

Gender-Based Violence in Humanitarian Settings: Cookstoves and Fuels

A SYSTEMATIC REVIEW OF THE EVIDENCE BASE

DEVELOPED BY:

GLOBAL ALLIANCE FOR CLEAN COOKSTOVES



August 2016

Acknowledgements

The Global Alliance for Clean Cookstoves is grateful to the individuals and organizations who provided comments on this work, including the International Center for Research on Women (ICRW), the Women's Refugee Commission (WRC), and the United Nations Environment Programme (UNEP).



This work was made possible through generous support by UK aid from the UK government.

Acronyms

ARRA	Administration for Refugee and Returnee Affairs (Ethiopia)
CRSM	Comite De Rehabilitation Du Sinistre Dans Son Milieu
DRC	Democratic Republic of the Congo
FAO	Food and Agriculture Organization of the United Nations
GIZ	Deutsche Gesellschaft für Internationale Zusammenarbeit
GBV	Gender-based violence
IASC	Inter-Agency Standing Committee
IDP	Internally displaced person
ILF	International Lifeline Fund
IRC	International Rescue Committee
M&E	Monitoring and evaluation
POU	Point of use
SAFE	Safe Access to Fuel and Energy
SAG	Sustainable Action Group
UN	United Nations
UNHCR	United Nations High Commissioner for Refugees
UNICEF	United Nations International Children's Emergency Fund
WFP	United Nations World Food Programme
WRC	Women's Refugee Commission

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Executive Summary

This paper outlines evidence and highlights gaps in knowledge on the impacts that adoption of clean and/or efficient cookstoves and fuels can have on reducing the risk and incidence of gender-based violence (GBV)ⁱ in humanitarian settings.ⁱⁱ Its purpose is to assess existing project data and research in order to evaluate the evidence base, better understand whether humanitarian energy programs intending to reduce GBV measured their impacts, and learn whether or not these projects actually reduced the risk or incidence of GBV. The paper provides a brief background on how energy access fits within humanitarian response structures, analyzes the documented impacts of humanitarian cooking interventions on GBV, identifies gaps in evidence and knowledge, and finally provides recommendations to strengthen the evidence base.

In 2015, 65.3 million people, or one person in 113, were forcibly displaced from their homes as a result of persecution, conflict, generalized violence, or human rights violations;¹ approximately 20 million additional people were displaced by natural disasters.² Many of these crisis-affected people rely on three-stone fires and traditional fuels such as wood, animal dung, and agricultural waste for cooking, which negatively impacts their health, food security, safety, and the environment. On average, firewood collectors, who are predominantly women, walk more than five hours per trip to collect fuel to cook food for their families, risking physical and sexual assault, abuse, and injury.³ A 2014 United Nations High Commissioner for Refugees (UNHCR) survey found that, over a six-month period, incidents of

ⁱFor the purpose of this paper, the term “gender-based violence” (GBV) refers specifically to non-partner violence – sexual and physical abuse committed by someone other than an intimate partner – unless otherwise indicated.

rape were reported by 4% of refugee households in Uganda and 5% of refugee households in Chad.⁴ These numbers are almost certainly underestimated due to the stigma around reporting rape; however, even these low estimates mean that more than 1,197 refugee women living in UNHCR’s camps in Uganda and Chad were raped during firewood collection over a six-month period – an average of seven rapes per day.ⁱⁱⁱ The risks of GBV related to firewood collection for cooking in crisis settings are clear. What is lacking is a compelling evidence base that shows whether and how cookstove and fuel projects can reduce these risks and reduce the overall frequency of GBV.

A stronger evidence base on the relationship between GBV and cookstove and fuel interventions could spur action among donors, policymakers, and other critical stakeholders, as well as increase the prioritization of energy access for crisis-affected people. Addressing research gaps has catalyzed action on lifesaving interventions in other humanitarian sectors, and energy access could benefit from the same approach. Evidence that conclusively links clean and/or efficient cooking technologies and fuels to life-enhancing outcomes for crisis-affected people is crucial to ensuring continued funding and implementation of effective cooking solutions in humanitarian settings. It is also necessary to ensure that donors and implementers can make informed decisions about which programs to implement to maximize protection impacts.

