 women each in Nzulo camp for a total of 52 participants. Verbal consent was secured from all participants. Women and girls were systematically selected from every fourth household in the 32 blocks of Nzulo camp. The four FGDs were classified by: married women, single girls, vulnerable aged women and single mothers.

The WRC and IRC research team conducted 250 individual interviews: 200 with people in Nzulo camp (149 females and 51 males; 80 percent of all interviews) and 50 with people in the village (42 females and 8 males; 20 percent of all interviews). Thus, three-quarters of the interviews were with females and one quarter was with males.

The survey data collection addressed the following information:

Focus group discussion:

- General cooking-related questions
- Information on stove/fuel types
- Information on protection and security

Individual interviews:

- Information on the persons interviewed for the household
- Information on fuel used
- Information on security and risks related to fuel collection

See Annex I for survey results

Findings

Focus Group Discussions

General and administrative information

Fifty-two women and girls, ages 14 to 65 years, living in Nzulo camp participated in four FGDs. Their household average size varied from two to seven people. These women or their female children are responsible for cooking and collecting fuel for the household.

General cooking information

The main foods for the Nzulo population were reported by interviewees as unchanged since displacement. They are: cassava or corn paste, silver fish, sweet potatoes and beans. These take from one to four hours to cook, depending on whether the food includes beans. Participants reported using one bundle of firewood per meal if the food is fish, but up to three or four bundles if it is beans. The reported average use of firewood per week is 7-28 bundles. Focus group participants reported that they cook outside of the tent within the camp, but said that their preference is to cook inside. Most FGD respondents cook and eat once a day because of lack of food and cooking fuel. Women prefer cooking themselves or to train their daughters to cook out of respect for tradition. Women and girls also use firewood and charcoal for heating the house, with the exception of the vulnerable aged group, who reported a fear of house fires.

Most women and girls reported washing food to prepare it prior to cooking. Furthermore, married women reported soaking maize prior to cooking; aged women reported soaking beans 30 minutes prior to cooking; and single mothers reported covering their food with plastic to cook it quickly.

Type of cooking fuel/stove used

No agency has distributed firewood or other cooking fuel in Nzulo camp. Internally displaced women and girls in Nzulo camp reported that they mainly use wood and charcoal, primarily collected in groups of 3-15 people, from Virunga National Park for cooking, for heating and for sale to generate income. In three of four FGDs, women and girls reported selling 50 percent of the firewood collected; single women and girls reported selling 70 percent of the firewood they collected. Women and girls also reported collecting firewood daily, with the exception of the vulnerable aged group, who reported collecting wood 3-6 times per week. Women and girls reported spending an average of 5.6 hours collecting wood, with the vulnerable aged group reporting an average of 8.5 hours and single parents reporting an average of 3.5 hours. All women reported that the trips take longer than they did when they first arrived in Nzulo, with married women stating that they take about two hours longer.

IDP women reported that they seldom buy firewood and charcoal, except when they are unable to collect some due to hindrances such as rain or obstacles in the park. When they do, they reported that it costs approximately 200 Congolese Francs (CFs) per batch. Yet women and girls reported spending 1,000-2,000 CFs per week on cooking fuel. One bundle of firewood is reported, by three of four groups, to last one day if the meal is small like fish. The vulnerable aged group said one bundle is not enough for one day. Due to the limited availability of these combustibles, cooking fuel was reported to be supplemented with dry leaves, old clothing and shoes and plastics. Otherwise, women and girls undercook food or do not cook at all. Women and girls also

said that they work as casual laborers on villagers' farms—weeding gardens, for example—to obtain money to purchase firewood 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. Rather, they sell household items such as clothes and dishes to get food. When asked about whether women are forced to trade favors for food, fuel or other goods, all FGDs reported that some women in the camp offer sex in exchange for food.

The most commonly reported stove in use is the basic three-stone stove. However, vulnerable aged women and single parents also reported using metal stoves.

Information on protection and security

Women and girls in all four FGDs reported theft and rape as the two things they fear the most inside the camp. Women's most commonly mentioned fears outside the camp were rape and gas hole leaks—though bees, snakes and poisonous plants were also mentioned. Women in all four FGDs reported that they had heard of rape happening to their “neighbors” inside and outside the camp. 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 than before displacement, but all groups responded to this question by reporting that a lack of food is a major and desperate concern. Women in all four FGDs also said that if they had a safety concern, they would talk to the National Congolese Police (PNC). Women in two FGDs said they trust the police, though single girls reported that they don't trust them totally. MONUSCO was also mentioned in three of the four FGDs as more trustworthy than other groups. Women and girls in all four FGDs indicated an awareness of the IRC's psychosocial center in the camp and hospital services outside of the camp.

Key Informant Interviews

Household information

The WRC and IRC research team conducted 200 individual interviews in Nzulo camp and 50 interviews in the village. Just over one-half (52 %) of respondents were aged 14-35 years, with just less than half being 36 years and older. Approximately two-thirds (63 %) of the surveyed population in Nzulo camp and the surrounding host community live in households of 3-6 persons while slightly over one-quarter (27 %) of the population lives in households with 7-12 persons. The remaining respondents live in households of 1-2 persons (8 %) or in households with more than 12 persons (2 %).

The overwhelming majority (88 %) of survey respondents earn from \$1-50.00 US per month, while 10 percent of respondents earn between \$51.00 and \$150.00. Among those who earn income, the most commonly cited means to generate income included casual labor (43 %) and farming (28 %), while a few people reported fishing (4 %) and income as shop owners (1 %).

Combustible material for energy

Respondents reported that women are the main collectors of combustible materials such as firewood and charcoal (82 %), while some girls (7 %), men (7 %) and boys (1 %) also collect combustibles. Nearly half (47 %) of respondents reported undertaking firewood collection daily, while approximately one-quarter (27 %) collects 4-5 times per week and the other quarter (26 %) reported undertaking this activity 1-3 times per week. Between November 2012 and March 2013, 80 percent of respondents reported spending 2-5 hours collecting firewood

per day. Slightly over one half (54 %) of firewood collectors undertake the activity in the afternoon and one third (33 %) collect firewood in the morning.

Among respondents who purchased firewood, two-thirds (67 %) reported doing so 30 minutes or more away from their house and nearly one-third (30 %) said the distance was less than 30 minutes. Researchers also observed that firewood and charcoal were sold in the camp.

The majority (90 %) of respondents reported a preference for charcoal over firewood, kerosene or electric power because it is easy to use (79 %) and does not smoke (21 %). Far fewer (7 %) reported a preference for firewood over charcoal, kerosene or electric power, primarily because it is available (78 %) or out of habit (22 %). It appears that displacement has affected the type of combustible (firewood or charcoal) used by some respondents. Prior to displacement, 65 percent of the population used charcoal and 32 percent used firewood as their primary source of cooking fuel, while 85 percent and 15 percent of respondents said that firewood and charcoal, respectively, were currently their primary types of cooking fuel. The great majority (97 %) of IDPs consume between 7 and 21 bundles of firewood per week at a cost equivalent range from \$1.40 – \$4.20 respectively. Just over half (55 %) consume 14 bundles of firewood at a cost equivalent of \$2.80 per day.

