



**Women's Refugee Commission**  
Research. Rethink. Resolve.



# **Cooking Fuel Saves Lives: A Holistic Approach to Cooking in Humanitarian Settings**

# Cooking Fuel Saves Lives: A Holistic Approach to Cooking in Humanitarian Settings

## Women's Refugee Commission

Almost 40 million people worldwide are currently displaced by armed conflict and an additional 40 million uprooted by natural disasters. Forced to leave their homes and seek refuge in camps, with host families or in urban areas, displaced people face a series of obstacles as they try to cook food for their families. Despite the fact that the food distributed by humanitarian agencies must be cooked before it can be eaten, cooking fuel\* is rarely provided. Women and children, especially girls, are typically responsible for cooking family meals, and their health and safety are threatened every day as they search for the fuel they need to cook their food. The fuel they use most often is firewood, and they may have to travel up to 10-20 kilometers into the bush to find it.

Through its Fuel and Firewood Initiative, the Women's Refugee Commission aims to reduce the vulnerability of displaced women and children to the many harmful consequences associated with cooking fuel collection and use—including gender-based violence (GBV), environmental degradation and respiratory illnesses caused by burning solid fuels like firewood indoors—and ensure that displaced women, children and families have safe access to appropriate cooking fuel.

The Women's Refugee Commission has been working successfully since 2005 to put cooking fuel—a particularly complex issue in humanitarian settings—on the humanitarian agenda. The challenges associated with the collection, supply and use of cooking fuel span several sectors of humanitarian response and rarely fit neatly into

the existing mandates of the United Nations (UN) agencies and nongovernmental organizations (NGOs) working on the ground. Humanitarian workers tend to work on just one sector, such as protection or food; however, the Women's Refugee Commission has found that a *comprehensive* approach to cooking fuel needs is necessary.

### HOW SECTORS CAN WORK TOGETHER: ONE EXAMPLE

Humanitarian workers in the shelter sector may not always be aware of the harmful health effects of burning firewood in poorly ventilated shelters as they set out to construct a new refugee camp. Health sector workers, however, may have a clearer understanding of the links between indoor air pollution and respiratory infections, and of solutions to these problems. If the shelter and health sectors work together from the earliest stages of emergency response, they can ensure that families are safer and healthier by building shelters with proper chimneys, or allotting sufficient space during the site planning process for outdoor cooking shelters.

Driven by the clear need for a cross-sectoral approach to addressing cooking fuel needs and challenges in diverse humanitarian settings, the Women's Refugee Commission spearheaded the creation of the InterAgency Standing Committee Task Force on Safe Access to Firewood and alternative Energy in Humanitarian Settings (SAFE

\* As used here, the term "cooking fuel" includes fuels, such as firewood and kerosene, as well as cooking devices, such as fuel-efficient stoves or solar cookers. These fuels and devices are also known as "household energy," though household energy also typically includes domestic lighting and heating.

task force). The SAFE task force brought together representatives from a variety of UN agencies and NGOs across the humanitarian response spectrum—including protection, health and environmental organizations—and was charged with developing a framework for the humanitarian community to effectively respond to cooking fuel needs in humanitarian settings. The framework developed by the SAFE task force focuses on eight sectors: camp coordination & camp management; emergency shelter; environment & natural resource management; food & nutrition; health; information, education & communication; livelihoods, development & food security; and protection. Each of these sectors and their relationship with cooking fuel, including the key challenges and some proposed solutions, are discussed in more detail in the following eight “sector sheets.”

The SAFE task force created two critical tools for the humanitarian system aimed at ensuring the predictable development of holistic cooking fuel strategies in diverse regions around the world.

- A **Matrix** on Agency Roles and Responsibilities for ensuring a Coordinated, Multi-Sectoral Fuel Response in Humanitarian Settings, which defines the key fuel-related activities that must be implemented in order to achieve an effective fuel response in new and ongoing humanitarian crises.
- The **Decision Tree Diagrams** on Factors Affecting the Choice of Fuel Strategy in Humanitarian Settings, which address the different types of cooking fuel options that will be most appropriate in each specific emergency setting (the type of stove that would be most appropriate for Burmese refugees in Thailand to use for cooking rice is not necessarily the same type of stove that would be best-suited for displaced women stirring *assida* [porridge made from millet] in the Darfur region of Sudan, for example).

Both tools reflect the need for humanitarian actors to coordinate their fuel-related activities across all eight traditional response sectors. By doing so, each



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sector can play its part to ensure that displaced women and girls have safe access to one of their most basic needs—cooking fuel—from the start of every emergency. The sheets in this package contain information on each sector, outlining the problems related to cooking fuel within that sector, specific issues and examples, and some proposed solutions.

For further resources on cooking fuel in humanitarian settings, please visit [www.fuelnetwork.org](http://www.fuelnetwork.org).

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**OUR MISSION:** Since 1989, the Women’s Refugee Commission has advocated vigorously for laws, policies and programs to improve the lives and protect the rights of refugee and displaced women, children and young people, including those seeking asylum—bringing about lasting, measurable change.