While there is evidence of the connection between firewood collection and the risk of GBV, a review of the existing literature and project data reveals

ⁱⁱ In this paper, “humanitarian settings” refers to refugee camps, settlements of internally displaced people (IDPs), or similar crisis-affected areas.

ⁱⁱⁱ This assumes that only one woman per household was raped once over a period of six months.

that there is a dearth of evidence on if and how clean cooking interventions have a significant protection impact. Of the 126 humanitarian cooking projects reviewed as part of this research, 15 included reduction of GBV as an objective. Within these 15 projects, only one attempted to measure incidence of GBV before and after the project's implementation. Four of the 15 projects measured other baseline indicators related to the risk of GBV, such as the number of firewood collection trips, hours spent collecting firewood, and/or distance traveled, but only two of these projects also measured the selected indicators at the end-line. In these two projects, the data showed that improved access to cooking energy reduced the time spent collecting firewood and the number of collection trips. The one project that measured the frequency of GBV in both baseline and end-line assessments, a firewood project in Dadaab, Kenya by UNHCR and Deutsche Gesellschaft für Internationale Zusammenarbeit (GIZ), found that providing firewood to refugees resulted in fewer firewood collection trips, which in turn resulted in a reduced number of rapes occurring during firewood collection. Given an increase in rapes within the camp overall, however, the number of total rapes in the camp did not significantly decrease during the implementation period.

Since the vast majority of projects (86.7%) did not measure baseline and end-line data for any GBV-related indicators, the credible evidence base for which types of humanitarian energy programs effectively reduce the risk and incidence of GBV remains small, thus demonstrating the critical importance of conducting further research and rigorous evaluations of projects being implemented with an objective to reduce GBV. Addressing the evidence gap will also allow humanitarian implementers and donors to better identify and implement programs that will have

the greatest impact on GBV outcomes for crisis-affected populations.

Based on a review of the data, the Global Alliance for Clean Cookstoves (Alliance) recommends the following actions for donors, humanitarian agencies, and energy stakeholders:

First, donor organizations should commission research and evaluations by humanitarian implementers and academic institutions to examine GBV-related indicators and outcomes associated with cookstove and/or fuel interventions through baseline, mid-line, and end-line assessments. A portion of these evaluations should include research on GBV incidence, in order to explore whether or not there truly is a causal relationship between cookstove and fuel programs and reduced incidence of GBV.

Second, academic institutions undertaking research in these settings should train implementing partners to conduct quality baseline and end-line evaluations that include GBV indicators, in order to build the capacity of energy project stakeholders to properly measure and evaluate protection concerns.

Third, a consortium of researchers, implementers, and GBV and energy experts, in coordination with the [Safe Access to Fuel and Energy \(SAFE\) Humanitarian Working Group](#), should create a common methodology and set of indicators for measuring protection outcomes related to energy access in humanitarian settings. It should build on existing measurement approaches and best practices of the GBV sector and be directly applicable for humanitarian and energy practitioners. The methodology should consider the larger landscape of GBV in humanitarian settings in order to understand how decreasing firewood collection needs may affect overall incidents of GBV and take into account potential unintended consequences.

Lastly, the Alliance urges GBV and protection experts to increase their involvement in the humanitarian energy sector, including through participation in the SAFE Humanitarian Working Group, to ensure that the energy access sector can leverage the deep knowledge of GBV experts in the design, implementation, and monitoring and evaluation (M&E) of these projects.

Given the potential impact on the lives of women and girls, immediate action must be taken to research and fully understand the connections between GBV and cooking interventions. However, increasing access to clean and/or efficient cookstoves and fuels will not completely address problems related to women's exposure to GBV in humanitarian settings. Research should therefore examine the multifaceted aspects of protection risks, such as the various reasons (other than fuel collection) that women and girls might leave their camps or travel far from their homes.

