

# **NEW ISSUES IN REFUGEE RESEARCH**

**Research Paper No. 172**

## **Household energy in refugee and IDP camps: challenges and solutions for UNHCR**

**Eveliina Lyytinen**

Intern  
Policy Development and Evaluation Service  
UNHCR

E-mail: [eveliina.lyytinen@green.oxon.org](mailto:eveliina.lyytinen@green.oxon.org)

May 2009



**UNHCR**

The UN Refugee Agency

Policy Development and Evaluation Service

**Policy Development and Evaluation Service  
United Nations High Commissioner for Refugees  
P.O. Box 2500, 1211 Geneva 2  
Switzerland**

**E-mail: [hqpd00@unhcr.org](mailto:hqpd00@unhcr.org)  
Web Site: [www.unhcr.org](http://www.unhcr.org)**

These papers provide a means for UNHCR staff, consultants, interns and associates, as well as external researchers, to publish the preliminary results of their research on refugee-related issues. The papers do not represent the official views of UNHCR. They are also available online under 'publications' at [www.unhcr.org](http://www.unhcr.org).

ISSN 1020-7473

## **Introduction**

The aim of this paper is to identify the current key challenges that UNHCR faces at the operational level in relation to household energy in refugee and IDP camps. It also discusses the lessons learned in the search for sustainable solutions. While the operational level at refugee and IDP camps is the focus of this report, UNHCR's household energy policy is also explored. In IDP situations UNHCR's household energy policy is discussed in the context of the inter-agency response. This paper has been produced as background information for the UNHCR and Women's Commission for Refugee Women and Children forthcoming joint project on household energy and livelihood questions.

The paper aims to identify countries in which UNHCR is currently experiencing severe problems in terms of household energy issues. The approach to household energy challenges adopted in this paper is broad and comprehensive: the social, political, environmental and economic aspects of energy issues are addressed.

A systematic review of all of the Annual Protection Reports produced for 2007, as well as certain Country Operations Plans, identified seven locations where UNHCR faces its most severe problems with household energy: Nepal, Chad, Ethiopia, Rwanda, Kenya, Tanzania and Sudan. It is notable that all but one of these countries are located in Africa. Reference is made to other countries than these seven key locations when appropriate.

### **Key household energy challenges**

The household energy needs of displaced people in camps are those related to cooking, heating and lighting. The amount of fuel – principally firewood – required to fulfil these needs is typically greater than that provided by aid agencies. Refugees and IDPs must therefore use local natural and human resources to supplement their fuel allowance.

The review of the 2007 Annual Protection Reports and other UNHCR country-specific reports identified the following five key challenges related to household energy: protection, relations between hosts and displaced people, environmental problems, household energy-related natural resource restrictions and livelihood-related challenges. These challenges are discussed in more detail in the following section, with reference to specific case studies.

In addition to these five key challenges, the Inter-Agency Standing Committee (IASC) Task Force on Safe Access to Firewood and Alternative Energy in Humanitarian Settings (SAFE) has identified other issues related to household energy.<sup>1</sup> These include household energy questions that are linked to health and education. It is clear that different fuels and energy production methods can cause health problems and lead to both acute and chronic diseases. Because women and girls often bear the greatest burden of firewood collection, they are disproportionately

---

<sup>1</sup> Inter-Agency Standing Committee (IASC) Task Force on Safe Access to Firewood and Alternative Energy in Humanitarian Settings (SAFE) (2008)

affected by these energy-related health problems. In addition, young girls may be affected in terms of education since providing enough firewood can be highly time-consuming and they may be unable to attend school. However, these consequences for health and education were not discussed extensively in the UNHCR reports that form the basis of this study and will therefore not be discussed further here. This does not mean that health and education challenges are not extremely important, nor that attention should not be paid to them.

### *Protection-related challenges*

There are several protection risks related to the fulfilment of household energy needs. The risks identified from the analysis of the UNHCR data include those related to the increased danger of arrest and refoulement, sexual and gender-based violence (SGBV) and the jeopardizing of the voluntary nature of return and the willingness of authorities to grant asylum to refugees.

The first protection challenge is the increased risk of arrest for illegal firewood collection. In Bangladesh,<sup>2</sup> some refugees were arrested in 2007 for firewood collection despite UNHCR efforts to reduce the need for this activity. Although UNHCR has distributed compressed rice husk as an alternative fuel, some refugees sell their allocation and continue to collect firewood. In Djibouti,<sup>3</sup> the authorities have also threatened to detain those who are caught firewood collection in the forests. In the case of Ethiopia,<sup>4</sup> refugees are officially forbidden to leave the camp to collect firewood. However, this regulation has been widely ignored as a consequence of inconsistencies in kerosene distribution.

The second protection concern, the increased risk of refoulement, was only identified in Tanzania,<sup>5</sup> where incidences of refoulement were reported in 2007. Refugees left camps for various reasons, including firewood collection, despite the known dangers of doing so without the required permission. Some of those found outside the camps were arrested and deported. The group of refouled refugees did not have any specific demographic characteristics: it appears that women or specific minority groups are no more vulnerable for refoulement in this context than others. UNHCR was able to intervene in these cases.

The third protection issue is the jeopardizing of the profoundly voluntary nature of return. There is evidence that in Tanzanian<sup>6</sup> camps, factors such as restrictions on movement and insufficient food and firewood supplies are affecting refugees' decisions to return to their place of origin. This lack of basic resources puts the voluntary nature of return in doubt. In many cases, whether displaced people remain in the camps or decide to go back to their homes, they will still face severe household energy problems. UNHCR must therefore not only consider household energy issues within camps but also in the context of durable solutions.