**OUR VISION:** We envision a world in which refugee, internally displaced, returnee and asylum-seeking women, children and young people are safe, healthy and self-reliant, participating in the decisions that affect their lives.

## Cooking Fuel Saves Lives: A Holistic Approach to Cooking in Humanitarian Settings

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The camp coordination and camp management

(CCCM) sector is meant to improve living conditions for refugees and internally displaced people (IDPs) living in camps. It aims to ensure that they are provided with assistance and protection and that any gaps in services are identified and addressed. Camp managers are also responsible for working with refugee leaders, host governments and local communities to mitigate potential concerns or incidents regarding access to land and natural resources.

### The Problem

Cooking fuel—or the lack thereof—impacts several areas within CCCM. Struggles over limited natural resources such as firewood can cause tensions between host governments and camp residents, as well as between refugees and local communities, since both groups are often dependent on the same scarce resources either for their own consumption or as a means of earning income. In Darfur, for example, displaced women often have few means of making money besides collecting the increasingly scarce firewood and selling it to local villagers or businesses like restaurants and bakeries. On the other hand, in Kakuma camp in Kenya, a key income source for the local Turkana population is collecting firewood and selling it to refugees living in the camp—or giving it to them in exchange for some of their food rations.

A 2006 UN High Commissioner for Refugees/World Food Programme (UNHCR/WFP) assessment mission in Rwanda found a glaring lack of access to cooking fuel in several camps hosting Congolese and Burundian



refugees. The report indicated, for example, that only eight percent of refugees' need for firewood was being filled in the Gihembe camp. As a result of the insufficient firewood distribution, women and children were often forced to collect firewood illegally in surrounding private forests, where they were at risk of violence if caught. In another case, UNHCR reported that in the Bhutanese refugee camps in eastern Nepal "tensions between the refugees and the local communities have been increasing for various reasons, including the fact that refugees are collecting fallen trees, dried leaves and twigs from the local forests. When there is a delay in the delivery of kerosene,<sup>1</sup> the refugees—mostly women and children—have no option but to go to the nearby forests to gather firewood for cooking at the risk of being attacked, including possible sexual assault."<sup>2</sup>

Environmental degradation resulting from unsustainable firewood harvesting can also negatively affect the relationship between those living in the camps and the local community and can cause or exacerbate food insecurity.

Open cooking fires in crowded camps also pose a huge health and safety risk, as one spark or untended fire can quickly spread across hundreds of densely packed shelters.

## The Solution

Undertaking critical assessments of cooking fuel needs and existing natural resources at the initial stages of humanitarian planning can both lessen the likelihood of resource-based tensions arising between the displaced and their hosts and protect the overall well-being of both refugee and host communities. Camp managers should work with beneficiaries to establish a cooking fuel strategy that respects cultural customs and habits to decrease the potential for tensions both within and outside camps. If disputes do erupt over resources, camp managers should work with local authorities to mediate these disputes. In situations



where host communities suffer from many of the same problems as the displaced, providing support to hosts and engaging them in confidence-building activities can help create a more protective environment for the displaced when they leave the camps. In eastern Nepal, for example, UNHCR works with the Nepalese government on small-scale but impactful activities, such as forest rehabilitation and road construction, to help alleviate some of the stresses caused by refugees on local communities and the environment, reducing the likelihood of tensions erupting between the two groups.<sup>3</sup>

When firewood is scarce, camp managers should ensure that a sufficient amount of cooking fuel is provided to beneficiaries (and in some cases, to host communities as well) to lessen tensions and reduce the vulnerability of both communities. Safer fuel-efficient stoves should also be promoted, both as a means of reducing firewood consumption and also to mitigate the risk of potentially devastating camp fires.

Following these guidelines can help camp managers meet the needs of both displaced and host communities.

<sup>1</sup> UNHCR distributed kerosene to refugees in Nepal from 1992-2006, but stopped the program in 2006 for financial reasons.

<sup>2</sup> "UNHCR acts to ease tensions between locals and refugees in Nepal," UNHCR-Damak, July 18, 2005.

<sup>3</sup> Ibid.

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Shelter actors are typically responsible for overseeing the camp site selection and planning process, and for ensuring that shelter materials—usually wood poles, tarps and rope—are provided to beneficiaries when camps are being established. In many regions, they also coordinate the composition and distribution of “non-food items,” such as cooking pots and buckets for carrying water.

### The Problem

In emergency settings, firewood is often in direct competition with materials needed for shelter construction, such as timber. Without proper assessment by shelter workers of the wood resources available in and around a camp site, the construction of the camp itself can actually deplete much of the surrounding area's firewood supply, forcing women to travel farther and farther away from the relative safety of the camp to find cooking fuel.

This issue is compounded as local governments, with an eye to controlling their dwindling resources and in an effort to reduce or prevent deforestation, may limit or ban refugees from accessing forests.

Refugee camps are also often extremely crowded—it is not uncommon to find camps meant for 25,000 residents housing four times that many. When shelters are so close together, open fires used for cooking are a huge risk factor



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for house fires. A single house fire can have devastating effects in camps that are constructed primarily of wood, thatch and plastic. In March 2008, for example, a fire quickly destroyed 95 percent of the structures in the Goldhap refugee camp in eastern Nepal before it could be extinguished, forcing almost 1,300 families to sleep in the open. The fire spread quickly because of the proximity of family shelters built over 17 years of population growth. The makeshift tents made of plastic and bamboo that were used following the fire left refugees, especially children, vulnerable to the elements and therefore to illness and disease.