Introduction

The world is currently witnessing the highest levels of human displacement on record, with millions of people requiring protection and support. Addressing protection concerns associated with firewood collection, an activity predominantly conducted by women, is an overlooked area in humanitarian response. In refugee camps in sub-Saharan Africa, women spend five hours on average per trip to collect firewood, which puts them at risk for physical and sexual assault, abuse, and injury.⁵ In a 2014 study, UNHCR found that 42% of the 673 refugee households surveyed in

^{iv} This evidence led to the World Health Organization (WHO) becoming an advocate for household water treatment. The WHO sponsored the formation of the International Network to Promote Household Water Treatment and Safe Storage of which over 30 representatives from UN agencies, private sector entities, international NGOs and research institutions are a part. In 2011 UNICEF joined as a sponsoring partner.

Chad had at least one member that experienced incidents of physical or verbal assault, theft, attempted rape, rape, or other forms of violence during firewood collection over the six-month recall period. The same survey conducted in Uganda's refugee camps found similar statistics: 41% of 702 surveyed households had at least one member that experienced violence during firewood collection over the past six months.⁶

In order to understand how to strengthen the evidence base on the connections between firewood collection needs and the risk and incidence of GBV, the Alliance mapped existing research and identified knowledge gaps. A strong evidence base can spur action among donors, policymakers, and other critical stakeholders and increase the prioritization of energy access for crisis-affected people. The humanitarian community has seen similar examples in other sectors, where addressing research gaps propelled prioritization of lifesaving interventions. For example, before 2003, Point of Use (POU) water treatment technologies were not widely used due to the lack of evidence connecting their usage to health outcomes. After several seminal field studies demonstrated the benefits of POU technology, advocates, including UN agencies, private sector entities, and international non-governmental organizations, recommended wide scale implementation of POU's.^{iv} A similar body of evidence linking clean cooking technologies and fuels to life-enhancing outcomes can be equally critical to achieving large-scale implementation and adoption of the most effective clean and efficient cooking interventions in humanitarian settings. It is also necessary to ensure that donors

The organization advocates for household water treatment and continues to develop the body of research around POU's. References:

Clasen, T., Mintz, E. (2004). International network to promote household water treatment and safe storage [news and notes]. *Emerg Infect Dis* [serial on the Internet]. Retrieved from <http://dx.doi.org/10.3201/eid1006.040243>.

and implementers can make informed decisions about which programs to implement to maximize protection impacts.

Background

Energy in Humanitarian Response

In order to put the recommendations from this literature review in context, it is important to understand the history of energy access in humanitarian response and current efforts to increase it. In March 2007, the United Nations Inter-Agency Standing Committee Task Force on Safe Access to Firewood and Alternative Energy ([IASC Task Force on SAFE](#)) was established “to reduce exposure to violence, contribute to the protection of and ease the burden on those populations collecting wood in humanitarian settings worldwide, through solutions which will promote safe access to appropriate energy and reduce environmental impacts while ensuring accountability.” The task force was originally co-chaired by UNHCR, the UN World Food Programme (WFP), and the Women’s Refugee Commission (WRC). Fourteen other agencies participated in the task force “to help create a formal commitment to address the pressing needs and challenges related to cooking fuel in humanitarian settings.” Over the course of two years, the task force increased recognition of cooking energy needs and created IASC guidelines on how to develop a coordinated, multi-sectoral fuel strategy for humanitarian settings, which takes into account associated protection risks.⁷

Today, the IASC Task Force on SAFE has transitioned into the [SAFE Humanitarian Working](#)

[Group](#), and is no longer housed under the IASC. It is currently co-chaired by the Alliance, WFP, and the Food and Agriculture Organization of the United Nations (FAO) with a Steering Committee comprised of UNHCR, Mercy Corps, WRC, and other humanitarian agencies. The Working Group’s scope has expanded to encompass energy access for crisis-affected populations more broadly – including cooking, heating, lighting, and powering – and it operates as the central coordinating body for energy response in humanitarian settings. However, energy access is still largely unaccounted for in humanitarian assistance, including in the United Nations cluster system.^v This means that no one agency or organization is formally mandated by the UN and its partners to coordinate energy response in humanitarian crises.