---

<sup>2</sup> UNHCR (2008h)

<sup>3</sup> UNHCR (2008i)

<sup>4</sup> UNHCR (2008b)

<sup>5</sup> UNHCR (2008g)

<sup>6</sup> Ibid

The fourth protection challenge is sexual and gender-based violence (SGBV). It is widely recorded that women and girls face particular risks during firewood collection. The review of UNHCR's Annual Protection Reports provides evidence that SGBV is still a major challenge, despite the ongoing search for solutions. In Chad,<sup>7</sup> competition for natural resources has resulted in the rape of refugee women who leave the camps in search of firewood. This has been identified as one of the most significant protection challenges for UNHCR in the country. In the Ethiopian<sup>8</sup> refugee camps, the sexual harassment of unmarried women and women heads of households in particular also poses a serious protection problem.

This harassment is particularly common when women collect firewood outside the camps. Because the lack of firewood is causing serious problems in most refugee camps in Ethiopia,<sup>9</sup> meeting energy requirements is an important protection issue. In the Namibian<sup>10</sup> case, too, refugee women have mentioned that they fear physical attack when they look for firewood. They continue to be exposed to this risk even though the amount of distributed kerosene has been increased.

In Sudan,<sup>11</sup> particularly in the IDP camps in Darfur, the incidence of SGBV – primarily linked to firewood collection – is also well known. In Nepal,<sup>12</sup> Bhutanese refugee women and girls have been abused, detained and raped while collecting firewood. However, SGBV is less common in Nepal than in many other refugee and IDP situations. This may be partly due to UNHCR's long-standing fuel distribution scheme.

The fifth protection challenge is related to the potential impact of environmental degradation on the willingness of authorities to grant asylum to refugees.<sup>13</sup> If refugee camps have severe problems in fulfilling household energy needs, and particularly if this jeopardizes relations between host and refugee populations, the authorities may restrict their asylum policies. It is essential that UNHCR supports and advocates for a sustainable energy supply and the mitigation of the environmental impact of the camps.

Various attempts have been made to address household energy-related protection issues. In some of the Ethiopian<sup>14</sup> camps, group firewood collection and shopping trips have been organized and as a consequence fewer incidents of harassment have been reported. Other solutions include strengthening the activities of women's associations, conducting awareness-raising workshops on SGBV and increasing the participation of women in management and leadership positions.<sup>15</sup> In Bangladesh,<sup>16</sup> environmentally friendly solar street lights have been installed in the camps. This has improved the overall security of the camp and mitigated SGBV in particular.

---

<sup>7</sup> UNHCR (2008a)

<sup>8</sup> UNHCR (2008b)

<sup>9</sup> UNHCR (2006b)

<sup>10</sup> UNHCR (2008i)

<sup>11</sup> UNHCR (2008f)

<sup>12</sup> Women's Commission for Refugee Women and Children (2006b)

<sup>13</sup> See for example UNHCR (2000)

<sup>14</sup> UNHCR (2008b)

<sup>15</sup> UNHCR (2006b)

<sup>16</sup> UNHCR (2008h)

### *Relations between hosts and displaced people*

The scarcity of natural resources around many refugee and IDP camps has often been a cause of conflict between hosts and displaced people. In countries such as Chad, Ethiopia, Kenya, Nepal, Rwanda and Sudan, the shortage of household energy resources has been identified as a problem which significantly contributes to the degeneration of the relations between displaced people and host communities.

Even where the relationship between displaced people and hosts is relatively good in terms of most aspects of cohabitation, the fight over natural resources has often led into open rivalry. For instance, in West Darfur<sup>17</sup> the limited access to natural resources such as firewood, has caused inter-tribal conflict. It would be interesting to establish whether refugees and host communities experience more conflict over natural resources than IDPs and their hosts, given the fact that IDPs are citizens of the same country as the hosts. However, no conclusion on this issue can be reached based on the review of the UNHCR documents.

Various solutions have been implemented to enhance and improve mutually beneficial relations between host and displaced populations. In Chad,<sup>18</sup> a comprehensive energy strategy was developed to reduce the reliance on natural resources. The introduction of energy-efficient stoves has had a positive impact on refugees' relationships with both the local population and the authorities. Similar improvements have occurred in Kenyan refugee camps as a result of energy-saving stove projects. The Kenyan Dadaab camp stove project has positively affected a wide range of issues, including "the improvement of living conditions of both refugees and the immediate host communities, promotion of both inter-agency and stakeholder collaboration in addressing issues and ensuring stability of asylum by promoting harmonious co-existence between refugees and their host communities."<sup>19</sup> The establishment of environmental working groups with both refugee and host members has also improved relations between the communities.

In Ethiopia,<sup>20</sup> conflicts between refugees and their hosts have not been that significant. This may be due to the situation of mutual assistance that prevails, in which host communities allow refugees to access their limited resources and UNHCR provides access to services provided for refugees, such as health and education, to host communities.

The Kakuma camp in Kenya<sup>21</sup> has a policy discouraging refugees from using the limited natural resources; because these restrictions are well known by both refugees and locals they have contributed to a lack of conflict over resources. The policy of refugees buying additional firewood from the local community has also improved relations between the two parties. However, in order to be able to purchase this firewood, refugees have to sell part of their food rations. This has had a negative impact on the nutritional status of refugee children in particular and can therefore not be seen as a sustainable energy solution.