Some respondents (38%) also reported using alternatives to supplement firewood, such as farming waste (46 %), dry leaves (42 %) and used plastics, clothes and shoes (13 %).

Stoves

The three-stone fire is the most commonly (87 %) used stove by respondents, though 11 percent reported use of a metallic stove and (2%) reported using a clay stove.

Protection risks and security issues

The majority of respondents (92%) reported perceived risks associated with the collection of combustible materials, with more than one-third (37%) reporting rape as a risk and another one-third (31%) reporting attack by armed men or rebels as a risk. Almost one-quarter (24%) of respondents reported perceived risks as gas holes and, to a lesser extent (7%), insects and animals, with one person also reporting kidnap and murder as perceived risks.

In response to the question, “Were you feeling safe in the past six months and if not, why?” 82 percent of respondents said no, with more than a third (35 %) citing attack for the reason that they do not feel safe, followed by gas holes (27 %), rape (20 %), insects and animals (8 %) and kidnapping (.04 percent) and murder (.04 %). Eighteen percent said they had not perceived risks during firewood collection in the six months prior to displacement. For those who gave the reason of not feeling safe, attacks were the major risk related to firewood collection. After displacement, the major risk related to firewood collection is rape (86 respondents), following by attack (71), then gas holes (55), insects and animals attack (16) and murder (2). Twenty respondents (8 %) declared they did not perceive any risk.

In addition to the risks and security problems related to firewood collection, interviewees reported lack of food as a huge and priority concern leading to desperate measures to do what they can to get food, including selling items such as clothes.

To the question “To whom do you report the incident if someone is attacked and why?” 98 respondents (39.2%) reported that they go to the health center when someone is attacked to access health care and to

prevent diseases. “We cannot do something when we are physically and psychologically weak,” they said. Forty-eight respondents (19.2 %) said they do not report the incidents to avoid stigma, 34 (13.6 %) said that they report incident to humanitarian organizations for the psychological and material support, 30 (12 %) said they report to the household chief because he can advise about how to access needed support, and 16 (6.4 %) respondents declared they report the incident to others, such as the police, to help them identify the perpetrators. Half of respondents said that authorities, such as the police, governor and park managers, never have capacity to manage problems related to fuel collection, while 22 percent think that authorities can manage these problems sometimes and 11 percent said authorities rarely have the capacity to manage problems related to fuel collection. Only five percent of people said that authorities can manage these problems often or always.

Recommendations put forth by respondents to improve security during firewood collection include: distribute fuel (32 %); provide escorts during firewood collection (27 %); collect firewood in a group (12 %); support income-generating activities (10 %); distribute fuel-efficient stoves (FES) (8 %); improve overall country security (6 %); allow park access (2 %). Two percent did not know.

Energy source management

According to the researchers, no sustainable reforestation project has been initiated in Nzulo camp and the demand for combustibles reportedly highly exceeds the environmental capacity. The environment was observed to be bare, with young trees cut before maturity, forcing the population to dig up roots for charcoal production.

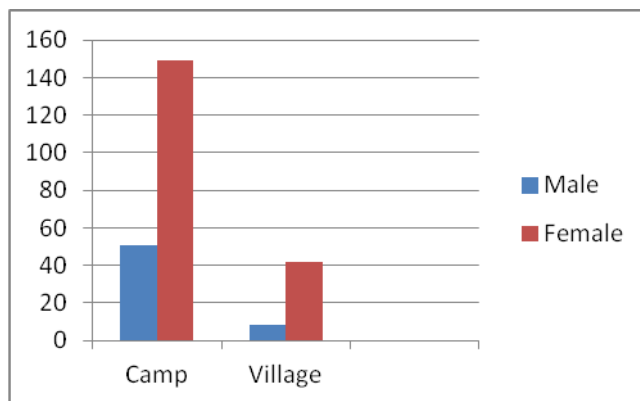
This study also asked interviewees about their preferred type of trees and the rationale for their choice (availability, durable fire product, fast growing, potential for good quality charcoal). A tree referred to as *munzenze* was named most often (34 %), preferred largely (56 %) because of its availability but also as a durable fire product (23 %) and its fast growth (21 %). The second most commonly (24 %) preferred tree was the *mishebere* tree because of its availability (45 %), it makes good quality charcoal (22 %), it is a durable fire product (18 %) and it grows fast (15 %).

More than half (52 %) of interviewees suggested reforestation to improve cooking fuel sources. Other recommendations were to improve income-generation activities (18 %); security in the country (14 %); alternative energy (9 %); and tree management in the park (2 %). Three percent did not know.

Information on Interviewees

Village and Sex

	Sex		Total
	Male	Female	
Camp	51	149	200
Village	8	42	50
Total	59	191	250

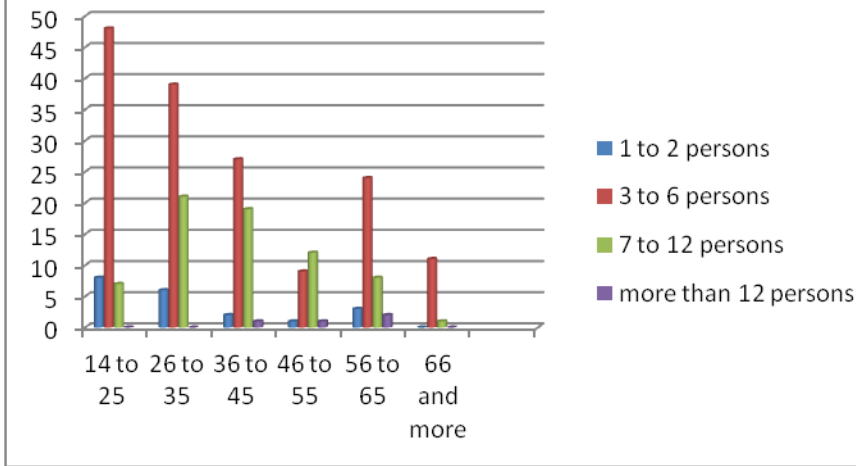


In total, 250 people were interviewed in Nzulo camp and village. 200 people were interviewed in the camp, of whom 51 were males and 149 were females. 50 people (8 males and 42 females) were interviewed in the village.