The risks of non-partner physical and sexual violence related to firewood collection for cooking in crisis settings are clear. Recognition of this connection prompted the inclusion of fuel-efficient cookstoves as a minimum standard in humanitarian response under the guidelines of the Sphere Project – a voluntary initiative that brings a wide range of humanitarian agencies together around the common goal of improving the quality of humanitarian assistance and accountability of humanitarian actors. The Sphere Handbook, *Humanitarian Charter and Minimum Standards in Humanitarian Response*, is an internationally-recognized set of common principles and universal minimum standards in life-saving areas of humanitarian response.^{vi} The inclusion of efficient cookstoves in this Handbook reflects the growing recognition from humanitarian organizations of the risks associated with cooking-related needs. Humanitarian agencies are now

^v For more information on the UN cluster system, visit <http://www.unocha.org/what-we-do/coordination-tools/cluster-coordination>.

^{vi} Cooking is included in “Non-food items standard 3.” For more information, see the Sphere Handbook: <http://www.spherehandbook.org/en/non-food-items-standard-3-cooking-and-eating-utensils/>.

working together to promote alternative fuels, clean and efficient cookstoves, and better overall energy access in humanitarian settings.

Existing Research

Overall, there is a general lack of quantitative evidence on impacts, particularly regarding if and how increasing access to energy can actually reduce incidence and risk of GBV. In a 2014 study funded by the World Bank, Arango et al. summarized the existing research: “Some have argued that energy and water-related projects may reduce the time women spend fetching firewood or water, and thus could minimize their exposure to assault and harassment.” In trying to find more information, however, they “found no impact evaluations that tested these interventions.”⁸ In a 2015 landmark study conducted by Mary Ellsberg et al. entitled “Prevention of violence against women and girls: what does the evidence say?” the authors found that there were “several areas in which the evidence base is small or non-existent. We found... few evaluations from humanitarian and emergency situations.” Among interventions to prevent non-partner sexual assault they found that “no studies address sexual violence in conflict settings.”⁹ Beyond the lack of impact evaluations and rigorous assessments related to energy access and the risk of GBV, energy project reports and data are also often buried in grey literature – materials and research produced by organizations that are not available to outside researchers or the public.

^{vii} This project map continues to be updated and can be viewed at <http://www.safefuelandenergy.org/where-we-work/index.cfm>. In addition to cooking projects, it also includes lighting, heating, and powering interventions.

Research Approach

For this paper, the Alliance conducted a literature review in 2014 of 41 existing reports related to GBV and cookstoves and fuel in humanitarian situations, including refugees, internally displaced people (IDPs) and those affected by natural disasters. Keywords used in the search included GBV, violence, sexual assault, firewood, fuel, and cookstoves.

In an effort to uncover existing quantitative data demonstrating that cooking interventions reduced the risk of GBV, the Alliance undertook a detailed project mapping exercise. The Alliance solicited information from 16 members of the SAFE Humanitarian Working Group and more than 70 other humanitarian organizations, requesting them to submit project documents, reports, and evaluations of all energy access interventions they had implemented in humanitarian settings. Through this process, the Alliance collected information on more than 126 energy projects and mapped them publicly on the SAFE Humanitarian Working Group’s website.^{vii}

The Alliance then determined which projects stated GBV-related objectives.^{viii} Of the 126 projects, 15 (12%) included at least one objective related to GBV. These 15 projects (see Appendix) were then systematically analyzed to determine what impacts were demonstrated regarding reduction in the incidence of GBV, reduction in GBV-related risks during firewood collection, and improvement in perceived safety during firewood collection.

^{viii} Objectives were included that used any of the following terms: sexual and gender-based violence (SGBV), GBV, rape, violence against women, attacks on women, and/or sexual assault.

Analysis of Humanitarian Cooking Project Impacts Related to GBV

Reduction in the Incidence of GBV

Of the 15 projects with GBV-related objectives, only one attempted to measure the incidence of GBV. This is likely due to the fact that GBV incidence is notoriously difficult to measure due to the social stigma around sexual assault, which leads to underreporting. There are also ethical and security issues with collecting GBV information, as some victims may fear reprisal. Researchers must be careful to appropriately train and sensitize interviewers, and must have referrals on hand for victims that report sexual violence and request counseling or other services.