---

<sup>17</sup> UNHCR (2008f)

<sup>18</sup> UNHCR (2008a)

<sup>19</sup> UNHCR (2008c), p. 25

<sup>20</sup> UNHCR (2008b)

<sup>21</sup> UNHCR (2008c)

### *Environmental problems*

In camp situations wood is often the only available source of energy. Traditionally, wood has been used for cooking and is therefore often also the most familiar source of energy. The demand for firewood depends on the type of wood and stove used and on the climate, as wood may also be used for household heating. It has been estimated that initial daily per capita consumption of firewood in camps is 3 kilograms per person. However, this can be reduced to 1-2 kilograms if wood-saving techniques are used and firewood collection is restricted..<sup>22</sup>

Alternative energy sources, such as coal, kerosene, liquid propane gas and electricity,<sup>23</sup> are used more often in situations of urban displacement than in rural camps. Some of these energy methods cause environmental degradation and create health risks. It is therefore necessary to evaluate the environmental and other impacts of various energy sources carefully before deciding on the best option for a specific situation.

Typically, the amount of fuel or firewood distributed by the aid agencies is not sufficient and displaced communities continue to use natural resources located close to the camps. For example, in Rwanda<sup>24</sup> it is a serious challenge to provide sufficient amounts of fuel to all of the refugee camps. This is primarily because there is not enough wood to meet the energy needs of the population as a whole. Severe drought has meant that firewood has had to be transported from other districts to refugee camps. This has led to increased transportation costs and further jeopardized the regular distribution of firewood.

In Nepal,<sup>25</sup> deforestation in the areas surrounding refugee camps has been increasing for many years and has created substantial environmental degradation as well as a lack of firewood. In many mass influx situations, deforestation has been the most significant negative environmental impact on the hosting area.

Although environmental issues are increasingly well addressed in refugee and IDP camps, problems still exist with regard to the actions and attitudes of both the authorities and displaced people. For instance, in West Darfur, Sudan,<sup>26</sup> the activities of both groups demonstrated a lack of environmental awareness, particularly in terms of the extensive firewood collection taking place around the camps.

When attempting to mitigate the negative environmental impacts of household energy use in camps, at least three things need to be considered.<sup>27</sup> First and foremost, energy consumption should be reduced. Secondly, fuel wood must be harvested in a sustainable manner and thirdly, the supply of alternative fuels must be considered.

Reducing consumption can be achieved by introducing fuel-efficient stoves, communal cooking alternatives and environmental education training.

---

<sup>22</sup> UNHCR (2005a)

<sup>23</sup> UNHCR (2005b)

<sup>24</sup> UNHCR (2008e)

<sup>25</sup> UNHCR (2008d)

<sup>26</sup> UNHCR (2008f)

<sup>27</sup> Ibid

Environmentally friendly, energy-saving stoves have been constructed and distributed in several different camp locations, which has decreased the consumption of firewood. In Eastern Chad,<sup>28</sup> kitchen stoves have been distributed to all households to promote a more efficient use of energy resources.

Environmental education and sensitization campaigns contribute to an improved awareness of environmental risks and ways to mitigate these risks. However, environmental education is not always available in camp situations. For instance, in Sierra Leone,<sup>29</sup> where refugee livelihood activities, including the increased use of firewood, have had negative impacts for the land and vegetation in host communities, no international agencies on the ground are advocating for sustained environmental performance.

The introduction and use of alternative energy resources besides firewood are also important for mitigating environmental degradation and in particular the exploitation of forests. UNHCR<sup>30</sup> has developed the concept of an ‘energy ladder’ of burnable fuels. Fuels such as charcoal, briquettes, kerosene and biogas have more energy value than firewood, and are therefore higher up the ‘ladder’, but are more expensive.

At the same time, the use of these fuels is usually practically feasible and culturally appropriate, although it does pose the problem of potential resale. Energy sources which fall below firewood on the energy ladder include dry peat, grass and loose waste and residues. These tend to be more labour-intensive and cheaper forms of energy production, but they also have lower cooking efficiency. They therefore tend not to be as socially acceptable as other, more efficient, fuels.

Likewise, there are many cultural, logistical and social problems attached to the use of solar energy, which is therefore perceived to have a lower overall value than firewood as a fuel option. However, although there are initial obstacles to the use of alternative energy sources, they should be considered as part of attempts to promote and develop sustainable household energy use in refugee and IDP camps.

In Nepal, the conflict has increased the price of kerosene and affected the distribution of fuel and UNHCR has developed an alternative fuel programme. However, refugees have been fairly reluctant to adopt new fuels such as biomass briquettes and compressed coal dust briquettes, or other new techniques, such as parabolic solar cookers and biogas. The involvement of the local community is a key issue for the successful implementation of alternative energy programmes.