Households' average size and interviewees' average age

Age scale	People in household				TOTAL
	1 to 2	3 to 6	7 to12	More than 12	
14 to 25	8	48	7	0	63
26 to 35	6	39	21	0	66
36 to 45	2	27	19	1	49
46 to 55	1	9	12	1	23
56 to 65	3	24	8	2	37
66 and over	0	11	1	0	12
TOTAL	20	158	68	4	250

Household average size and average age of interviewee

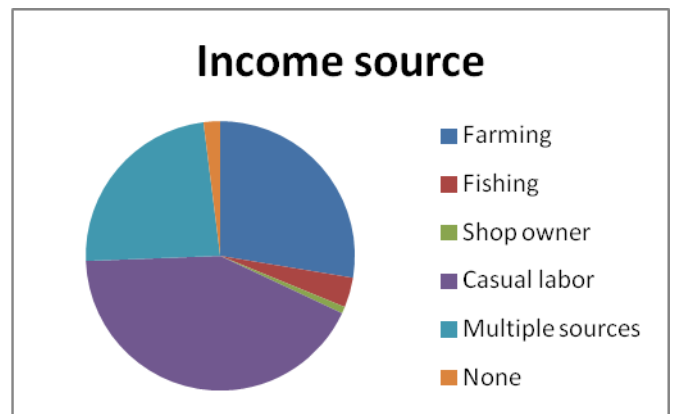


Summary

Of the 250 persons interviewed, 66 were between 26 and 35 years of age; 63 were between 14 and 25 years of age; 49 were between 36 and 45 years of age; 23 were between 46 and 55 years of age; 37 were between 56 and 65 years of age; and 12 were 66 years of age or older. 158 of the respondents have 3 to 6 people in their household; 68 have 7 to 12 people in their household; 20 have 1 to 2 people in their household; and 4 have more than 12 in their household.

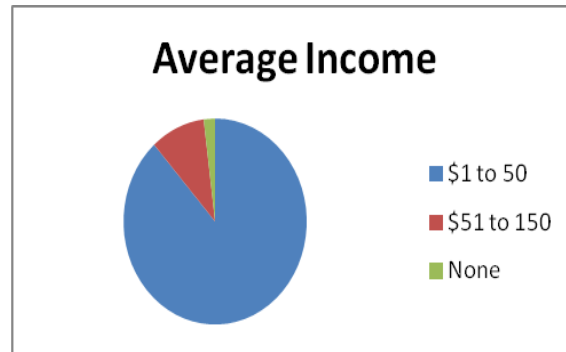
Average income and source of livelihoods

	Frequency	Percentage
Farming	69	27.6
Fishing	9	3.6
Shop owners	2	.8
Casual labor	106	42.4
Multiple sources	59	23.6
None	5	2
Total	250	100.0



250 people reported an income from the following sources: 106 (42.4%) from casual labor; 69 (27.6%) from farming; 9 (5%) from fishing, 2 (1.0%) as shop owners; and 64 (25.6%) said they do not undertake fixed activities because they do several things at the same time.

	Frequency	Percentage
1 to 50	221	88.4
51 to 150	24	9.6
Total	245	98.0
None	5	2.0
Total	250	100.0

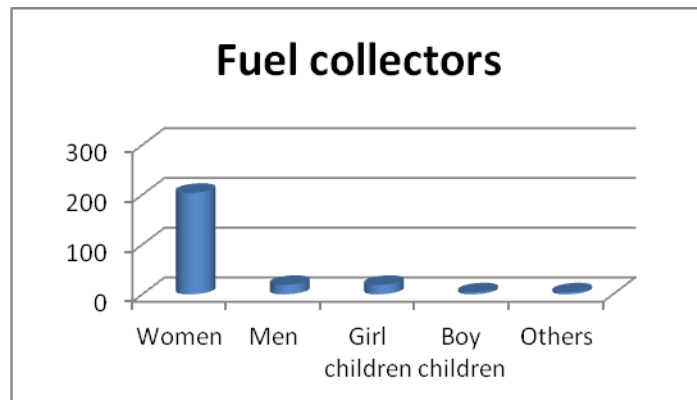


221 (88.8% of interviewees earn a monthly income of \$1.00 to \$50.00 US dollars. 24 (9.6%) of interviewees reported earning between \$51 and \$150 and 5 (2%) said they had no income at all.

Information related to energy use

The main collectors of combustible materials

	Frequency	Percentage
Women	204	81.6
Men	19	7.6
Girl children	19	7.6
Boy children	4	1.6
Others	4	1.6
Total	250	100.0



Interviewees reported that the main collectors of combustible materials are women 204 (81.6%); men 19 (7.6%); 19 (7.6%) girl children; 4 (1.6%) boy children and 4 interviewees (1.6%) said that they are living with relatives (nephew, sisters or cousins) who help them collecting combustible materials.

Time and frequency of collection

Frequency	Departure time for collection				TOTAL
	Early morning	At noon	Afternoon	Evening	
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

Of 246 interviewees who collect firewood, 117 (47.5%) collect firewood daily, 66 (26.8%) undertake firewood collection 4 to 5 days per week and 63 (25.6%) collect firewood 1 to 3 times weekly. Four people do not collect firewood. Slightly over one-half (54%) of firewood collectors undertake the activity at 12 noon and one-third (32.9%) collect firewood in the morning.

Time spent per day in collecting firewood

Time spent collecting firewood in the last 5 months

Hours	Number of respondents	Percent
1	3	1.2
2	45	18.0
3	69	27.6
4	59	23.6
5	28	11.2
6	11	4.4
7	2	.8
8	11	4.4
No fixed time	22	8.8
Total	250	100.0

Time spent collecting firewood at the time of the interview

Hours	Number of respondents	Percent
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	.8
No fixed time	22	8.8
Total	250	100.0

The two tables above show that the time spent collecting firewood has increased over the past five months. In the last five months the time varied between 1 and 8 hours. At the time of the assessment interviews, between 3 and 12 hours per day were spent collecting firewood.

Average distance traveled to purchase firewood

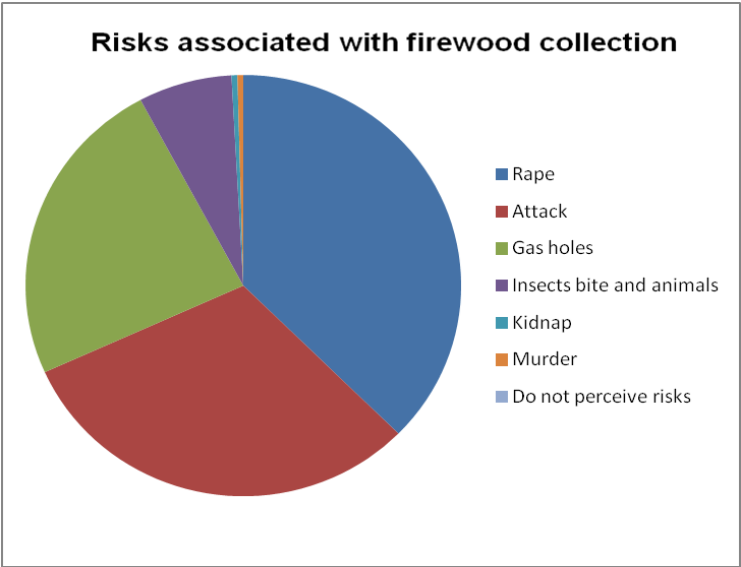
	Number of respondents	Percent
30 minutes	143	57.2
1 hour	2	0.8
Less than 30 minutes	65	26.0
Don't buy	36	16.0
TOTAL	250	100.0

Two-thirds 143 (of 214) interviewees who purchase firewood buy firewood at 30 minutes' walk from their house, 65 (26.9 %) reported purchasing firewood less than 30 minutes from their house and 36 (14.4 %) of

interviewees do not buy firewood. Researchers observed that firewood and charcoal are being sold in the camp.