The project that did examine incidence of GBV at both the baseline and end-line was the UNHCR and GIZ Firewood Project – a firewood distribution intervention in Dadaab camp in Kenya – and it only measured the incidence of rape among women. It also did not include other types of non-partner violence, including attempted rape, sexual harassment, and physical assault. The evaluation “demonstrated a decrease of 45% in *firewood collection* rapes during periods of full firewood coverage” due to the fact that women were making fewer trips and spending less time collecting firewood.^{ix} However, despite being provided all of the firewood necessary for their household cooking needs, women and girls continued to collect firewood. This reflected the need to earn income from firewood sales among some groups of women and girls. Additionally, rapes in non-firewood collection situations increased during the same period. The evaluation found that the overall incidence of reported rape decreased by no more than 10% during the period

^{ix} Italics added.

when households were fully supplied with firewood.¹⁰ In other words, while supplying enough firewood to meet household cooking needs appears to have reduced the incidence of rapes, it is difficult to conclude that firewood provision is a wholly successful strategy for preventing rape or that firewood distribution alone is enough.

More evidence is needed to conclusively connect reductions in the time spent and distance traveled during firewood collection to a reduction in total incidence of non-partner rape, attempted rape, sexual harassment, and sexual and physical assault in humanitarian settings. Further research must also consider the larger landscape of GBV in humanitarian settings in order to understand how decreasing firewood collection needs may affect overall incidences of GBV. This includes considering potential unintended consequences, such as an increase in intimate partner violence if women spend more time in their homes.

Reduction in Time Spent on Firewood Collection

Of the 15 humanitarian energy projects that included reduction in GBV as an objective, four measured baseline factors related to the risk of GBV during firewood collection. Only two of the 15 projects also measured these same outcomes at the end-line: the Berkeley Darfur Stove Project (now called Potential Energy) in Darfur, Sudan, and a 2013 project by WRC in North Kivu, the Democratic Republic of the Congo (DRC).

There are several factors indicating a higher risk profile for the incidence of GBV during firewood collection, including:

- (1) The number of firewood collection trips;
- (2) The number of hours spent during one roundtrip to collect firewood; and
- (3) The number of kilometers traveled during one roundtrip to collect firewood.

It should be noted that while these indicators – fewer and/or shorter trips to collect firewood – can be used as a proxy to measure **exposure** to potential GBV risks, **they cannot be used to measure the incidence of GBV directly.**

The results of the baseline/end-line comparisons from these two projects were promising in terms of reducing factors related to the risk of GBV. WRC found that after the distribution of improved cookstoves in North Kivu, the average number of hours IDP women spent per firewood collection trip decreased from six to four hours, and the number of collection trips dropped by 50%.¹¹ Similarly in Darfur, the Berkeley Darfur Stove Project found that 50% of respondents reported switching entirely from collecting to purchasing firewood after receiving their efficient stove.¹²

However, a reduction in firewood collection trips, hours spent during firewood collection, or distance travelled during firewood collection cannot be used as proxies for a reduction in the incidence of GBV unless there is evidence that conclusively connects a reduction in these risks to a reduction in the actual occurrence of GBV. The UNHCR/GIZ Firewood Project evaluation makes this connection to some extent, but it only examines the incidence of rape during firewood collection, omitting other critical areas of GBV, such as attempted rape, sexual harassment, and assault.

Gaps in Evidence and Knowledge

From this desk review, it is clear that there have been very few evaluations measuring the GBV impacts of cookstove and fuel interventions in humanitarian settings. The vast majority of projects (86.7%) that the Alliance examined did not measure GBV-related indicators at all. Of those projects that included objectives to reduce GBV, 93.3% did not measure baseline or end-line incidence of GBV. As discussed above, the one project that did conduct this analysis (UNHCR/GIZ) only focused on non-partner rapes during firewood collection – leaving out other types of GBV that can also occur during firewood collection. Two projects measured indicators related to the risk of GBV during firewood collection; however, clearer association between reducing the time spent and trips taken to collect firewood and reducing GBV during firewood collection is needed. More research must be done to establish the link between these secondary indicators and actual reduction in GBV incidence.

Furthermore, there is a lack of understanding around which cooking interventions are likely to have the strongest protection impacts. For example, only providing firewood that meets household cooking needs may not address all GBV related to firewood collection, as seen in the UNHCR/GIZ Dadaab project. Moreover, as discussed above, existing research does not consider potential unintended consequences of reducing firewood collection trips.