#### *Natural resource-related restrictions*

National legislation may restrict the right of refugees’ right to work, which limits their ability to generate income and purchase additional fuel. At the same time, national laws can also restrict the use of natural resources. These laws protect and regulate the exploitation of scarce resources and the environment, but may also constrain household energy supplies. Nevertheless, the UNHCR forestry guidelines clearly

---

<sup>28</sup> UNHCR (2008a)

<sup>29</sup> UNHCR (2008j)

<sup>30</sup> UNHCR (2002b)



recognize the need to control wood gathering, stating that even when forest conditions are favourable enough to allow refugees to freely collect their wood requirements, extensive supervisory control, law enforcement and awareness raising measures will still have to be taken.<sup>31</sup>

Organized wood supply is also an option for restricting wood gathering. Under this system, displaced people do not collect the wood themselves; instead, harvesting and distribution are conducted by an agency. However, displaced people typically participate in the process at various levels. Even though it has many advantages, this method is still only rarely used, primarily in situations where wood resources are very limited, the freedom of movement of displaced people is restricted or where firewood collection poses a serious security risk to individuals.<sup>32</sup>

UNHCR guidelines recognise the implications of national environmental policies and laws and define access rights and benefit sharing as fundamental to sound environmental management. In relation to access to land and natural resources, they emphasize that decisiveness and clarity are essential. An ambiguous government policy or inconsistent application of laws relating to refugees' rights over local land is likely to be more environmentally damaging than the adoption of clear stance, even if that stance allows for full access and exploitation.<sup>33</sup>

A weakly enforced prohibition of refugees' right to use resources is often a poor option in terms of the environment, as it can lead to the uncontrolled exploitation of natural resources and worsening relations between displaced people and host communities.

Under Nepalese<sup>34</sup> law, the right to forest protection lies with local Community Forest User Groups (CFUGs), which are responsible for ensuring that the illegal harvesting of forest products does not take place. As a result, refugees are restricted from consuming natural resources. Both refugee and host communities are aware of this law, but the lack of other livelihood options has put refugees in danger of contravening it. Refugees who are compelled to collect firewood can be arrested or abused if caught.

Rwanda<sup>35</sup> has established a culture of environmental protection and, generally speaking, refugees abide by its environmental policies. However, these policies have been highly contested with regard to the use of firewood. Government officials have accused refugees of misusing forest resources because of occasional increases in wood collection due to the lack of firewood distribution. In addition, women and children in camps are vulnerable to harassment and violence due to the lack of access to firewood in nearby areas. In 2005, the Government of Rwanda issued a law forbidding the use of wood for shelter construction and as an energy source in order to respond to increasing deforestation.<sup>36</sup> This law has affected refugees and returnees

---

<sup>31</sup> UNHCR (2005a), p. 36.

<sup>32</sup> UNHCR (2005a)

<sup>33</sup> UNHCR (2000), p. 56

<sup>34</sup> UNHCR (2008d)

<sup>35</sup> UNHCR (2008e)

<sup>36</sup> UNHCR (2006a)

alike. UNHCR has had to look into alternative energy sources, but replacing wood as a source of energy and for construction will take considerable efforts and funds.

In Tanzania,<sup>37</sup> the government has banned tree-harvesting in natural reserves, which has particularly affected the main refugee hosting areas. In addition, Tanzania continues to enforce an encampment policy. Although the authorities do not take measures against refugees who leave the camp for daily firewood collection, the encampment policy limits the potential for refugee self-reliance.

Given these restrictions on natural resource use and freedom of movement, UNHCR has developed two approaches to household energy provision in Tanzanian camps. In some camps it continues to provide firewood, while in others refugees collect dead tree wood under the guidance of the authorities.

Solutions to the various national restrictions on the use of natural resources and freedom of movement are complicated. On the one hand, these restrictions are established to protect scarce resources; on the other, if no other sources of income and household energy are provided, they can seriously harm the well-being of displaced people by limiting their access to their most-often used means of employment. UNHCR should both implement alternative income-generating activities and advocate for the importance of environmental policies. It also needs to advocate for freedom of movement and changes in the laws that discriminate against displaced people with regard to the use of natural resources.

### *Livelihood-related challenges*

The causes of various household energy challenges seem to be closely linked to a lack of livelihood options. Indeed, it can be argued that sustainable livelihood options and sustainable environmental behaviour go hand in hand. The lack of income-generating opportunities in refugee and IDP camps significantly affects the use of firewood and other natural resources. Furthermore, it impacts on relations between displaced and host populations and on the protection of displaced persons.

In several refugee-hosting countries, refugees are not allowed to work. When the right to work is not recognized, refugees tend to work illegally and to use natural resources extensively in order to generate income. They may, for example, sell firewood or other natural resources. For example, refugees in Ethiopia<sup>38</sup> are prohibited from working and therefore participate in the informal sector, including work related to agricultural activities and selling firewood.

Displaced people also sometimes place themselves at physical risk in order to collect firewood for sale. Refugees in the western region of Gambia<sup>39</sup> are dependent on selling firewood and charcoal during the dry season, which places severe pressure on the environment and may inhibit the water cycle and thus prevent rain.

---

<sup>37</sup> UNHCR (2008g)

<sup>38</sup> UNHCR (2008b)

<sup>39</sup> UNHCR (2008k)

Livelihood options must also be carefully considered in situations where refugees and IDPs buy at least part of their firewood from local markets. A positive result of this arrangement may be that relations between hosts and refugees are better than those where displaced people collect firewood from the forests surrounding the camp and therefore compete with the local population. However, if displaced people are forced to sell some of the essential products they receive in order to be able to purchase firewood from locals, they may be deprived of other basic substances, such as food.

Food rations are the main source of income for the majority of refugees, as in the Kakuma camp in Kenya,<sup>40</sup> where refugees buy firewood from the host population by selling part of their food rations. This situation has negatively affected the nutritional status of refugees. UNHCR must therefore pay special attention to evaluating and monitoring the implications of situations where displaced people purchase part of their energy sources from locals. Alternative income-generating activities must be created in order to balance energy requirements with other basic needs.

