Perhaps nowhere is the danger of assault whilst gathering firewood more evident than in Darfur. Women and girls trek for hours a day in the hope of finding a few branches or roots to burn. To avoid the midday sun, many leave in the darkness. To lessen competition, they travel alone or in very small groups. To find increasingly scarce combustible material, they may have to walk several kilometres away from the camps. In doing so, they become prime targets for the Janjaweed militia, local government or police forces and other men who act in a climate of almost total impunity.

In August 2006 the International Rescue Committee (IRC) reported 200 assaults in a five-week period from a single camp. Médecins sans Frontières reported over 200 cases per month in 2005. Given the stigma associated with rape, it is extremely likely that the real number of survivors of sexual violence is much higher.

Various UN agencies and NGOs have introduced several ad hoc initiatives to increase the protection of women and girls as they collect wood or to reduce the amount of wood needed for cooking (and therefore the number of collection trips). In late 2005, the Women’s Commission for Refugee Women and Children undertook field research to assess the status and impact of these initiatives, which included fuel-efficient stoves, firewood patrols and the development of alternative fuels.

Fuel-efficient stoves

The most common models of fuel-efficient stoves currently in use in Darfur are extremely basic. Made usually from a combination of mud, water and animal dung or ash, they can be made in three to five days and cost less than one US dollar per stove. Tests are under way on more sophisticated models, including some made from stainless steel. Even the most basic models, however, can reduce firewood consumption by 20 to 80% (depending on the stove itself, how it is used and conditions during use), compared to the traditional three-stone fire. Because the amount of firewood needed to cook the same amount of food is less, stove users can collect firewood less often and their risk of attack is therefore reduced.

Firewood patrols

Firewood patrols in Darfur typically involve both civilian police (CivPol) and troops from the African Union Mission in Sudan (AMIS) who follow women and girls by truck. This armed accompaniment has been fairly successful in deterring would-be attackers but in many cases has been rendered less effective by the lack of trust and effective communication between CivPol and the women being accompanied. The most successful patrols have been those organised by committees comprising displaced women leaders, CivPol staff (preferably those participating in the patrols – and female wherever possible) and NGO facilitators who solicit feedback from all involved. Together, the committees draw up specific guidelines for the patrols, choose times and locations and ensure the presence of translators in the patrols. These regular committee meetings also serve as a forum for women and girls to discuss and rectify any concerns that they may have regarding the patrols.

Too often, however, the patrols have not been so well organised, with poorly chosen routes and times, entirely male AMIS participation, no translators (making communication between the women and AMIS all but impossible) and conflicting interpretations of the goal of the patrols.
patrols and responsibilities of AMIS. This has stifled participation in the patrols as women and girls – many of whom are survivors of sexual assault – are often reluctant to leave the camps in the presence of armed men, even those from a protection force. When patrols are instituted, therefore, it is crucial to ensure that they are supported by an active, participatory firewood patrol committee. Most recently, the patrols have fallen victim to drastic cuts in the overall funding of AMIS.

**Alternative fuels**

Refugee and IDP settings can provide a good testing ground for the development of alternative fuels. Several non-wood-based fuels or fuel technologies have been tried in various refugee and IDP settings worldwide with varying degrees of success. These now need more widespread, replicable testing. Many organisations outside the traditional humanitarian community – such as appropriate technology organisations, environmental protection groups, private foundations and universities – have already done extensive work on alternative fuels and fuel technologies from which displaced populations could benefit. So far, however, there has been little interaction or cooperation.

In order to be successful and sustainable, non-wood-based fuels and fuel technologies in refugee and IDP settings must:

- be safe and culturally acceptable
- utilise locally available raw materials
- be able to be produced locally (ideally with the possibility for income generation for displaced and/or host communities)
- have little or no local market value (for onward sale)
- be sustainable both in terms of cost and environmental impact

Food Programme and partners, for example, are usually not edible until they are cooked – yet in very few settings is cooking fuel provided with food provisions. Delivery of cooking fuel has proven to be expensive and ultimately unsustainable. However, putting women and girls at risk of assault by effectively forcing them to walk kilometres a day into unsafe territory should be considered equally – if not more – unacceptable.

There is no single fuel or fuel-related initiative that will by itself solve the problem of sexual violence during firewood collection. An effective fuel strategy needs to respond to specific needs in each emergency context. Direct fuel provision may be a crucial protection tool at the very outset of a crisis but only in the short term. Firewood patrols are a useful protection tool but again cannot be the sole solution. Fuel-efficient stoves have a clear and important role to play but only in the context of long-term identification of sustainable, non-wood-based fuels.

No initiatives, no matter how well designed or coordinated, will have the desired protection impact unless alternative income-generation activities are developed for displaced families and particularly for women and girls. Women’s Commission research found that even Darfuri women and girls who have made and regularly use fuel-efficient stoves continue to collect as much firewood as possible in order to sell it to generate much-needed income for their families.

The issue of cooking fuel in refugee and IDP settings crosses many sectors – food and nutrition, health, environmental protection, shelter and, of course, women’s rights and gender-based violence. The UN system has not yet developed the capacity to deal effectively with issues that do not fit neatly within traditional sectoral boundaries. The new cluster-based mechanism to address gaps in humanitarian response simply relegates fuel to the ‘shelter’ cluster. Recognising the wider importance of cooking fuel in women’s lives would go a long way towards enhancing protection of the millions of displaced women and girls for whom it plays such a central – and often tragic – daily role.

Erin Patrick (erin@womenscommission.org) is a consultant for the Women’s Commission for Refugee Women and Children (www.womenscommission.org) and is currently facilitating the Fuel & Firewood Initiative, funded in part by USAID/OFDA.

2. See [www.womenscommission.org/projects_fb.html](http://www.womenscommission.org/projects_fb.html)

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**Effective fuel strategies**

The international community needs to develop more effective implementation and coordination of fuel strategies from the outset of humanitarian crises. Food rations distributed by the World Food Programme and partners, for example, are usually not edible until they are cooked – yet in very few settings is cooking fuel provided with food provisions. Delivery of cooking fuel has proven to be expensive and ultimately unsustainable. However, putting women and girls at risk of assault by effectively forcing them to walk kilometres a day into unsafe territory should be considered equally – if not more – unacceptable.

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