Recommendations

It is critical for humanitarian agencies to begin measuring GBV-related indicators at both the baseline and end-line of humanitarian cooking interventions, especially when a reduction in GBV is stated as a project objective. This is the only way to determine which cooking interventions are most likely to reduce risks and incidences of GBV, as well as increase awareness, prioritization, and funding of the most effective interventions.

Based on a review of the data, the Alliance recommends the following actions for donors, humanitarian agencies, and energy stakeholders:

First, donor organizations should commission research and evaluations conducted by humanitarian implementers and academic institutions to examine GBV-related indicators and outcomes associated with cookstove and/or fuel interventions through baseline, mid-line, and end-line assessments. A portion of these evaluations should include research on GBV incidence, in order to explore whether there truly is a causal relationship between cookstove and fuel programs and reduced incidence of GBV.

Second, academic institutions undertaking research in these settings should train implementing partners to conduct quality baseline and end-line evaluations that include GBV indicators, to build the capacity of energy project stakeholders to properly measure and evaluate protection concerns.

Third, a consortium of researchers, implementers, and GBV and energy experts, in coordination with

the [Safe Access to Fuel and Energy \(SAFE\) Humanitarian Working Group](#), should create a common methodology and set of indicators for measuring protection outcomes related to energy

access in humanitarian settings. It should build on existing measurement approaches and best practices of the GBV sector and be directly applicable for humanitarian and energy practitioners. The methodology should consider the larger landscape of GBV in humanitarian settings in order to understand how decreasing firewood collection needs may affect overall incidences of GBV and take into account potential unintended consequences.

Lastly, the Alliance urges GBV and protection experts to increase their involvement in the humanitarian energy sector, including through participation in the SAFE Humanitarian Working Group, to ensure that the energy access sector can leverage the deep knowledge of GBV experts in the design, implementation, and M&E of these projects.

Conclusion

To fully achieve the humanitarian sector's mandate to protect the world's most vulnerable, energy needs of crisis-affected people must be met. Given the potential protection impacts, especially for women and girls that can result from access to energy, immediate action must be taken to better understand the potential connections between meeting cooking needs and reduced risk and incidence of GBV. This need is only becoming greater with the surge of displaced people, and the resulting urgency to meet their needs.

Appendix

Of 126 humanitarian energy projects reviewed as part of this research, the following 15 included included objectives to reduce GBV. The following table summarizes, respectively, whether or not each project measured: (1) incidence of GBV (at the baseline and/or end-line), (2) indicators associated with the risk GBV at the baseline, and (3) indicators associated with the risk GBV at the end-line.

To access more information on these projects, visit the Where We Work page on the SAFE Humanitarian Working Group's website at www.safefuelandenergy.org.

Title of Projects with GBV Objectives	Location	Implementing organization	Project dates	Baseline/ End-line: Incidence	Baseline: Risks	End-line: Risks
UNHCR Eco-stove and Solar Street Light Project	Bangladesh	UNHCR	2008 - 2010	No	No	No
Production of briquettes as an alternative energy source	North Kivu, DRC	WFP, CRSM	2013 - Present	No	No	No
Protecting women against all the risks related to firewood collection: saving lives, saving futures	North Kivu, DRC	WRC, IRC	2013 - 2013	No	Yes	Yes
Gaia CleanCook Stove and Ethanol Project for Refugees in Jijiga and Asosa	Somali Region, Ethiopia	UNHCR, ARRA, the Gaia Association	2005 - Present	No	No	No
Stove Distribution and Livelihoods Program in Ethiopia	Ethiopia	WFP	2012 - 2013	No	No	No
Renewable Energy Supply Conservation Utilization and Education (RESCUE) Project	Dadaab, Kenya	UNHCR, GIZ	1993 - Present	Yes	No	No
Stove Distribution and Small Scale Artisan Training	Mogadishu, Somalia	UNICEF	2012 - Present	No	Yes	No
Stove Distribution in Mogadishu	Mogadishu, Somalia	UNICEF, Relief International	2013- 2013	No	No	No

