



# GENDER-SENSITIVE SOLAR LIGHTING IN BANGLADESH

## Lighting, sanitation and the risk of gender-based violence

Case study 2: Bangladesh, Rohingya refugee camps, Cox's Bazaar

### What type of lighting was installed, when, where and why?

Since August 2017, over 700,000 Rohingya refugees have fled Myanmar to the relative safety of camps around Cox's Bazaar in Bangladesh. The camps were established rapidly and without prior planning in a hilly area. Every day, hundreds of thousands of people have to negotiate many physical hazards – including extremely steep and uneven steps, bridges in poor repair, muddy and uneven ground – simply to access water or latrines. Conditions are even more treacherous given the poor or non-existent lighting. Injuries are common and it is easy to get lost in poorly lit neighbourhoods that are crammed together without distinguishing landmarks. Lack of light limits mobility for women and men of all ages – though women are particularly affected.

*'The latrines and bathing places are not accessible at night. So, when would women go? They can't go during the day because men are roaming, and at night it is too dangerous.'*

**Majhi (community leader),  
Unchiprang**

Social and cultural norms and the practice of 'purdah' prevent many Rohingya women from moving beyond the immediate vicinity of their shelter and neighbours. Oxfam's assessments found that women and girls were reluctant to collect water or use latrines in the daytime because they felt ashamed if they didn't have adequate clothing to cover themselves in line with purdah. They were particularly concerned about being seen by men who were not close relatives. As a result, they were waiting until dusk to go out to sanitation facilities, meaning they had to navigate the often steep and slippery pathways in poor light.



Lights distributed by Oxfam. Photo: Rachel Hastie/Oxfam

Although a few people managed to bring solar panels with them from Myanmar, the vast majority of the refugees are without any source of light. With the sun setting at 6–7pm, many women and girls spend the evenings in their shelters in darkness. Men have greater freedom of movement after dark, including attending the three calls to prayer at Mosque after sunset. If a family has any form of lighting, men's use is prioritized so they can negotiate the dangerous paths.

Over time, various aid agencies started to distribute torches and lamps in the areas of the camp where they were working, although the quality of the lights varied widely. One aid worker observed that some people had lights that were little better than children's toys, providing just 20 minutes' light after a full charge. Battery life, luminescence, robustness and additional features such as the ability to charge mobile phones varied, creating a sense of 'a lottery' whereby different neighbourhoods were better or less well

supplied. In some cases, the higher quality lighting devices had to be sourced out of country and took longer to arrive, so there was an element of trade-off between speed and quality.

Drawing on learning from its global research into lighting – which had found that distributing one lamp per household resulted in more men than women using the lights – Oxfam decided to distribute two lights to each household: one d.light S500 solar lantern and one d.light S100 solar torch, which has a stand so it can be used as a lamp if required. Both have a mobile phone charger and come with a two-year warranty. During the distribution, Oxfam staff explained the rationale for providing two lamps per household, and how to claim against the warranty if needed. Recipients were also told the price of the lamps, because, as one Oxfam staff member put it, *‘We hope they won’t sell them, but if they do, we want to be sure they get a good price.’* Oxfam distributed cloth at the same time, as lack of adequate clothing was another issue limiting movement within the camp.



Solar panels for the distributed lights. Photo: Rachel Hastie/Oxfam

### Did the distribution/installation of lighting affect perceptions of safety, particularly in relation to GBV?

Camp residents’ response to having the lamps has been overwhelmingly positive. Repeated household visits have clearly shown the value people attach to these assets – solar panels could be seen on roofs, mobile phones charging, and the torches hanging by entrances ready for use. Many households reported similar patterns of usage: the larger lanterns were mainly used inside the shelter – for cooking, cleaning up, family time – and more often by women and girls. The torches tended to be used to go out after dark, and therefore were more often used by men, e.g. to attend Mosque, go to market, and pick up medicines from clinics.

*‘It has increased our freedom.’*

**Amina, female camp resident in Kutupalong, explaining the impact of solar torches on women.**



Lights distributed by Oxfam. Photo: Rachel Hastie/Oxfam

If the men were out with the torch, the women would use the lantern to go to the latrines or bathing areas, or to help a child or elderly relative do so. Having both lights had undoubtedly made people’s lives easier. As one woman concluded: *‘Having two lights means there is less discussion about who has priority.’* Everyone interviewed had a view on the relative attributes of the two lights: the S500 lantern was valued for its brightness and the S100 torch for having a directional beam, which is better for walking around at night.

The warranty is upheld by a local agent for d.light who is present in Cox’s Bazaar, and to date one woman whose light was not functioning properly has claimed a replacement under the warranty. Oxfam was aware that distributing two lights may have meant that people would sell one to meet other urgent needs. However, when asked about this, women said: *‘We haven’t seen any of these lights for sale in the marketplace, but no, we would not sell them ourselves. We need these lights more than we need money!’* Oxfam is monitoring markets and will continue to talk to the community, to understand the extent to which providing two items can increase access to lighting for a wider range of family members, and especially for women and girls.

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