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In colder climates, or in the evenings during the winter season in even usually hot regions such as Chad, refugees living in flimsy shelters, without blankets or warm clothing, may resort to keeping a fire going inside their houses in order to keep warm. Many such shelters do not have proper ventilation, and the smoke from cooking or heating fires can cause severe respiratory infections, such as pneumonia, especially in young children. (See sector sheet #6: Health.)

## The Solution

It is critical that shelter actors take into account the cooking fuel needs of camp residents during the site selection, planning and construction phases. When selecting a site, shelter actors should assess the wood resources that are available—for both timber and firewood—and the potential demand for these resources to avoid depleting them. In situations where wood resources are scarce, shelter actors should develop and promote the use of alternative, woodless shelter construction technologies, such as (unfired) stabilized soil blocks, which can be as

strong as fired mud bricks, but require neither timber nor wood for a kiln. Such non-wood construction alternatives should also be considered for building schools, health care facilities, warehouses and other large, institutional structures.

Proper design of cooking areas—including planning for appropriate cooking spaces separate from the home, for example—can both reduce the risk of camp fires as well as the negative health consequences caused by indoor cooking smoke. Distribution of fuel-saving non-food items, such as tight-fitting lids to make cooking more efficient, as well as blankets and warm clothing or resource-saving heating devices, where needed, can also significantly reduce fuel use: the UN High Commissioner for Refugees, for example, reported in its 2002 *Domestic Energy Handbook* that a tight-fitting lid can save up to 20 percent of cooking fuel.

Following these guidelines can help shelter workers play a critical role in promoting the protection, health and safety of millions of displaced families.

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Camps for displaced people are often located in environmentally fragile areas, which can be par-

ticularly negatively impacted by a sudden influx of new residents. The environment and natural resource management sector works to ensure that these potential impacts are mitigated as much as possible from the earliest stages of response, including during the site selection process before the camp is even established. Environment workers also oversee environmental management and rehabilitation projects, such as forest conservation, tree planting and the establishment of green belts and woodlots in areas surrounding camps.

## The Problem

Environmental degradation can be exacerbated in humanitarian settings for a variety of reasons. The marginal, semi-arid lands where so many displaced persons' camps are located may have been able to effectively support their small, dispersed resident populations in the past. However, sudden large concentrations of people living in the crowded camps that emerge during war or after natural disasters can rapidly deplete the land's carrying capacity and diminish regeneration possibilities.

Countries such as Tanzania, for example, have seen permanent deforestation resulting from the estimated 1,200 tons of firewood being used each day following an influx of refugees in the late 90s.<sup>1</sup>

The destruction of towns and villages during conflict or disasters also necessitates—whether immediately or after refugees return home—the reconstruction of houses, buildings, fences and other structures that are often made of either timber or mud bricks that must be fired in wood-burning kilns. Thus the damage caused to the surrounding



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environment is two-fold: not only are thousands or even millions of trees cut down for the initial camp construction and to supply cooking fuel for the displaced, but a second wave of cutting is then needed to rebuild when refugees go home. In the Darfur region of Sudan, for example, the UN Environmental Program has estimated that 30–40 trees are needed to rebuild a single family compound. With 2.6 million people displaced, 15–20 million trees will be needed to rebuild just the houses.<sup>2</sup>

Cooking fuel is not provided on any measurable scale in Darfur, and thus women and children are forced to forage for firewood on their own. Years of firewood and shelter material collection (timber and thatch) by both displaced and host communities in Darfur have taken a visible toll on the environment, with few or no trees remaining in vast swaths of the region. To find firewood, women and children are forced to travel ever-greater distances—as far as 15 or more kilometers outside of their camps—which puts them at high risk of attack. The environmental *and* protection situations are in fact so dire in Darfur that in many cases women have resorted to digging holes in areas where trees used to be, in the hope of being able to pull up a root they can burn for fuel. In addition to the physical toll of such hard labor, this complete stripping of natural resources hinders the possibility for reforestation, even in the long run.

## The Solution

In the initial stages of emergency response, environment workers should support the direct provision of cooking fuel—including sustainably harvested firewood where necessary—to help decrease the unsustainable and often unsafe collection of firewood. Non-wood shelter construction materials, such as unfired soil blocks, should also be promoted whenever feasible.

As the initial emergency response gives way to longer-term approaches, however, environment actors



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should play a lead role in developing and promoting both fuel-saving devices, such as cookstoves, and alternatives to firewood, such as briquettes, ethanol or gas-based fuels. When firewood must be collected, environment workers should ensure that collection is undertaken in the most sustainable way possible, by teaching sustainable harvesting techniques and introducing controls on the frequency or location of firewood collection, for example. They can also develop and promote environmental protection and conservation activities, such as planting woodlots and undertaking reforestation programs, in tandem with local governments and environmental authorities. The safety and economic benefits of fuel-saving activities should also be promoted to refugees who may at first be reluctant to try unfamiliar cooking fuels or devices such as fuel-efficient stoves or gas-based fuels.