The lack of sustainable livelihood options has been identified as an increasingly critical protection risk. In Darfur, Sudan,<sup>41</sup> it has involved women in risky income-generating activities such as collecting and selling firewood. In Nepal,<sup>42</sup> refugees have become dependent on kerosene distribution, as the resale of kerosene is their main means of income. The fact that Nepali law prohibits refugees from working particularly affects women, who must sell firewood and kerosene to earn money, placing them at risk.

The Nepali example provides clear evidence that the lack of livelihood options is linked to both household energy and protection concerns.<sup>43</sup> Because many refugees rely on kerosene for their livelihoods, the introduction of alternative fuels will force them to find alternative sources of income, including firewood selling or prostitution. The lack of alternatives for refugees also creates competition with locals over employment opportunities and could lead to conflict.

Solutions to the problems related to the links between livelihoods and household energy can be found in innovative projects that address both the environmental challenges and the lack of economic options. Such projects might include displaced people themselves building energy-saving stoves in the camps, which would both reduce the amount of firewood used and create income-generating activities. As mentioned above, a project in the Dadaab camp in Kenya<sup>44</sup> introduced a new type of stove which uses less firewood for cooking; the stoves were produced in the camp and the project employed several displaced people. UNHCR must also continue to advocate for the right to work for refugees.

At the same time, it is important to note that an influx of refugees or IDPs can stimulate new opportunities for income-generating activities and can therefore be viewed as a positive as well as a negative situation.<sup>45</sup> Income-generating activities are

---

<sup>40</sup> UNHCR (2008c)

<sup>41</sup> UNHCR (2008f)

<sup>42</sup> Women's Commission for Refugee Women and Children (2006b)

<sup>43</sup> UNHCR (2006c)

<sup>44</sup> UNHCR (2008c)

<sup>45</sup> UNHCR (2002a)

not necessarily environmentally destructive but can actually be aimed at addressing environmental degradation. The commercialisation of wood can promote more efficient wood use, although it might also negatively affect the environment if the process is not appropriately managed. It is also possible that it might disadvantage vulnerable groups if the equal use of resources is not guaranteed. Most of the materials for environmental projects can be produced locally, which should be taken into consideration when environmental and livelihood projects are planned.

Unfortunately, many forestry-related income-generating activities are still linked to illegal activities and hence UNHCR cannot support them. It is therefore even more important that UNHCR assist with the development of legal and sustainable forestry-related livelihood options. These might include,<sup>46</sup> for instance, tree nursery work, tree planting, the creation of fences and fire breaks, plantation tending, controlled harvesting, authorized charcoal production, agro forestry practices, erosion-control measures and the construction of forest roads. Displaced people could be paid in cash or through the provision of firewood or other items.

### **UNHCR's household energy policy**

This report aims in part to analyse UNHCR's household energy policy. It seems that UNHCR does not have a clearly defined 'household energy policy' as such which can be applied in every situation. Rather, its 'policy' on energy issues is drawn from various documents that address issues of household energy provision in the context of other matters. The following section highlights some aspects of the agency's approach to household energy. It also discusses the role of UNHCR in the inter-agency response to energy issues. This is essential, given the fact that UNHCR does not deal with these issues in isolation, but rather coordinates with other humanitarian actors, particularly in IDP situations.

UNHCR recognized in a 1996 report<sup>47</sup> that energy issues do not often receive primary attention in emergency situations, where the focus lies more with other basic needs such as food, shelter, water and sanitation. In addition, where household energy-related problems are addressed, action is rarely timely but taken only when the problem has become severe. Furthermore, humanitarian agencies do not normally have the necessary funds to develop long-term and sustainable solutions for household energy provision.

However, nearly ten years after this initial report, in 2005, domestic energy was identified as a sectoral activity at the heart of UNHCR's environmental projects.<sup>48</sup> It consists of three key areas: the promotion of efficient energy use, the supply of alternative fuels and the sustainable provision of fuel wood, and is intended to address energy problems during all phases of refugee assistance.

According to the UNHCR/WFP joint assessment guidelines,<sup>49</sup> an assessment of energy needs and availability must be conducted in every refugee and IDP situation.

---

<sup>46</sup> UNHCR (2005a), p. 40-41

<sup>47</sup> UNHCR (1996)

<sup>48</sup> UNHCR (2005b)

<sup>49</sup> UNHCR/WFP (2004)

Both refugees and host communities should participate in these assessments. The requirements for domestic heating must be considered in addition to cooking fuel needs. The guidelines present a clear preference for the order in which household energy-related challenges should be addressed. Firstly, the options for reducing household energy needs should be evaluated; secondly, the use of alternative sources of energy should be assessed; and, as a 'last resort', the external provision of fuel should be considered.<sup>50</sup>

One option to reduce fuel consumption is central and shared cooking. This method is, however, often overlooked. We have already discussed some methods of reducing energy consumption. In addition, and although it is often overlooked as a strategy to reduce fuel consumption, central and shared cooking should be promoted. The clustering of refugee houses and the provision of larger cooking pots can encourage shared cooking.

In the case of Eastern Sudan,<sup>51</sup> the use of communal stoves has led to a 40-50 per cent reduction in fuel consumption. Each stove is used by at least ten households and the stoves were produced by refugees and local constructors using local and sustainable materials. Evidence from a Tanzanian<sup>52</sup> refugee camp indicates that if six people cook together, the energy saving is over 60 per cent, three times more than that achieved by an improved stove. However, if the cooking units are too large, they might not be any more efficient than medium units which serve six to seven people.