Risks associated with the collection of combustibles according to participants' perception

Do you perceive risks associated with collection?			
Risks	YES	NO	TOTAL
Rape	86	0	86
Attack	71	0	71
Gas holes	55	0	55
Insects and animals	16	0	16
Kidnap	1	0	1
Murder	1	0	1
Perceive risks	0	20	20
TOTAL	230	20	250



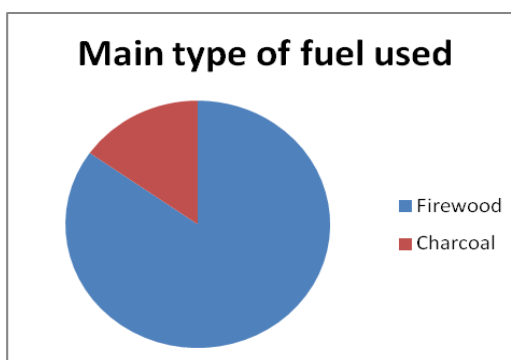
Of the 230 people who perceive risks (92%) associated with the collection of firewood, more than one-third (86 - 37.3%) perceive rape as major risk followed by 71 (30.8%) who perceive risk of attack (especially armed men or rebels), 55 (23.9%) gas holes, 16 (6.9%) insects and animals. One interviewee reported kidnap and another one said that he perceive murder as a risk associated with firewood collection, while 20 (8%) said they did not perceive any risk at the time of firewood collection.

The main combustible and the type of stove (technology) used

Combustible

Main type of fuel used currently

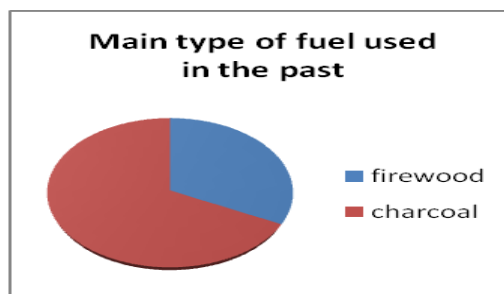
	Frequency	Percentage
Firewood	212	84.8
Charcoal	38	15.2
Total	250	100.0



212 (84.8%) interviewees use firewood as the main cooking fuel and 38 (15.2%) reported charcoal use. Prior to displacement, 169 (67.6%) of interviewees were using charcoal as a combustible and 81(32.4%) were using firewood.

Main type of fuel used in the past

	Frequency	Percentage
Firewood	81	32.4
Charcoal	169	67.6
Total	250	100.0



Comparative table of type of combustible used before and during displacement

Combustible	Before displacement	Currently
Firewood	81	212
Charcoal	169	38
TOTAL	250	250

The displacement has impacted the type of combustible used by IDP interviewees, as well as by community members in the village. Most interviewees have shifted from charcoal to firewood since displacement.

The main reason stated by participants is that firewood is more available than charcoal.

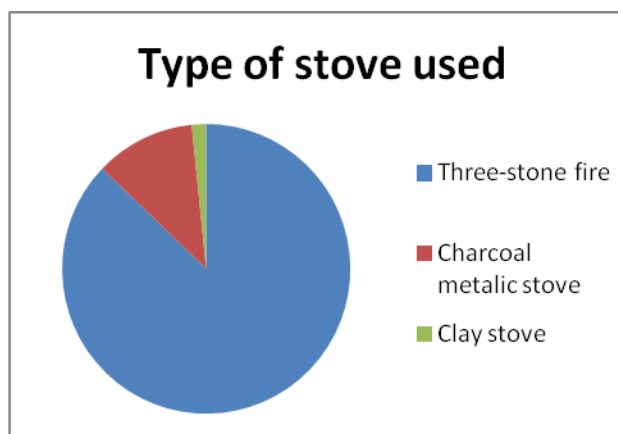
Preferred combustible type and reason

Reason for preference	Type of combustible				TOTAL
	Firewood	Charcoal	Kerosene	Electric power	
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

The above table shows that charcoal is the preferred combustible because it is easy to use and it does not smoke much. Firewood is used for its availability and out of habit.

Stove

	Frequency	Percentage
Three-stone fire	218	87.2
Charcoal metallic stove	28	11.2
Clay stove	4	1.6
Total	250	100.0



The three-stone fire is the most frequently reported stove in use. 218 (87.2%) of interviewees use the three-stone fire, 28 (11.2%) reported use of a metallic stove and 4 (1.6 %) use of a clay stove.



The three-stone fire stove commonly used by IDPs in Nzulo camp.

Firewood is the most commonly used combustible in Nzulo by interviewees who use the three-stone fire stove. The demand for firewood is high because of the large number of IDPs, with a risk of wood shortage according to the interviewees and camp representatives. To cope with the wood shortage in their household, some 96 (38.4%) interviewees reported combining firewood with alternative fuels, such as farm waste 44 (45.8%), dry leaves 40 (41.6%) and used plastics and shoes 12 (12.5%).

Energy source	Do you combine energy sources?		
	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

Normal quantity and weekly consumed combustible price (in Congolese francs)

Number of consumed units	Unit price	Total price	Number of respondents	Percentage
6	200CF/ \$0.2	1 200CF/\$1.2	4	1.6
7	200CF	1 400CF/ \$1.4	49	19.6
9	200CF	1 800CF/ \$1.8	1	0.4
14	200CF	2 800CF/ \$2.8	138	55.2
16	200CF	3 200CF/\$3.2	1	0.4
17	200CF	3 400CF/\$3.4	1	0.4
21	200FC	4 200CF/\$4.2	52	20.8
24	200FC	4 800CF/\$4.8	1	0.4
28	200FC	5 600CF/\$5.6	1	0.4
35	200FC	7 000CF/\$7	2	0.8
Total	177		250	100

On average, a household consumes 14.22 combustible units weekly at a cost of 2,844CF (Congolese francs) = 2.8US dollars.

Energy source management

No sustainable reforestation project has been initiated in Nzulo. However the need for combustibles highly exceeds the environmental capacity according to the WWF.