Undertaking these and other activities can help environment workers play an important role in protecting women and children *and* the environment in which they live.

<sup>1</sup> UNHCR. “The Environment - A Critical Time,” *Refugees Magazine*, July 2, 2002.

<sup>2</sup> Adapted from “Darfur: Relief in a vulnerable environment.” Tear-Fund, 2007.

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The UN World Food Programme (WFP) and its implementing partners provide food assistance and fight hunger and malnutrition in humanitarian settings, whether through direct distribution or in exchange for work (“food for work”).

### The Problem

The food distributed in humanitarian settings—typically items like dried beans, grains or flour—must be cooked in order to be eaten (when flour or hard beans are eaten raw, not only do they cause digestive difficulties, but their nutritional value is greatly reduced). However, the fuel needed to cook this food is almost never provided, and the burden of finding cooking fuel rests on the beneficiaries themselves—most commonly women and children. If sufficient fuel cannot be found, or there is not enough money to purchase it, women may resort to undercooking their meals—increasing their risk of foodborne illness—or they may be forced to skip meals altogether, which can cause malnutrition, especially in young children.

In many instances, families may have to trade or sell some of their food rations in order to purchase cooking fuel, which leaves them with less food than they need to survive. A Somali refugee interviewed by the Women's Refugee Commission in Dadaab camp in eastern Kenya, struggling to find ways to cook food rations for her family, summed up this issue clearly: “Even 100 bags of food is useless without firewood.”



In Menik Farm internally displaced persons (IDP) camp in northern Sri Lanka—which at its peak in 2009 had a population of 290,000 people—women like Yogeswary had to collect wood every day in order to cook rice rations for her family: “Much of my day is spent in collecting firewood. There are just so many of us. It is getting harder to find.”<sup>1</sup> A refugee woman in Dadaab echoed Yogeswary’s concern: “Going so far into the bush is dangerous. When I leave in the morning to collect wood, I never know if I’ll come home safely. But I have no choice. My children need to eat.”

In part because of difficulties in securing sufficient cooking fuel, or because of the need to trade food rations for fuel, malnutrition rates among displaced populations are often higher than among their non-displaced counterparts. IDPs in Somalia, for example, were reported to have malnutrition rates of 25 percent, compared to the global malnutrition rate in Somalia of 17 percent.<sup>2</sup>

## The Solution

Food and nutrition officers have several options for reducing illnesses and malnutrition caused by eating raw or undercooked foods. During the very earliest stages of emergency response, for example, when nearby firewood is scarce or there is pervasive insecurity, precooked or quick-cooking foods should be provided, such as the “meals ready to eat” distributed by WFP in the immediate aftermath of the 2010 Haiti earthquake.

Fuel-efficient stoves can also reduce the amount of fuel needed to properly cook a meal, and thus reduce the burden on women who would otherwise have to find or buy large amounts of firewood. For example, to help women feed their families properly cooked meals with the highest nutrition levels possible, WFP has provided over 13,000 families in Sri Lanka with fuel-efficient stoves as part of its SAFE initiative in that country. These *anagi* stoves were designed to be familiar to Sri Lankan women and to cook their food in the way that they know how and prefer to cook it—



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ensuring that the stoves will actually be used over the long term. Food and nutrition officers should try to provide familiar foods and clear cooking instructions, so that proper cooking times are observed, as well as training on fuel-efficient cooking techniques—like pre-soaking beans, using tight-fitting lids and sheltering cooking fires from the wind—so that cooking fuel is not wasted. Any institutional feeding programs, such as those in schools or hospitals, should be encouraged to use fuel-efficient stoves when they cook for hundreds of people at a time.

Implementing these guidelines can help food officers play an important role in enhancing the protection and improving the health and nutrition of women and families.

<sup>1</sup> WFP Annual Report, Sri Lanka 2009.

<sup>2</sup> Internal Displacement Monitoring Centre (IDMC), *Somalia: Window of Opportunity for Addressing One of the World’s Worst Internal Displacement Crises*, October 2, 2006.

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In addition to establishing health clinics and providing care, health actors undertake education campaigns on the prevention and management of health concerns, such as hand washing and sanitation.

### The Problem

When displaced women and children are exposed to noxious smoke and indoor air pollution (IAP) from cooking fires day after day, often for as much as seven hours per day, they are prone to respiratory illnesses such as pneumonia. According to the World Health Organization (WHO), indoor concentrations of toxins such as carbon monoxide in smoke from cooking fires may be 15 to 20 times higher than accepted levels. Such elevated levels of toxins are especially dangerous to babies and young children, whose lungs are still developing and who are often near their mothers during cooking. Moreover, babies and young children are especially susceptible to dying from re-

spiratory disease: pneumonia and tuberculosis are two of the top five killers of children under five worldwide. Over all, respiratory infections caused by IAP are responsible for more deaths every year than malaria (1.9 million annually).<sup>1</sup>

In humanitarian settings, cooking is often done inside shelters that are designed to keep the elements—sun, rain, dust, wind—out, meaning that



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such shelters are likely to be poorly ventilated, so smoke from cooking fires stays trapped inside for long periods. Families often sleep in the same single room where the cooking fire is located, increasing their exposure to toxins and exacerbating health risks. A woman in Nayapra refugee camp in Bangladesh told the UN High Commissioner for Refugees of her experience cooking before she was provided with a cleaner-burning stove: “Sometimes my eyes were burning, tears were flowing, my whole house became smoky and all the children suffered.”

