Lighting makes people feel safer and has benefits beyond safety: Camps and informal settlements are supposed to be places of refuge and safety for people fleeing conflict and disaster, but they can be dangerous, especially for women and girls. A lack of lighting makes people feel unsafe, especially when they first arrive in a new place and the neighbours are strangers. There is thus high demand in such locations for lighting to:

• reduce the risk of gender-based violence (GBV), and other protection threats³;
• improve the ability to navigate physical hazards after dark, e.g. hillsides, waterways, bridges, sewers, vegetation, other shelters and dangerous animals;
• ensure safe and dignified access to basic services; and
• be considered in all physical spaces, including homes, productive spaces and public areas, for all social groups to support family and community relations and contribute to effective policing and emergency services.

Lighting as a standalone intervention is insufficient for security and safety, particularly reducing GBV risks: Oxfam’s global research on lighting in and around sanitation facilities has found that, while good-quality lighting interventions do make people feel safer in camps, poor-quality sanitation structures increase fear of GBV,⁷ which in turn reduces usage, forcing people (particularly women) to use alternative practices that can increase public health risks. For example, providing only lighting to vulnerable people could make them a target for robbery, as they could be easily seen moving across an otherwise unlit camp after dark.

A comprehensive lighting strategy for public, household and individual lighting should be community-based, gender-sensitive, meet quality standards, and be implemented incrementally as the settlement develops: It is rare for lighting to be a solely individual, household or public issue; as one Rohingya woman focus group participant said, ‘we have our torches, but you can only see so far. We are scared of elephants, because they come into the camp at night. We are also scared of traffickers. We have heard of women and girls disappearing in the camp⁸. It is vital to complete a thorough consultation process and needs assessment with all stakeholders early to determine the focus area. A four-pronged approach will often be required:

1. Public outdoor lighting, such as lamp posts along main thoroughfares; at junctions/crossroads; and around key facilities such as health centres, markets, water points, security posts, reception centres and/or camp management offices.
2. Public indoor lighting inside key facilities, such as medical centres, to enable easier use after dark.
3. Household lanterns to light inside homes (more information on Tip Sheet 2).
4. Individual torches to help people move around after dark (more information on Tip Sheet 2).

Research findings⁴: In Omugo extension camp in Uganda, 84% of women cited a fear of GBV after dark. According to a member of the police force, ‘all criminals take advantage of the darkness of night – there are many “black spots” in the camp. Perpetrators feel camouflaged and their identities can be hidden in the dark’. Male focus group participants said ‘women are worried about being seen going to the latrine’, and ‘the distance [to the latrines] is a bit far and men will be watching you and can rape you’. Reports of GBV were made by a key informant who had interviewed 30 people: ‘at night, people hide and call out to girls asking for sex. Harassment quickly becomes an actual assault. There are two cases of rape I know about, one adult and one teenager.’

Tip: Make use of existing data already gathered by agencies such as REACH, Ground Truth Solutions or UNFPA. You can undertake primary research using assessment tools that support gender-transformative programming, such as CLARA (Cohort Livelihoods and Risk Analysis⁵), Good Shelter Programming: Tools to Reduce the Risk of GBV in Shelter Programmes⁶, and the EEMRG Inclusive Energy Handbook⁷. This will help inform your intervention and identify whether lack of lighting is seen as a risk by the community.
Lighting must be considered within a holistic package of energy and resource needs, designed and delivered in participatory ways that reduce safety concerns and optimize equality of access and opportunity. This demands multisector (e.g. Camp Coordination and Camp Management (CCCM), shelter, protection (GBV), Early Recovery, health, WASH (and Energy)) planning and delivery of public lighting.

Lighting solutions should be combined with other social empowerment and awareness-raising activities: This will help to combat access/usage inequalities and context-specific security issues. It could include community watch groups performing safety audits; employing female police or civilian patrols; and clearing main pathways of debris, broken glass, etc. Energy access is an enabler that reduces exposure to GBV and other protection threats and can leverage transformative change for gender equality for example by facilitating new livelihood opportunities for women’, especially when bolstered by supportive resources, policies and actions.