The 'last resort' option of external fuel provision should only be considered in the following situations: where securing household energy will take an excessive amount of time and labour; in the context of serious security risks related to the collection of fuel products; where severe threats to the environment exist; when the institution of asylum is jeopardized because of competition over fuel; or where there is governmental pressure.<sup>53</sup> Authorities may be concerned that displaced people will exploit local resources and hence increase environmental degradation. These concerns are sometimes justified by ecological evidence but they may also be politically motivated.

UNHCR also makes it clear that fuels should not be provided for free. The UNHCR guidelines in forest management<sup>54</sup> state that the provision of free fuel supplies should be avoided at all costs and that the free distribution of wood is only appropriate for the most vulnerable groups. Most displaced people should receive their firewood or other energy supplies in exchange for work carried out, which could be linked to environmental or other public projects.

UNHCR has identified several other factors which need to be taken into account when considering fuel distribution. One is that refugees and IDPs should manage distribution themselves as this may reduce conflict.<sup>55</sup> Due consideration should be

---

<sup>50</sup> UNHCR/WFP (2004)

<sup>51</sup> Bridel (2002)

<sup>52</sup> Owen (2002)

<sup>53</sup> UNHCR (2002b)

<sup>54</sup> UNHCR (2005a)

<sup>55</sup> UNHCR (1998, 2002a)

given to what fuel should be supplied. According to UNHCR and WFP,<sup>56</sup> the fuel should be culturally acceptable, easy to use but unappealing for resale. Its distribution should also be targeted to specific groups. Moreover, long-term donor and agency commitment is necessary to make organised supply work.

It must also be kept in mind that consumption of fuel normally increases when fuel distribution is established; because only a proportion of the newly required fuel is distributed, refugees continue to gather wood. Supplying fuel can also be highly expensive and logistically challenging. Any organised wood-supply project has to be complemented by actions to maintain the supply of wood, such as tree planting.

Organised energy supply projects have had mixed results. Positive environmental and social results have been reported in Nepal.<sup>57</sup> This is mainly due to the low resale value of kerosene, the long-term UNHCR commitment and the refugee-managed distribution system. However, other sources question this success, citing the increased price of kerosene and refugees' dependency on kerosene resale as a main income-generating activity.

In addition to these practical household energy policies, the roles and responsibilities of UNHCR in the inter-agency response to household energy questions must be considered. UNHCR increasingly works in situations of internal displacement and through the inter-agency cluster approach. In addition to these practical household energy policies, which mainly focus on refugee camp situations, the roles and responsibilities of UNHCR in the inter-agency response to household energy questions in IDP camps must be considered. This is because UNHCR increasingly works in situations of internal displacement through the inter-agency cluster approach.

Under the current inter-agency cluster approach, which is used in all major complex IDP emergencies, household energy is not defined as a separate cluster. This is surprising, given that household energy is a crucial issue and should be given high priority. It is currently dealt with as a cross-cutting issue – that is, one which deserves the attention of all humanitarian actors in the cluster approach.

The IASC Task Force SAFE<sup>58</sup> has provided useful guidance on the different responsibilities of humanitarian agencies with regard to household energy (see Annex 2). These guidance notes on agency-specific responsibilities identify eight different areas linked to household energy issues, in all of which UNHCR is involved in one way or another. UNHCR is the 'cluster lead' for Camp Coordination and Camp Management (CCCM), Emergency Shelter and Protection, either independently or with another organisation. It is also a 'primary responsible agency' for CCCM; Emergency Shelter; Environment/Natural Resource Management; Information, Education and Communication (IEC); and Protection. Furthermore, it has been given the role of 'relevant expert' for the Food/Nutrition, Health and Livelihoods/Development/Food Security clusters.

---

<sup>56</sup> UNHCR/WFP (2004)

<sup>57</sup> UNHCR (2002a)

<sup>58</sup> Inter-Agency Standing Committee (IASC) Task Force on Safe Access to Firewood and Alternative Energy in Humanitarian Settings (SAFE) (2008)

UNHCR is thus heavily involved in various tasks and has extensive responsibilities both in terms of leading various clusters and providing expertise under the inter-agency fuel strategy for situations of internal displacement. However, the responsibilities defined by the IASC Task Force are relatively flexible; it is left mostly to the organizations themselves to use and disseminate the tools that the Task Force provides. Because household energy is a cross-cutting issue rather than a cluster, it is also difficult to ensure sufficient funding for household energy projects and to allocate responsibility to an agency.<sup>59</sup> The wide range of responsibilities assigned to UNHCR, however, prove that it has a significant role to play in household energy issues at the inter-agency level.

## **Conclusion**

This report has identified various challenges related to household energy provision in refugee and IDP camps. These challenges are linked to protection, relations between host and displaced populations, the environment, natural-resource restrictions and livelihood problems. While health problems and education-related issues do exist in camp situations, they were not clearly addressed in the analysed data and have therefore not been fully discussed in this paper.

In most camp locations, household energy challenges are both acute and interlinked. This is most obvious in the context of livelihood-related problems. It appears that most of the other challenges are root causes or consequences of the lack of sustainable livelihoods and the dangers linked to energy-dominated income-generating activities. A comprehensive approach is therefore essential to finding sustainable energy solutions.