When sufficient cooking fuel is not available, foodborne disease or malnutrition can result from eating or undercooked or raw foods. Lack of fuel also made it more difficult to contain the spread of cholera in post-earthquake Haiti, since many families had to choose between using their limited fuel for cooking or for boiling water.

Another widespread health risk in camp settings are burns and scalds resulting from improperly tended cooking fires, or from house fires caused by cooking. In many cases, mothers leave their young daughters in charge of the cooking fire when they go out to collect firewood or to attend to other household chores. Without proper training, these girls—often as young as five or six—may not tend to the fire or to the cooking pots properly; as a result they are the most common victims of burns and scalds.

## The Solution

Health workers can help minimize the exposure of women and children to IAP by advocating for the use of cleaner-burning cooking fuels and stoves, particularly those that contain the fire’s flames—resulting in both efficiency and safety improvements. Promoting the design and building of better-ventilated shelters or safe, outdoor cooking spaces can also help to reduce the impact of IAP. The health sector should also play a key role in providing technical advice to camp managers, shelter actors and other partners on the



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positive health and safety impacts of these new technologies. These positive impacts are multiple: a 2008 study on fuel-efficient stove programming in Darfur by ProAct Network found that incidents of “wild fires in camps due to open flames from cooking on the traditional three-stone fireplace” were common. But “with the use of fuel-efficient stoves, this has been reduced to zero.”<sup>3</sup> Moreover, the same report noted that over 60 percent of interviewees stated that they saw a reduction in kitchen smoke-related coughing after they started using fuel-efficient stoves, and that they recognized that fuel-efficient stoves produced less ash, resulting in cleaner kitchens and better, healthier working and living environments for women and their families.

Spreading awareness not only on the dangers associated with the collection and use of firewood, but on the benefits of cleaner-burning fuels and stoves, can help women move from a more familiar, yet unhealthy, way of cooking to one that can improve their health and that of their children.

<sup>1</sup> <http://www.who.int/mediacentre/factsheets/fs292/en/index.html>

<sup>2</sup> <http://www.unhcr.org/4c08eacb6.html>

<sup>3</sup> “Assessing the Effectiveness of Fuel-efficient Stove Programming: A Darfur-Wide Review,” ProAct Network Report, September 2008.

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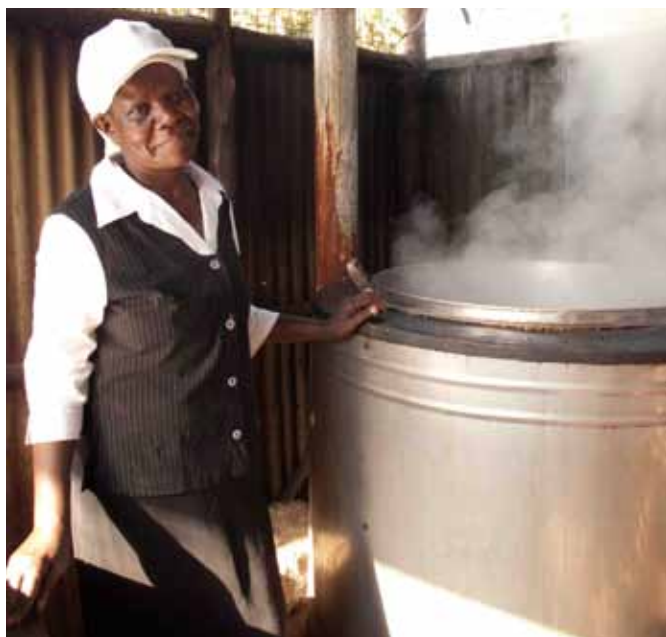
The SAFE task force combined traditional, school-based education and the information, education and communication (IEC) sectors into one.

IEC is a process of raising public awareness to promote positive behavior change through different kinds of learning, including messaging campaigns, demonstrations, dissemination of printed materials, radio or drama and other creative mechanisms. IEC is frequently associated with health activities (promoting breastfeeding, for example), but can be used to raise awareness and spread information about a wide variety of topics. Schools and other learning environments for children and young people are also key venues for awareness-raising and information sharing. In many displacement settings, school feeding programs are used to encourage school attendance, reduce burdens on families and improve child nutrition.

### The Problem

Displaced women are not always familiar with the types of food rations—or fuel-efficient stoves or alternative fuels—that the humanitarian community gives them. This lack of understanding can result in overcooking and wasting food or cooking fuel, or it can mean that potentially useful new technologies are not adopted for lack of information and training. Moreover, fuel-efficient cooking techniques like pre-soaking beans to reduce cooking time cost no money and are easily done, but awareness-raising campaigns are rarely undertaken.