Around the camp the environment is bare of trees, and the population digs roots for charcoal production.

Young growing trees are being cut before their maturity.



Women and children coming back from firewood collection.

The area offers different types of trees for combustibles. Some are liked more than others, according to their availability, combustibility and durability.

Preferred types of trees and reason for preference

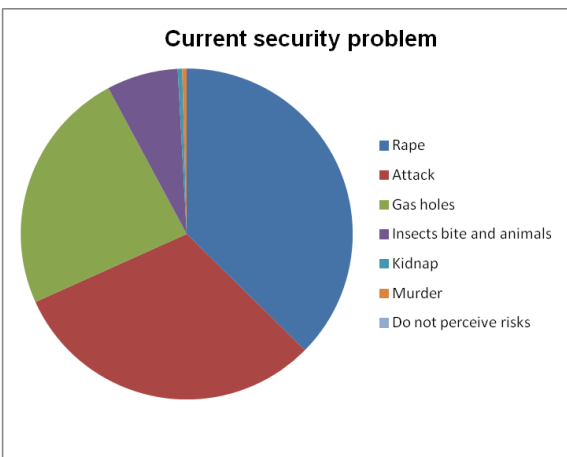
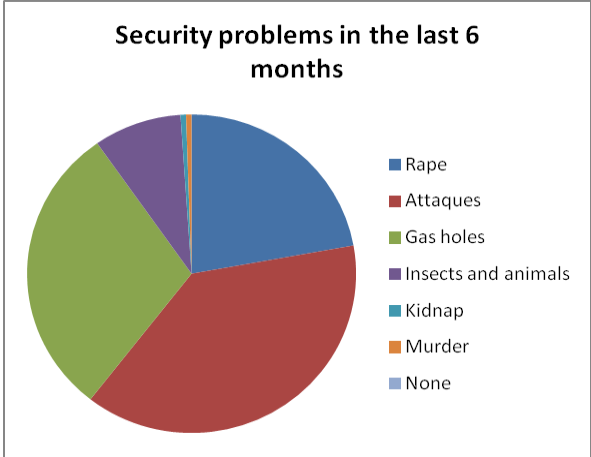
Types of trees (written as given during interview)	Reason for preference				TOTAL
	Available	Durable fire product	Grow fast	Make a good quality of charcoal	
<	48	20	18		86
Misengesi	6		3		9
Mishikiri	12	3	1		16
Misasa	8				8
Mishebere	27	11	9	13	60
Greverie	9	4		2	15
Acasia	10		8		18
Eucalyptus	15	10	6	7	36
TOTAL	135	48	45	22	250

The preferred tree (Munzenze) was preferred primarily for its availability as shown in the table above. Interviewees also reported the fact that it produces a durable fire and grows faster as reasons that they preferred this tree.

Information on security problems in relation to energy collection.

Were you feeling safe in the past six months?

If no, why	Were you feeling safe in the past six months?		
	NO	YES	TOTAL
Rape	41	0	41
Attack	71	0	71
Gas holes	55	0	55
Insects et animals	16	0	16
Kidnap	1	0	1
Murder	1	0	1
None	0	45	45
TOTAL	205	45	250



The majority (82%) of interviewees reported that they did not feel safe in the past six months, primarily related to attacks (34.6%) followed by gas holes (26.8%), rape (20%), insects and animals (7.8%), kidnapping (.04%) and murder (.04%). In addition to the risks and security problems related to firewood collection, interviewees

reported lack of food as a huge and priority concern, leading to desperate measures to do what they can for food, including selling items such as clothes.

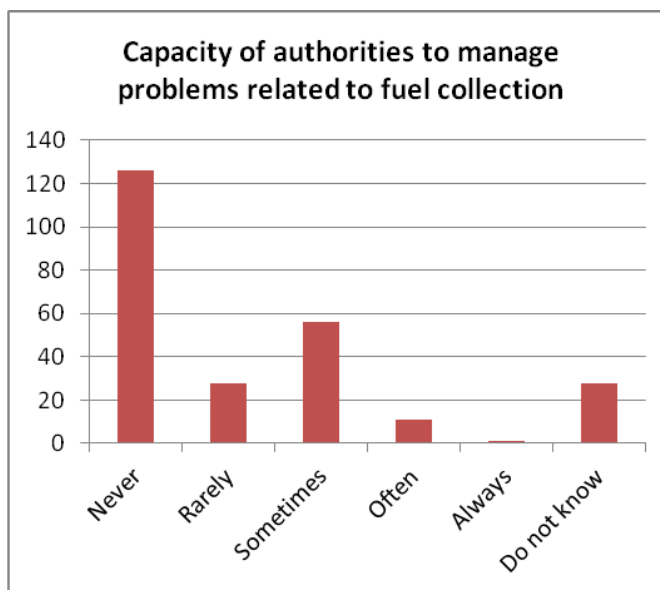
Reporting incidents

	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 informaton	30				24	54
Access health care and prevent disease		98				98
Identify perpetrators					16	16
Avoid stigma				48		48
Materialistic and psychological support			34			34
TOTAL	30	98	34	48	40	250

Most interviewees 98 (39.2%) said they would report to the health center if there is an incident where someone is attacked; 34 (13.6%) would report to NGOs for material and psychological support; 30 (12%) would report to the household chief to help them identify available services that can support them; 24 (9.6%) would report to any other person who can help them and give them some orientation (advice); 16 (6.4 %) would report the incident to the police to help them to identify perpetrators; and 48 (19.2%) said they would not report incidents to avoid stigma from their society.

Capacity of authorities to manage problems related to fuel collection

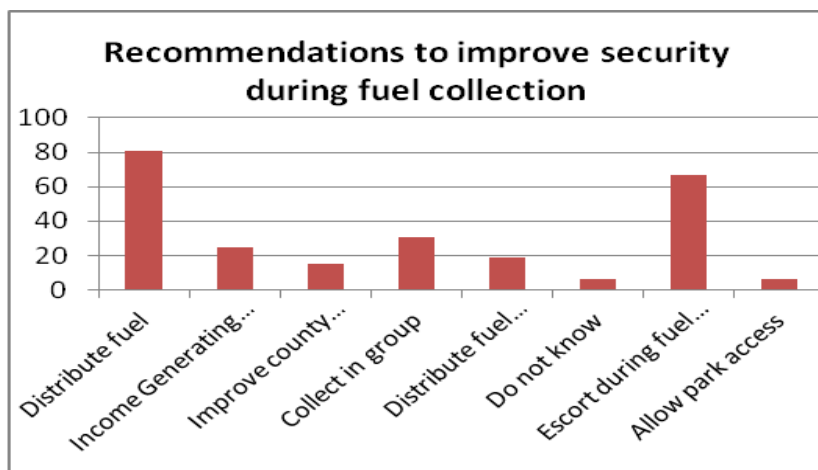
	Frequency	Percentage
Never	126	50.4
Rarely	28	11.2
Sometimes	56	22.4
Often	11	4.4
Always	1	.4
Do not know	28	11.2
Total	250	100.0



Approximately half (50.4%) of interviewees think that the authorities have no capacity to manage the fuel collection problems; 56 (22.4%) think that the authorities can sometimes manage the problems related to fuel collection, 28 (11.2%) think that the authorities can rarely manage the problems, 28 (11.2%) do not know. Only 12 (4.8%) think that the authorities can often or always manage the problems related to fuel collection.