Many solutions have been implemented. Like the challenges themselves, solutions are manifold and interlinked. The threat to the institution of asylum needs to be approached from various perspectives, including those of environmental protection, relations between host and displaced populations and respect for the national restrictions on the use of natural resources. Similarly, solutions to environmental problems will also affect natural resource restrictions, relations between host and displaced populations and protection concerns.

The solutions to livelihood-related challenges in particular are affected by other problems and solutions. The main initiatives undertaken to provide sustainable livelihoods include advocacy for the right to work, and the implementation of innovative environmental projects which create income-generating opportunities. Fuel distribution projects must take into account the low resale value of fuel and be accompanied by effective alternative livelihood options in order to make distribution beneficial for all affected people.

Solutions to the challenge of relations between host and displaced populations primarily involve ways of decreasing the use of firewood and reinforcing cooperation between the two communities, including through stakeholder collaboration and

---

<sup>59</sup> Haenni Dale (2008)

environmental working groups. Another potential solution takes the form of arrangements through which refugees and IDPs purchase part of their fuel from the host population. However, as discussed earlier, this can have negative consequences such as malnutrition where displaced persons are required to sell part of their food rations in order to be able to buy fuel.

UNHCR has made efforts to mitigate protection-related challenges in terms of activities such as group firewood collection, workshops on SGBV and the reinforcement of women's participation. It has also introduced solar street lights to new camps, which has had a positive impact on the overall security situation.

This report's analysis of UNHCR's 'household energy policy' has involved both a review of various approaches to household energy in refugee camps and an investigation into UNHCR's role in the inter-agency approach to energy issues in relation to IDP situations. It concludes that UNHCR does not have a clear 'household energy policy' to adhere to in every displacement situation, but rather has elaborated various guidelines on different aspects of household energy-related questions.

Overall guidance on what needs to be considered in refugee/IDP camps with regard to household energy is missing. Enquiries from the field indicate that it might be useful to establish a project-based, regularly updated database which outlines current household energy-related challenges and attempted solutions. Establishing such a database would require input from the field and could not be achieved through a desk study.

Some broad guidelines for household energy can be gleaned from more general UNHCR documents which address issues such as forest management, environmental protection, cooking options and livelihood promotion. UNHCR's policy is to conduct household energy needs assessments and to act in three different areas: decreasing energy needs, developing sustainable energy options and implementing fuel distribution, if needed. Given the various risks and challenges involved in fuel distribution, UNHCR regards this as an option of last resort and has developed guidelines on best practices.

When it comes to UNHCR's 'household energy policy' in IDP camps, the issue of inter-agency cooperation has to be considered more carefully than in the typical refugee camp context. Under the inter-agency fuel strategy UNHCR has a significant and varied role to play. It is global cluster lead with appropriate lead agency responsibilities on household energy issues in three of the eight key activities, as well as being a primary responsible agency in five and relevant expert in three key activities. It is therefore involved in all eight key energy-related activities, with CCCM, Emergency Shelter and Protection being the most significant. Several challenges have been identified within the inter-agency fuel strategy, including the major question of responsibility and the lack of a household energy cluster with a clear lead agency.

To conclude, it is clear that UNHCR and inter-agency cluster approach are lacking clear household energy policies. Therefore, it is essential that UNHCR establishes an overall household energy policy for refugee situations and that in inter-agency response a new cluster for energy issues is launched. Without clear energy policies the



displacement-related household energy challenges will inevitably continue suffering from a lack of sustainable solutions.

## Annex 1. Key energy challenges and solutions in selected country operations

Main energy problem	Sub-problems	Countries with the problem	Attempted solutions
<b>Protection</b>	Increased risk of arrest Increased risk of refoulement Jeopardizing of the voluntary nature of return Sexual and gender-based violence (SGBV) Jeopardizing of the institution of asylum	Bangladesh, Djibouti, Ethiopia, Tanzania, Chad, Namibia, Sudan, Nepal	Group firewood collection Reinforcement of women's participation and leadership Workshops on SGBV Solar street lights in the camp
<b>Relations between host and displaced populations</b>	Competition over natural resources	Chad, Ethiopia, Kenya, Nepal, Rwanda, Sudan	Energy strategies Energy-efficient stoves Stakeholder collaboration Environmental working groups Restrictions on the use of natural resources Purchase of some fuel from the local population
<b>Environment</b>	Degradation Deforestation Desertification Exploitation of natural resources	Chad, Nepal, Rwanda, Sudan, Sierra Leone	Reduction of consumption (techniques and restrictions) Sustainable harvesting of wood Alternative environmentally friendly energy sources Transportation of firewood from other areas Environmental education and sensitization campaigns
<b>National resource restrictions</b>	Discriminatory regulations relating to the use of energy resources Increased risk of harm if regulations are not followed due to lack of alternatives	Nepal, Rwanda, Tanzania	Organized wood supply and collection Advocacy for access rights and benefit-sharing Introduction of alternative fuels and livelihood options
<b>Livelihoods</b>	Restrictions on the right to work Lack of formal income-generating activities Excessive (and illegal) use of energy sources in order to generate income Increased protection and environmental risks Resale of distributed energy resources Lack of self-reliance and integration as a consequence of the lack of livelihood opportunities Potential dependency on fuel distribution	Chad, Ethiopia, Gambia, Kenya, Sudan, Nepal	Projects that reinforce self-reliance and created income-generating activities Low resale value of distributed fuels Advocacy for the right to work Mitigating environmental and protection risks Innovative projects that address both livelihoods and environmental protection Sustainable forestry-related livelihood options