Despite the importance of education or skills-building for immediate support and protection, as well as for longer-term livelihoods opportunities, children—particularly girls—are frequently



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kept from school or other educational opportunities to collect firewood for their families, or to tend to younger children and household chores while their mothers are out collecting wood. Save the Children UK found that drop-out rates for girls in Southern Sudan are the highest in the world, largely because they must leave school to take on the burdens of household chores.<sup>1</sup>

Children are often an economic lifeline to displaced families with few other income opportunities, meaning they must work menial jobs to earn money rather than gaining the education needed for better opportunities in the future. The grandmother of an eight-year-old girl told the United Nations Children's Fund (UNICEF) in Senegal: "If she goes to school, we can't eat."<sup>2</sup> When schools began reopening in post-earthquake Haiti, many parents, who had lost their jobs and were surviving on \$5 per day payments from the UN for clearing rubble, had to choose between paying their children's school fees or buying charcoal to cook.

School feeding programs play a key role in enhancing the nutritional intake of schoolchildren who may otherwise be forced to skip lunch, and, by reducing the burden of feeding children at home, can also encourage parents to send their children to school. However, school feeding programs typically use wood—often on inefficient open fires—to cook for hundreds of children at a time, making these programs among the largest institutional users of firewood.

In some cases, families are required to contribute firewood to these school feeding programs, and children may be kept from class if they or their families cannot find enough wood to bring to school. This is doubly crippling, because infrequent school attendance reduces learning and therefore decreases the employment and other opportunities that children should have over the long term.



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## The Solution

IEC workers have a key role to play in encouraging partner organizations to use schools, community centers or food distribution points to teach fuel-efficient cooking practices, including construction and use of fuel-efficient stoves and fuel-saving cooking techniques like pre-soaking beans, sheltering cooking fires from the wind and using only dried wood.

Spreading awareness on the benefits and proper use of fuel-efficient stoves or cooking fuel alternatives can help women feed their families more efficiently and effectively, helping to prevent malnutrition and reducing the amount of respiratory illnesses caused by smoke from wood fires. Demonstration and promotion of fuel-efficient stoves and cooking techniques can reduce overall firewood consumption, thereby helping to ensure that children are not forced to leave school—and school feeding programs—to collect firewood for their families or schools. School feeding programs themselves should be encouraged to use fuel-efficient stoves in order to reduce the massive amount of firewood they typically use and thus the burden on families and the environment.

<sup>1</sup> <http://www.savethechildren.org.uk/en/sudan-and-southern-sudan.htm>.

<sup>2</sup> "From a vicious to a positive cycle: Girls' education in Senegal," UNICEF, April 14, 2005.

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Women's Refugee Commission

## Background

*In complex emergencies, the humanitarian system tends to address issues of concern by focusing on individual sectors, such as health or food. However, the Women's Refugee Commission has found that when it comes to cooking fuel, an integrated approach is essential. Recognizing the cross-sectoral nature of cooking fuel, the Women's Refugee Commission and the InterAgency Standing Committee Task Force on Safe Access to Firewood and alternative Energy in Humanitarian Settings (SAFE task force) developed a framework outlining the key fuel-related challenges and solutions across eight sectors of humanitarian response. This comprehensive and holistic approach to all eight sectors is necessary*

*to ensure that displaced women and their families have safe access to appropriate cooking fuel. Below is information on the livelihoods, development and food security sector.*

The term “livelihoods” refers to the capabilities, assets and strategies that people use to make a living. Livelihoods actors work with beneficiaries to enhance self-reliance through vocational training or income-generation activities (IGAs), for example. Particularly when people are displaced for long periods, livelihood activities also focus on ensuring food security through food-for-work, animal husbandry or agricultural programs. Over the long term, these types of activities are called development.

## The Problem

Women and children, most often girls, spend a significant amount of time and labor to secure cooking fuel—often they travel for hours at a time, several days a week, to find enough firewood to cook for their families. The sheer amount of time spent on such an arduous task limits their ability to engage in safer, more productive activities—including earning an income or attending school.

Moreover, since refugees are often not allowed to work legally, women are frequently dependent on the collection and sale of firewood as one of their only means of earning money. A Somali refugee woman interviewed by the Women's Refugee Commission in the Dadaab refugee camp in Kenya reported that she could earn about \$0.50 selling the bundle of wood that she carries on her back. To find this much wood, she walks 4-5 kilometers outside of the camp—a task that can take as long as five hours and during which she risks being



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attacked, bitten by snakes or succumbing to dehydration in the desert heat.

Women are more likely than men to participate in IGAs that are dependent on the use of natural resources. Common IGAs include selling firewood or charcoal, subsistence agriculture, brewing alcohol and cooking food to sell. This dependence on natural resources means that women are most heavily impacted when access to these resources is limited because of insecurity or because the resources have been depleted.