Recommendations to improve security during fuel collection

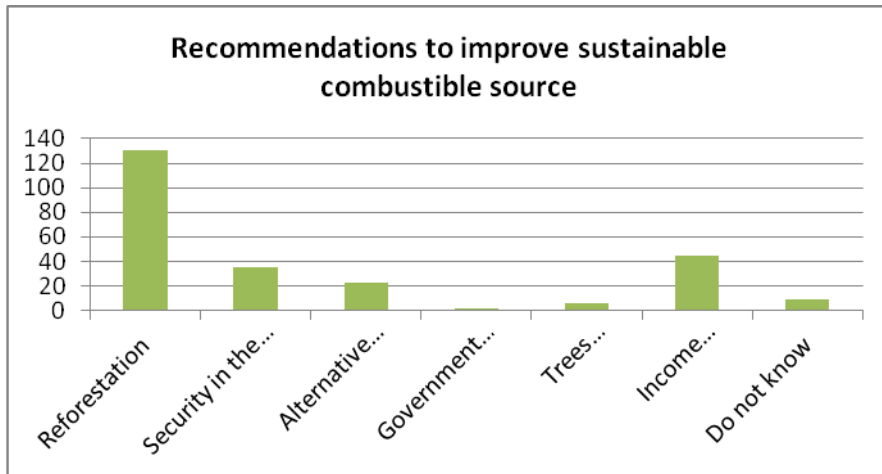
Recommendations to improve security during fuel collection		
Recommendations	Frequency	Percentage
Distribute fuel	81	32.4
Income-generating activities	25	10.0
Improve the country security	15	6.0
Collect in a group	31	12.4
Distribute fuel efficient stoves	19	7.6
Escort during collection	67	26.8
Allow park access	6	2.4
Do not know	6	2.4
TOTAL	250	100



Distributing fuel is the most frequently cited recommendation to improve security during firewood collection, given by 81 (32.4%) or nearly one-third of interviewees. This is followed by escort during collection 67 (26.8%), collecting in group 31 (12.4%), income-generating activities 25 (10.0%), distribute fuel efficient stoves 19 (7.6%), improve country security 15 (6.0%) and allow park access 6 (2.4%). Six persons (2.4%) reported that they did not know how to improve security during fuel collection.

Recommendations to improve sustainable combustible sources, so that future generations can benefit

Recommendations to improve sustainable cooking fuel source		
Recommendations	Frequency	Percentage
Reforestation	130	52
Security in the country	35	14
Alternative energy	23	9.2
Government implication	2	0.8
Trees management in the park	6	2.4
Income-generating activity	45	18
Do not know	9	3.6
TOTAL	250	100



Just over one half (52%) of interviewees recommended reforestation to address sustainable combustible sources while the next most commonly cited recommendation (18%) is to support income-generating activities, followed by security in the country (14%), alternative energy (9.2%), management of trees in the park (2.4%), and government participation or responsibility (0.08%).

CONCLUSION

The findings from this baseline study demonstrate the multi-sectoral impact from the lack of adequate food and a sustainable approach to safe access to firewood and alternative energy in Nzulo camp. The findings demonstrate the effects on IDPs' security and protection, livelihoods, health and nutrition, and the environment.

Cooking fuel is not provided in Nzulo camp and women are the main fuel collectors and therefore the most exposed to risks related to fuel collection, such as attacks, rape and methane gas holes, among others. Women in FGDs reported selling from 50-70 percent of the firewood they collect, showing the demand for income-generation activities regardless of the perceived risk to collecting it. Lack of adequate food was a main concern. Women and girls reported spending an average of 5.6 hours collecting firewood daily, with the length of collection times and their exposure to protection risks increasing due to environmental degradation. Firewood is wasted because of the predominant use of the traditional three-stone fires, with only a few metal and clay fuel-efficient stoves in Nzulo.

The results of this participatory research show that the population's lack of safe access to firewood and alternative energy puts them at protection and health risks and exposes the environment to further damage. It is time to take actions to reduce, if not to eliminate, the risks related to firewood collection before it is too late for the population and environment.

It appears that IRC has undertaken successful information, education and communication (IEC) initiatives regarding the availability and benefits of its services for rape survivors, with nearly 40 percent of interviewees indicating they would report an incident to access health care and prevent disease.

RECOMMENDATIONS

1. Any cooking fuel-related project must specifically consult the most affected population, IDP women.
2. Distribute FES and train women in their benefits and use to reduce the demand for firewood as cooking fuel.
3. Over the medium to long term, approach SAFE using a holistic multi-sectoral approach to adequately address the need for food, income generation, nutrition and the environment.
4. Inter-agency SAFE initiatives should be promoted and supported through the SAFE working group in North Kivu.
5. In a North Kivu SAFE meeting, develop a strategy for an inter-agency effort to implement the recommendations put forth from the survey respondents about their recommendations to improve security during firewood collection and to improve sustainable combustible sources.

Annex I. SURVEY RESULTS

Focus group discussion

GROUP SEGMENTATION AND PARTICIPANTS								
DATE	SITE	SEX	AGE GROUP	GROUP CATEGORIES	NUMBER OF PARTICIPANTS	MODERATOR	HOUSEHOLD AVERAGE SIZE	AGE AND SEX OF THE COOK
26th March 2013	Nzulo camp	F	20-55	Married women	13	Nadia Christine Christian	2 -9	14-55 F
26th March 2013	Nzulo camp	F	14-26	Single women and girls	13	Nadia Christine Christian	2-6	14-26 F
26th March 2013	Nzulo camp	F	55-65	Vulnerable aged women	13	James Joséphine Lucien	2-9	18-60 F
27th March 2013	Nzulo camp	F	20-55	Single mothers	13	James Nadia	5-7	18-55 F