## Annex 2. UNHCR's responsibilities in the inter-agency fuel strategy

Key activities	Global cluster leads	Primarily responsible agencies	Relevant expertise
Camp Coordination and Camp Management (CCCM)	<b>UNHCR</b> (conflicts), IOM (natural disasters)	<b>UNHCR</b> , IOM	NGOs
Emergency Shelter	<b>UNHCR</b> (conflicts), IFRC (natural disasters)	<b>UNHCR</b> , IFRC	UN-Habitat, WHO, UNEP, OCHA
Environment/Natural Resource Management	UNEP	<b>UNHCR</b> , FAO	UNEP, UNDP
Food/Nutrition	UNICEF	WFP	UNICEF, FAO, <b>UNHCR</b> , WHO
Health	WHO	WHO, UNFPA	<b>UNHCR</b> , WFP, UNICEF, NGOs
Information, Education and Communication (IEC)	UNICEF, SCF	OCHA, <b>UNHCR</b>	UNICEF, WFP, INEE
Livelihoods/Development/Food Security	FAO, UNDP	FAO, UNDP	<b>UNHCR</b> , WFP, NGOs
Protection	<b>UNHCR</b>	<b>UNHCR</b> , UNFPA, UNICEF	WFP, OCHA, NGOs

(Source: Modified from IASC Task Forced SAFE, 2008)

## REFERENCES

- Bridel, J. (2002). *Fuel-efficient Stoves, Firewood form a Sustainable Source, Tree Planting and Raised Environmental Awareness –Sound Environmental Practice? The Example of Laffa Refugee Camp, Kassala State, Eastern Sudan*, 46-48, in Practising and Promoting Sound Environmental Management in Refugee/Returnee Operations. Papers Presented at the International Workshop. UNHCR.
- Haenni Dale, C. (2008). "Practical Prevention". Presentation. 16 Days of Activism Against Gender Violence. 25.11.2008, UNHCR.
- Inter-Agency Standing Committee (IASC) Task Force on Safe Access to Firewood and Alternative Energy in Humanitarian Settings (SAFE) (2008). *Matrix on Agency Roles and Responsibilities for Ensuring a Coordinated, Multi-sectoral Fuel Strategy in Humanitarian Settings*, Version 1.1, October 2008
- UNHCR (1996). *Household energy in emergency situations*. Intermediate Technology Development Group, Boiling Point Series, No. 37, Intermediate Technology.
- \_\_\_ (1998). *Refugee Operations and Environmental Management. Selected Lessons Learned*. UNHCR.
- \_\_\_ (2000). *Key Principles for Decision-making*. Refugee Operations and Environmental Management. UNHCR.
- \_\_\_ (2002a). *Refugee Operations and Environmental Management. A Handbook of Selected Lessons Learned from the Field*. UNHCR.
- \_\_\_ (2002b). *Cooking Options in Refugee Situations. A Handbook of Experiences in Emergency Conservation and Alternative Fuels*. UNHCR, Geneva.
- \_\_\_ (2005a). *Forest Management in Refugee and Returnee Situations. A Handbook of Sound Practices*. UNHCR.
- \_\_\_ (2005b). *UNHCR Environmental Guidelines*. UNHCR, Geneva UNHCR.
- \_\_\_ (2006a). *Rwanda. Country Operations Plan 2007*. UNHCR
- \_\_\_ (2006b). *Ethiopia. Country Operations Plan 2007*. UNHCR
- \_\_\_ (2006c). *Nepal. Country Operations Plan 2007*. UNHCR
- \_\_\_ (2008a). *Chad. Annual Protection Report 2007*, UNHCR
- \_\_\_ (2008b). *Ethiopia. Annual Protection Report 2007*, UNHCR
- \_\_\_ (2008c). *Kenya. Annual Protection Report 2007*, UNHCR
- \_\_\_ (2008d). *Nepal. Annual Protection Report 2007*, UNHCR
- \_\_\_ (2008e). *Rwanda. Annual Protection Report 2007*, UNHCR
- \_\_\_ (2008f). *Sudan. Annual Protection Report 2007*, UNHCR
- \_\_\_ (2008g). *Tanzania. Annual Protection Report 2007*, UNHCR
- \_\_\_ (2008h). *Bangladesh. Annual Protection Report 2007*, UNHCR
- \_\_\_ (2008i). *Namibia. Annual Protection Report 2007*, UNHCR
- \_\_\_ (2008j). *Sierra Leone. Annual Protection Report 2007*, UNHCR
- \_\_\_ (2008k). *Gambia. Annual Protection Report 2007*, UNHCR
- UNHCR/WFP (2004). *Joint Assessment Guidelines. Provisional version*
- Women's Commission for Refugee Women and Children (2006a). *Beyond Firewood. Fuel alternatives and protection strategies for displaced women and girls*. Online. Available at: <<http://www.womenscommission.org/pdf/fuel.pdf>> [Accessed 31 October 2008]
- Women's Commission for Refugee Women and Children (2006b). *The Perils of Direct Provision: UNHCR's response to the fuel needs of Bhutanese refugees in Nepal*. Online. Available at: <<http://www.unhcr.org/refworld/docid/48aa83040.html>> [Accessed 31 October 2008]
- Owen, M. (2002). *Energy Conservation through Shared Cooking: A 'Best Practice' Worth Promoting*, 49-50, in Practising and Promoting Sound Environmental Management in Refugee/Returnee Operations. Papers Presented at the International Workshop. UNHCR, Geneva.