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In many situations, families may have no choice but to sell or trade some of their food rations to garner income or to pay for cooking fuel. Another woman in Dadaab said: “Sometimes men with donkey carts full of wood come into the camp, and I’ll trade some of my food rations for their wood. At least then [I can cook the food I have left so] my children will eat.” The resulting reduction in food rations not only increases the risk of malnutrition, especially in children, but can cause tensions within the family, including domestic violence stemming from disagreements over household economic priorities. During a group discussion in Dadaab, Somali refugee women told the Women’s Refugee Commission that they had to hide the fact from their husbands that they trade some of their food rations for firewood, because otherwise the men would get upset and beat them, saying it is the woman’s responsibility to find enough firewood to cook all of the food rations. The women said they would make up excuses, saying children had spilled the food or that it had been stolen at the distribution site.

When trading food for cooking fuel is not an option and collection is impossible, such as in urban settings, households must either purchase fuel or go

without eating. Buying fuel eats up huge portions of meager household incomes, however: in post-earthquake Haiti, a joint Women’s Refugee Commission/World Food Programme assessment found that families were spending upwards of 40 percent of their daily income on charcoal.

## The Solution

When women have access to safer jobs that earn them a decent wage, they become less reliant on dangerous IGAs such as the collection and sale of firewood and selling food rations. Livelihood actors should work with communities to develop safer, more sustainable, market-based jobs to reduce dependence on woodfuel-related IGAs. In some settings, these new jobs can include the production of alternative fuels or energy technologies, including fuel-efficient stoves or briquettes created from household or agricultural waste, or reforestation and other environmental management activities.

Reducing dependence on unsafe, unsustainable income generation options is a critical task for livelihood workers; one that plays a key role in protecting women and children.

# Cooking Fuel Saves Lives: A Holistic Approach to Cooking in Humanitarian Settings

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The protection sector undertakes activities aimed at obtaining full respect for the rights of the individual. This can mean ensuring legal protections,

such as registration, representation and intervening in situations of human rights abuses, as well as physical protection, such as patrols and accompaniment, including during firewood collection.

### The Problem

Cooking fuel and the protection sector are closely tied by the high incidence of rape reported when women and children leave camps to collect firewood, which they must do because sufficient cooking fuel is rarely provided in humanitarian settings. Physicians for Human Rights (PHR) reported in 2009 that seven kilograms (15.4 pounds) of wood was being distributed per capita, *per month* in the Farchana camp in eastern Chad, while the UN High Commissioner for Refugees (UNHCR) reported that the estimated per capita consumption of wood was actually three kilograms (6.6 pounds) *per day*—a deficit of 92 percent. Often, the only way to make up this firewood deficit is to go out and collect it. Without nearby, safely accessible natural resources, however, women and children must travel long distances to find sufficient firewood to cook for their families.

Physical protection, such as the presence of peacekeepers or civilian police, is often so limited that women and girls are susceptible to attack the moment they leave the relative safety of their camps. In some places, rape or assault during firewood collection has even been described as a commonplace occurrence: PHR reported that 91 percent of confirmed rapes in Farchana occurred outside camps



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when women were collecting firewood. One woman in the camp stated: “I always think someone is following me and wants to rape me. It is better to die.”<sup>1</sup> In 2005, Médecins Sans Frontières (MSF) issued a report<sup>2</sup> indicating that within a five-month period in 2004–2005, MSF alone treated nearly 500 women and girls who were raped while venturing outside the camps for firewood or water. MSF believes that these 500 women and girls likely reflected only a fraction of the total number attacked, since survivors of sexual violence are often reluctant to report the crimes committed against them for fear of being ostracized by their communities.



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Protection risks are not faced by women alone: ProAct Network reported in 2008 that women in camps in Darfur were risking their safety to protect the lives of their husbands who, they feared, were more likely to be killed when leaving the camp. The women were also hesitant to use donkeys or carts to carry the wood for fear they would be stolen, instead choosing to carry the heavy loads on their backs.<sup>3</sup>

Another protection risk associated with firewood collection is exposure to landmines. In conflict-affected northern Sri Lanka, for example, a survey conducted by the Mine Advisory Group found firewood collection to be among the three activities where fear of mine explosions was the highest. Uncleared landmines severely disrupt returnees' lives and livelihoods, confining them to the small perimeter of residential areas and preventing safe access to essential services and goods, particularly firewood.<sup>4</sup>

## The Solution

Because the risks associated with firewood collection vary in different settings, assessments must be undertaken early in the emergency response to define the particular concerns in each new setting and to make sure that women and girls themselves are included in the development of all types of protection strategies. When protection risks associated with firewood collection are determined to be present,

protection managers can provide transport, patrols or escort systems for women and girls collecting firewood, or can advocate for peacekeeping escorts to be deployed. Information sharing with humanitarian partners and women themselves can help to spread awareness about risks related to firewood collection and can help to ensure that preventative measures are put in place. Protection risks can also be mitigated by either directly providing a sufficient amount of cooking fuel or by supporting the development and production of alternative fuels to lessen dependence on firewood. Where there are landmine risks in firewood harvesting areas, protection workers can conduct campaigns to raise awareness about mined areas and alternative collection routes.

By implementing these guidelines, protection workers can play a key role in mitigating a major risk factor for gender-based violence and in ensuring the safety and dignity of women and children.