A. GENERAL QUESTIONS RELATED TO COOKING

QUESTIONS	ANSWERS			
	GROUP 1 Married Women	GROUP 2 Single Women and Girls	GROUP 3 Vulnerable Aged Women	GROUP 4 Single Mothers
What is your staple food?	<i>Ugali</i> (cassava gruel) and <i>Sambaza</i> (small fish)	<i>Ugali</i> and <i>Sambaza</i>	Cassava or maize gruel, <i>Sambaza</i> , cassava leaves and beans	<i>Ugali</i> , <i>Sambaza</i> , sweet potatoes and beans
What type of food do you normally cook now in Nzulo?	<i>Sambaza</i> , <i>foufou</i> , cassava leaves, beans and potatoes	<i>Sambaza</i> , <i>foufou</i> , cassava leaves, beans and potatoes	<i>Sambaza</i> , cassava leaves and <i>Ugali</i>	Beans, potatoes, cassava leaves and gruel, and <i>Sambaza</i>
How many meals per day do you cook?	One	One	One	One
How long does it take?	2 hours or 3 hours if it's beans	1-3 hours	1-4 hours	1-4 hours
Where do you cook?	Outdoors	Outdoors	Outdoors	Outdoors
Where do you prefer cooking and why?	Indoors to avoid flies and to secure our meals	Indoors	Indoors, but our hut is too small, it can easily burn	Indoors
Which type of fuel do you use for cooking?	Firewood and rarely charcoal	Firewood and charcoal	Firewood and charcoal	Firewood and charcoal
How much do you use on average per week?	7-28 bundles per week: one bundle per meal if it's small fish and 3-4 bundles if it's beans	7-21 bundles per week: one bundle for fish and 3 for beans	10-28 bundles per week	10-28 bundles per week
What/How did you cook before displacement?	We used to cook beans, cassava leaves and <i>foufou</i> . We used the three-stone fire and iron stove.	We used to cook beans, cassava leaves and potatoes. Three-stone fire, iron stove.	Three-stone fire, iron stoves and clay stove. We used to cook beans, potatoes, cassava leaves and gruel.	Beans, potatoes, cassava leaves and gruel, and small fish. We used three stone fire, iron and clay stove.

How do you prepare food before you cook it? Are there ways that you prepare your food for easy cooking?	If it's maize we soak it one day before cooking, but beans we wash and cook directly.	We simply wash food before cooking.	We wash our food before cooking. We soak beans for 30 minutes before cooking.	We cover our food with plastic, to cook quickly.
What is the most important part of cooking for you, apart from making food edible?	The fact of knowing that we are going to eat soon. To be with our husbands also.	The fact of showing that we know how to cook, the fact of having something to cook, the part of tasting the food.	When the children are gathering around the fire.	When the children are gathering around the fire, hoping to eat soon, the joy of feeding my family.
Do you like cooking alone or with other members of the family, and why?	We like cooking with our daughters from 14 to mentor them in cooking.	No, we like cooking alone.	We like cooking with our family members (children).	We like cooking with family.
For what other purpose, if any, do you use firewood/fuel?	For heating and lighting	For heating, and sometimes to defend ourselves if we are attacked	For cooking only; we fear house burning	For heating

B. QUESTIONS ON STOVE/FUEL TYPE

	GROUP 1 Married Women	GROUP 2 Single Women and Girls	GROUP 3 Vulnerable Aged Women	GROUP 4 Single Mothers
What do you currently use for cooking?	Three-stone fire	Three-stone fire	Three-stone fire and iron stove	Three-stone fire and iron stove
How do you get your firewood? (i.e., do you collect it yourself, rely on others to collect it, purchase it or have it given to you?)	We collect firewood in the park, small pieces of wood around the camp and sometimes purchase.	We collect it ourselves.	We collect firewood and purchase sometimes.	We collect it ourselves.
IF COLLECT				
How often must you collect it per week?	Every day for use and for sale	Every day	3-6 days a week	Every day
How long do such trips take (in hours)?	4-5 hours/day	4-8 hours/day	7 -10 hours/day	2-5 hours/day

Do the trips take longer than they did when you first arrived in Nzulo?	Yes, about 2 hours more	Yes	Yes	Yes
Do you go alone or with others? If so, how many others?	We go in groups of 10-15 people.	No, we go in groups of 6-10 people.	We go in groups of 3-10 people.	We go in groups of 5-10 people.
Where exactly do you go to find the wood? Why do you go that location?	In the park or around the camp, depending on the availability of wood. We go where there is wood to collect.	In the park, because the wood is available.	Inside the park, because the wood is available there.	Inside the park, because we find wood there, especially when it's for sale.
Do you do anything else while you are out collecting firewood?	We pick some vegetables and help villagers weed their fields for food or little money.	Yes, we pick some potatoes in villagers' farms and look for vegetables.	Yes, we gather grass to build our house, we weed villagers' farms.	We seek food for our family.
Does the same person who collected firewood before displacement still collect it, or is it a different person?	It's the same person. Firewood collection is women's task.	The same person.	Yes, it's the same person who still collects firewood.	It's the same person who still collects firewood.
If different, what is the reason for the change?	N/A	N/A	N/A	N/A
Do you collect firewood to sell?	Yes, most of us collect firewood to sell.	Yes, for now that is the only income-generation activity we have.	Yes, we collect firewood for sale, also.	Yes.
If so, about what percentage of the wood that you collect are you selling?	It depends on the need, but we normally sell 50% of the firewood we collect.	We sell about 70% of wood we collect.	We sell about 50% of the wood we collect for other needs	We sell about 50% of the wood collected.
IF PURCHASED				
What do you purchase? (i.e., firewood or charcoal)	Firewood and sometimes charcoal	Firewood and charcoal	Firewood and charcoal	Firewood and charcoal
Where do you purchase it?	Inside the camp	Inside the camp	Inside the camp	Inside the camp
If firewood: How much does a bundle of firewood cost?	200 FC (Congolese francs)	200FC	200FC	200FC
If charcoal: How much does one meal's worth of charcoal cost?	200 FC /batch	200FC/batch, but this portion is not sufficient	200FC/ batch	200FC-500FC/batch, depending on the size

		to cook		of the batch
Roughly how much do you spend per week on cooking fuel?	1,000 FC-2,000FC/week	1,000FC-2,000FC/week	1,500FC-2,000FC/week	1,000FC-2,000FC/week
If firewood: How long does one bundle of wood last you?	One day, and sometimes it's not enough	One day (one meal) if it's small fish	Half day; it's not enough to cook one meal	One day, but only if it's small fish
Where do you get the money from?	Carrying burdens for sellers from Goma or working in villagers' farms	Working in villagers' farms, carrying burdens for sellers	Working for villagers or carrying light burdens from the lake to the bus for Goma sellers	Carrying burdens for people in the market, selling wood or charcoal and working in villagers' farms
Why do you purchase the wood/charcoal rather than collect it yourself?	When it's raining or when someone is sick	Sometimes when we are afraid to go in the park, and when we are on our daily labor to get money and do not have time to collect firewood	We are not very strong, sometime we feel too weak to go in the park. We just purchase wood.	If we did something else that will pay us, like carrying burdens or helping villagers to weed their farms, and do not have time to collect wood.
Did you used to collect wood before?	Yes, we used to collect wood before	Yes, we used to collect firewood	Yes, we used to collect firewood before	Yes.
If you don't collect firewood, what do you with the time left over?	Work for villagers, fetch water	Daily labor and household work	Work for villagers to get money or do household work	Seek for food and do housework (e.g., fetching water)
Has the cost of firewood/charcoal changed over the time you have been displaced?	No, the cost is still the same	No, the cost is still the same	No, the cost is the same. It's the size of the bundle which has been reduced.	No, the cost did not change
IF GIVEN				
Who is providing you with cooking fuel?	No one	No one	No one	No one
How often?				
How much?				

