Statistical Snapshot: Access to Improved Cookstoves and Fuels and its Impact on Women’s Safety in Crises

The Alliance has conducted a desk review of 42 reports and evaluations on the role of access to improved cookstoves and fuels and its impact on women’s protection and safety in crises. The most compelling data has been condensed into this statistical snapshot to provide easy access to talking points and data for those in leadership positions. This quantitative summary is meant to inform advocacy efforts, enhance funding proposals, and provide a general overview of the quantitative risks and impacts on women related to access to improved cookstoves and fuels.

Safety risks related to lack of access to clean cookstoves and fuels
Exposure to the risk of gender-based violence is often measured in terms of the number of collection trips that are undertaken by women, as well as the time and distances traveled. Incidence of gender-based violence (GBV) is more difficult to measure, but provides the most direct indicator with which to evaluate protection concerns.

Incidence of gender-based violence during fuel collection
- In 2014 in Uganda's Nakivale refugee camp, 41% of households reported incidences of violence during firewood collection in the past six months. The types of accident reported included confiscation of firewood (23%), beating (20%), bodily injury (12%), assault (10%), attempted rape (5%) and rape (4%). (UNHCR Uganda, 2014)
- In Ethiopia, 33% of refugee households reported one or more violent incidents in the past 12 months while collecting firewood, and 13.5% experienced rape, assault, or attempted rape. (UNHCR Ethiopia, 2014)
- In Chad, 42% of households reported incidents of assault, attempted rape, rape, or other forms of SGBV during firewood collected in the past six months. (UNHCR Chad, 2014)
- In Doro, South Sudan, 54% of refugee respondents reported incidents of violence against women in firewood collection places in Doro, South Sudan. In 8 out of 13 focus group discussions with adolescent girls, incidents of physical and sexual assault were reported in firewood collection places. (Danish Refugee Council, 2012)
- In Farchana refugee camp in Chad, 90% of confirmed rapes occurred when women left the camps in search of firewood. (Physicians for Human Rights, HHI, 2009)
- In Dadaab refugee camp in 1998, 60% of the 164 reported rapes took place in the bush as women were collecting firewood. (UNHCR, 2001)
Exposure to risk of gender-based violence - firewood collection times and distances

- In camps in Chad, women travel an average roundtrip distance of 13.5 kilometers to collect firewood, spending on average 5 hours and 30 minutes per trip roughly once a week. (UNHCR Chad, 2014)
- In Ethiopia, women refugees collect firewood for cooking on average 6 times per month, spending 3 hours and 25 minutes each trip and covering a roundtrip distance of 4.5 km. (UNHCR Ethiopia, 2014)
- In Kenya, the average weight of women refugee’s wood bundle per trip is 20 kg (44 lbs). They collect firewood 5.6 times per month, spending 7 hours per trip and covering 9.7 km. (UNHCR Kenya, 2014)
- In Uganda, women refugees collect firewood 8.3 times per month, and girls age 17 and under collect wood 7.2 times per month. Time spent per trip is 3 hours and the average distance travelled by is 5.7 km. (UNHCR Uganda, 2014)
- In Doro Refugee Camp, South Sudan, it takes women and girls on average 3-4 hours roundtrip to collect firewood. (Danish Refugee Council, 2012)
- In Ruzizi, DRC women are the primary firewood collectors for 82% of households. Among 246 interviewees, 47.5% of women collect firewood daily. (Women’s Refugee Commission 2014)

Impacts of improved cookstove and fuel projects on women’s safety

Cookstove and fuel projects by WFP, UNEP, UNHCR, and others have had measurable success in reducing women’s fuel collection trips. Fewer project evaluations have measured baseline and endline incidence of GBV, since this is notoriously difficult to do. The Alliance recommends that more project evaluators utilize existing protection databases in camps (as in UNHCR’s 2001 study) and/or consider including general questions on violence where appropriate (as in UNHCR’s 2014 surveys) to better understand direct impacts of these projects.

Firewood collection times and distances

- A project by World Food Programme in 2011 distributed improved cookstoves in Kakuma camp, trained recipients on the use and maintenance of these stoves, and provided GBV sensitization training. Assessments by WFP and International Lifeline Fund found that 91% of refugee women adopted the stoves, which were 30-34% more fuel efficient than traditional three-stone fires. They found a reduction in frequency of firewood collection trips from an average of 2-3 times per week during the baseline to 1-2 times per week at endline. (WFP, 2013)
- In a review of fuel-efficient stove programs in Darfur, ProAct conducted a household survey that found women’s reported frequency of firewood collection was reduced by 50% in North Darfur (from 2 to 1 time per week), 57% in South Darfur (from 7 to 3 times per week), 0% in Geneina, West Darfur, and 40% in Zalingie, West Darfur (from 2.5 to 1.5 times per week). (UNEP, FAO, UNFPA, CHF International, and ProAct, 2008)

Gender-based violence during fuel collection

- An evaluation of the Dadaab firewood project in Kenya found that during the days households were fully supplied with firewood there was a decrease of 45.2% of rapes while collecting firewood. The overall frequency of reported rape decreased during the coverage period, when households were fully-supplied with firewood, by at best a 10% difference in the incidence of all rapes and at worst, no difference at all. (UNHCR, 2001)

The Global Alliance for Clean Cookstoves is a co-chair of the SAFE Steering Committee, and is committed to improving access to clean cookstoves and fuels for vulnerable groups such as refugees, IDPs, and other crisis-affected populations. More information on the Alliance and its humanitarian program can be found here: cleancookstoves.org/impact-areas/humanitarian/.