<sup>1</sup> “Nowhere to Turn: Failure to Protect, Support and Assure Justice for Darfuri Women,” Physicians for Human Rights, May 2009.

<sup>2</sup> “Rape and Sexual Violence Ongoing in Darfur, Sudan,” MSF press release, July 3, 2005.

<sup>3</sup> Assessing the Effectiveness of Fuel-efficient Stove Programming: A Darfur-wide Review. ProAct Network. 2008.

<sup>4</sup> Safe Access to Firewood and alternative Energy in the North of Sri Lanka: An Appraisal report, WFP, August 2010.

# Cooking Fuel Saves Lives: A Holistic Approach to Cooking in Humanitarian Settings

## Women's Refugee Commission

### Background

The Women's Refugee Commission's Fuel and Firewood Initiative is a far-reaching and cross-cutting effort to strengthen the capacity of the humanitarian community to respond to the rampant problem of violence against women and children during firewood collection, mitigate the negative health consequences of breathing cooking smoke, stem environmental degradation and reduce the dependence of women on unsafe livelihoods activities.

Working in partnership with key UN agencies and NGOs, we are leading the effort to institutionalize fuel-related interventions into respective agency funding proposals, strategic programming priorities and workplans and to ensure that the critical guidance created by the SAFE task force will be implemented and institutionalized among humanitarian organizations. By doing so, the Fuel and Firewood Initiative is effectively benefiting millions of women and children in conflict and natural

disaster-affected settings by addressing the root cause of much of their vulnerability: the lack of safe access to appropriate cooking fuel.

The SAFE task force guidance was launched in 2009 (see sector sheet #1, Overview), and the Women's Refugee Commission spent two years shipping thousands of copies to field offices and training hundreds of humanitarian staff around the world on when, why and how to implement it. Our key focus now, though, is turning these policies into reality on the ground. To this end, we have been partnering since 2010 with the UN World Food Programme (WFP) on its SAFE Initiative, through which it is reaching six million displaced women and their families with projects that ensure safe access to appropriate cooking fuels.

While we are pleased that WFP has taken on this major commitment, ultimately it falls on the entire humanitarian community to contribute to the SAFE process. The ultimate goal of the Women's Refugee Commission's Fuel and Firewood Initiative is therefore to **ensure that cooking fuel becomes institutionalized and a systematic part of humanitarian response**, in the same manner as food or water distribution—meaning that it is consistently, predictably and sufficiently staffed and funded in all phases of humanitarian response—and by all sectors. All of the Fuel and Firewood Initiative's program priorities address this key goal.

### **FUNDING: Identify and institutionalize funding streams for fuel-related interventions**

Advocacy for funding is the highest priority, since predictable, dedicated funding mechanisms for

What Next?



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cooking fuel response—particularly in emergencies—are not yet in place. Without funding, minimal impact can be made in the places that most urgently need new ideas and technologies (post-earthquake Haiti, for example). The Women’s Refugee Commission is engaging new donors and institutions and working to develop long-term, dedicated support for ensuring safe access to appropriate cooking fuel in humanitarian settings.

Key funding goals include:

- 1) deploying appropriate fuels and energy technologies to humanitarian settings and/or developing local capacity to produce such technologies in the affected regions;
- 2) building human resource capacity to address fuel-related needs and implement new interventions, and, equally important, to coordinate fuel-related interventions across a wide range of humanitarian response sectors; and
- 3) ensuring technical and research capacity within the humanitarian community to develop appropriate fuel-related interventions.

### **STAFFING: Develop and deploy SAFE-trained experts to emergency and other humanitarian settings worldwide to ensure sufficient technical capacity for addressing household energy-related needs**

Human resource capacity to address cooking fuel needs is a critical gap in the humanitarian assistance regime. The creation and deployment of a roster of household energy experts to critical locations and emergencies around the world will help to address this gap. The experts—modeled in part on existing “ProCap” and “GenCap” schemes that send protection and gender experts to key field sites—will be trained on the SAFE guidance and tasked with working with partners to coordinate and oversee the implementation of safe and appropriate cooking fuel strategies, and with local capacity-building to ensure long term sustainability of the projects.



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To be sustainable, cooking fuel strategies must be supported by the cooks themselves—nearly always women and girls. As such, women must not only be continually consulted in the design and development of cooking fuel strategies, but must be trained on all aspects of the production and use of household energy technologies like fuel-efficient stoves and empowered to engage in capacity-building and awareness-raising of other women and women’s groups.

### **INFORMATION-SHARING: Broaden and strengthen the Fuel Network**

The International Network on Household Energy in Humanitarian Settings (the “Fuel Network”), which was developed by the SAFE task force and is managed by the Women’s Refugee Commission, aims to become the key source of information and technical support for the development and institutionalization of safer, more appropriate cooking fuel strategies in humanitarian settings. We are building the capacity of the Fuel Network to reach this goal by: developing and implementing learning activities on its website; expanding membership and working with the Network’s Advisory Committee to develop new content and resources; and closely partnering with the new Global Alliance for Clean Cookstoves.

For more information, please see [www.fuelnetwork.org](http://www.fuelnetwork.org) and [www.cleancookstoves.org](http://www.cleancookstoves.org).