Do you use the fuel, or do you sell it? Or use some and sell some?	Use some and sell some; it is not given but collected	Sell some of the wood we collect	Sell some and use some	Use some and sell some
Is the amount you receive enough to cook for your family every day?	We do not receive any; we purchase or collect. But it is still not enough sometimes.	We do not receive any.	We do not receive firewood.	We do not receive firewood.
If not, how do you supplement the wood you're given?	We use dry grass.	We use everything that can burn (pieces of old clothes, old shoes, plastics, grass).	We use grass or we undercook the meal.	We use grass.
Have you discussed your firewood/fuel needs with the agency that grants it to you?	There is no agency that gives fuel.	No agency gives fuel.	There is no agency that gives fuel.	There is no agency that gives fuel.
Do you feel you have enough fuel to cook the number/amount of meals you would like to, thoroughly?	No	No	No	No
If not, what do you do to cope? (skip meals; undercook meals; purchase or trade for remainder; etc.)	Skip meals or purchase if possible.	The neighbor helps with wood if he/she has any.	We purchase some, and if there is no money, we skip meals.	If we can't purchase, we skip the meal.
If you trade for fuel, what do you trade? Do you ever trade food?	No, we don't trade for fuel, only for food.	Sometimes if we got some potatoes from villagers, we sell some for fuel.	We don't trade for fuel.	We do not trade for fuel; we trade for food.
If you trade food for fuel, do you still have enough to eat?	We do not trade food, because we lack it in this camp.	No, we don't have enough food to eat, so we do not trade food.	We don't trade food because we do not have enough food.	There's no food to trade; we traded our dignity kit for food.
Have you heard of any women being forced to trade favors for food, fuel or other goods?	Yes, for food, but it was an agreement, not forced.	Yes , for food	Yes, for food	Yes, not forced but an agreement to get food.

C. PROTECTION QUESTIONS

	GROUP 1 Married Women	GROUP 2 Single Women and Girls	GROUP 3 Vulnerable Aged Women	GROUP 4 Single Mothers
<i>Perception of safety</i>				
Are there things that you fear inside the camp?	Theft and rape	Theft and rape: our tents do not have doors, so it's easy for someone to get in.	Theft and [methane] gas from the lake	Theft and rape
Are there things that you fear outside the camp?	Yes, rape and the gas holes	Rape when going to collect firewood	Gas holes, bee attacks	Rape, gas holes, bee attacks, snakes and poisonous plant injuries
What/Who make you feel unsafe?	Rebels	Soldiers, rangers	Armed groups	Rebels, soldiers and rangers
What do you fear most?	To be raped	To be raped	Attacks	To be raped
Is this fear a recent concern, or has it been there for a long time	It has been there for a long time. The war is here for a long time.	Yes, it has been there for a longtime.	It's not recent. It has been there for a long time.	It has been there for a long time.
How do these concerns compare with how you felt before you were displaced?	It's almost the same, but here we are in a group, so we feel safer than before. But lack of food here is too high.	The safety is better inside the camp than before (in our village), but lack of food is becoming unbearable.	Now we really need food; we will die of hunger.	We feel safer than before, but the food concern is higher than others.
Are there times/days where you feel safer to leave the camp? Why?	No, but we leave because we have no choice.	No, the risks are always there, but we have no choice.	No, because the risk are always there.	No, outside the camp we do not feel safer because of rebels, solders, etc.
Are there circumstances/locations where you feel safer? Why?	Only arround the camp, if we could not go far.	If we collect wood around the camp, but still is not safe because of the gas holes.	Inside the camp, because we have the police to keep the camp.	No, even in the camp we organize patrols.

What would make you feel safer?	We don't know.	The end of this war.	Security, so we can go back to our home.	Provide fuel and food in the camp, so we don't go into the park every day.
What would you normally do to protect yourself?	We have patrols organized in the camp by the camp representative and young people.	We have whistles in the camp. If there is something we blow the whistle and the patrol can come.	Young people are organized to do patrol and we have the police.	We organize patrols in the camp, and we have the police keeping the security.
REPORTING				
Have you ever heard of something happening to your "neighbor" inside/outside the camp?	Outside the camp.	Yes	Yes	Yes
What exactly?	Rape	Rape	Thefts and rape	Rape while collecting firewood
What did she/he do about it?	She went to see the president of the camp, and the IRC medical center.	Saw the president of the camp, police and medical care.	Report to the camp president and the police, then refer to medical care.	We reported the case to the president of the camp, to the police and she went to IRC medical care.
Who would you talk to about safety?	Camp representatives and police	Camp representatives and police	Police	Police
Are you aware of any available service within the camp/outside the camp to refer to?	There is an IRC psychosocial center in the camp, the police and the president of the camp, and a hospital outside the camp.	Yes, IRC psychosocial center in the camp and hospital outside the camp	IRC center and hospital	IRC psychosocial center and hospital outside the camp
Would you go to it/refer other people (e.g., family members, friends, neighbors) to it?	Yes	Yes	Yes	Yes
Why/Why not?	Because they are near and willing to help.	Because it's the one center which helps people here.	It's the center that we know that helps	It's the center that is near the camp.

			survivors near the camp.	
<i>Perception of security/escorts/patrols</i>				
How do you feel about the police, army and other regular armed forces?	We trust the police posted around and inside the camp, not other armed forces.	We don't trust them totally.	We fear FARDC so much; there are rapists among them and thieves.	We trust the police, no other armed forces.
Do they make you feel safer or less safe?	No, but we simply trust them.	Sometimes safer, sometimes not.	The police make us feel safer.	The police yes, the army less safe.
Are there some groups that you trust more the other?	Yes, police and MONUSCO	MONUSCO	Yes, police	MONUCSO and police
Why?	The MONUSCO are not corrupt and most of the police posted here come from this village.	They are paid, therefore may be afraid to do stupid things like corruption and rape.	They don't ask for money from us IDPs. They protect us.	They are more serious than any other group.
<i>Concept of firewood patrols</i>				
Would you ever participate in a firewood patrol?	Yes, with MONUSCO.	Yes, if it's with MONUSCO.	Yes, with the police.	Yes, with police or MONUSCO only.
Why or Why not?	We feel a little safe with them, even if it's not totally.	They are not rapists, even if sometime they date girls.	They know us, and can protect us.	They are serious. The police are corrupt, but they are not rapists.