Alternative Fuels and Fuel Efficient Stoves for IDP Protection and Environmental Conservation in Darfur	Darfur, Sudan	Oxfam	2006 - 2007	No	No	No
Berkeley Darfur Stove Project	Sudan	Potential Energy, SAG	2007 - Present	No	Yes	Yes
Fuel Efficient Stove (FES) Project and Training of Trainers Program	Darfur, Sudan	Relief International, ILF	2005 - 2006	No	No	No
Local Stove Manufacturing and Training	Darfur, Sudan	Global Communities (formerly CHF International), Practical Action	2004 - Unknown	No	No	No
Karamoja Productive Assets Programme	Uganda	FAO, WFP, Government of Uganda	2010 - Unknown	No	Yes	No
Stove Distribution and Livelihoods in Karamoja	Karamoja, Uganda	WFP	2010 - 2012	No	No	No
LPG in Darfur, Sudan	Darfur, Sudan	Practical Action		No	No	No
		TOTAL		1	4	2
		PERCENTAGE		6.7%	26.7%	13.3%

¹ (2016). Global Trends: Forced displacement in 2015. UNHCR. Retrieved from <http://www.unhcr.org/576408cd7>.

² (2015). Global estimates 2015: People displaced by disasters. *IDMC*. Retrieved <http://www.internal-displacement.org/assets/library/Media/201507-globalEstimates-2015/20150713-global-estimates-2015-en-v1.pdf>.

³ (2014). *Light Years Ahead Project: Monitoring & Evaluation System and Baseline Survey Report*. UNHCR. *Note:* Figure is an average of the walking time data from Light Years Ahead (LYA) assessments in Chad, Kenya, Ethiopia, Uganda, and Rwanda refugee camps.

⁴ (2014). *Light Years Ahead Project: Monitoring & Evaluation System and Baseline Survey Report*. UNHCR. *Note:* These figures are drawn from the Uganda and Chad Country Reports under this survey, respectively.

⁵ (2014). *Light Years Ahead Project: Monitoring & Evaluation System and Baseline Survey Report*. UNHCR. *Note:* Figure is an average of the walking time data from Light Years Ahead (LYA) assessments in Chad, Kenya, Ethiopia, Uganda, and Rwanda refugee camps.

⁶ *Light Years Ahead Project: Monitoring & Evaluation System and Baseline Survey Report*, Uganda and Chad Country Reports. UNHCR.

⁷ History of SAFE. *SAFE*. Retrieved on August 4, 2016 from <http://www.safefuelandenergy.org/about/history.cfm>.

⁸ Arango, D., Morton, M., Gennari, F., Kiplesund, S., & Ellsborg, M. (2014). Interventions to prevent or reduce violence against women and girls: A systematic review of reviews. *Women's Voice and Agency Series (10)*, World Bank.

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- ⁹ Ellsberg, M., Arango, D., Morton, M., Gennari, F., Kiplesund, S., Contreas, M., & Watts, C. (2015). Prevention of violence against women and girls: What does the evidence say? *The Lancet*, *385* (9977), 1555-1566.
- ¹⁰ (2001). Evaluation of the Dadaab firewood project, Kenya. *UNHCR*. Retrieved from <http://www.unhcr.org/research/RESEARCH/3b33105d4.pdf>.
- ¹¹ (2014). Cooking fuel in Nzulo and Shasha displacement sites and the surrounding village of Nzulo: An end-line assessment report. *WRC*. Retrieved from <https://womensrefugeecommission.org/programs/fuel-and-firewood/research-resources/document/download/1100>.
- ¹² Gadgil, A., Sosler, A., & Stein, D. (2013) Stove Solutions: Improving Health, Safety, and the Environment in Darfur with Fuel-Efficient Cookstoves. *Solutions*, *4* (1), 54-64.



The Global Alliance for Clean Cookstoves is a public-private partnership hosted by the United Nations Foundation to save lives, improve livelihoods, empower women, and protect the environment by creating a thriving global market for clean and efficient household cooking solutions. The Alliance's 100 by '20 goal calls for 100 million households to adopt clean and efficient cookstoves and fuels by 2020. The Alliance is working with its public, private and non-profit partners to accelerate the production, deployment, and use of clean cookstoves and fuels in developing countries.

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