2 TECHNICAL AND PROCUREMENT CONSIDERATIONS

Lighting is a relatively new field for humanitarian actors. There is limited technical guidance available on implementation or safety issues (e.g. how to make structures storm-resistant). Public lighting is expensive to provide and should last 10–20 years, but much of the expenditure will be wasted if structures are not maintained. There are opportunities to plan for sustainability by establishing multisectoral coordination structures and holistic technical guidance combining social, cultural and technical issues. Embedding lighting across different sectors could help overcome the challenges of short donor funding cycles in emergency responses. Oxfam’s experience and research has raised the following technical considerations.

(A) PLANNING AND IMPLEMENTATION

1. Establish a coordination structure for all lighting actors and investigate options for joint purchasing: All lighting actors should agree joint technical standards, including on community-based approaches, weather-proofing, safety and maintenance. Agreeing joint technical standards will help to ensure adequate coverage, consistent quality and for similar maintenance packages and warranties. Companies specializing in lighting could be in high demand, and competing tender bids could affect quality. Effective coordination and jointly agreed technical guidance can drive up standards and promote a consistently gender-sensitive, community-based approach.

2. Work with a local contractor/trader: Do market assessments to explore working with local traders and cooperatives (particularly women-led enterprises) to ensure that the host community benefits, which will help reduce tensions between the displaced and host communities. Take into account how to ensure quality standards are met.

3. Identify existing skills and capacity in the community: Consider the willingness of local people to be trained.

Remember! Transforming damaging gender norms and policies can expose women, and sometimes men, to greater risks as it challenges existing power structures. Ensure resources and support are included to prevent and mitigate any ‘backlash’ in the short and long term.

Be aware! Poorly planned public lighting may be ineffective and even create additional risks. Depending on the context, public lighting may not be a requirement – e.g. in rural areas it may not be common to have electric lighting. However, if there is a record of violence occurring in dark areas and at night, then asking people what would make them feel safe in these areas is important: ‘some people may feel light at entrances actually increases chances of an incident, as it is clear to others when people are coming and going from their shelter.’

Relevant global standards

Grand Bargain Workstream 6: A participation revolution: include people receiving aid in making the decisions which affect their lives;
Lighting Global Quality Standards
SDG 5: Gender equality and empowerment of all women and girls, including those affected by conflict and crisis.
SDG 7: To ensure access to affordable, reliable, sustainable and modern energy for all.
Sphere Standards: ‘adequate lighting’ [Shelter / WASH]
UNITAR: Global Plan of Action for Sustainable Energy Solutions in Situations of Displacement
4. Prioritize technical standards: While it is vital to consult with the community on lighting locations (see Part 3), an engineer will need to assess whether the location is suitable to build the structures to code. The positioning and angle of the light should be determined in conjunction with a technical lighting specialist to ensure correct lighting coverage. Depending on wattage and height, the correct spacing between two lamps varies.

5. Avoid partial lighting of public areas: In South Sudan, Oxfam found that lighting only latrines can significantly increase risks for women and other vulnerable groups. For example, in a dark camp setting, men take advantage of the lighting around latrines to socialize after dark, which increases the perceived risk of GBV by women.

6. Include guarantees and maintenance in contracts: Numbering lamp posts will aid the identification of faulty or damaged lamp posts and enable the keeping of maintenance records. It is possible to look at options for barcoding individual lamp posts and linking this to digitized warranties, maintenance manuals and records. It is advised that legal agreements with contractors include 1–2 year maintenance and repair warranties (with agreed response times from the first report of an issue), the extent of these warranties (especially in relation to vandalism and theft, which are often excluded and may require a 20–30% contingency budget), the supply chain for spare parts, etc. Agree payment schedules that include the warranty coverage to ensure that obligations are fulfilled.

7. Ensure there is flexibility with the contractor: Being able to have the light reangled or repositioned at a later stage if community feedback suggests it (e.g., due to light pollution, increased feeling of risk or insecurity) is important.

8. Train contractors on safeguarding and Preventing Sexual Exploitation and Abuse (PSEA) requirements: Make compliance with these and technical requirements a contractual obligation. Ensure that feedback and complaints mechanisms are well known to the community as well as contractors.

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**LIGHTS CAN BE:**

- **multidirectional** for general ambient lighting
- **unidirectional** for lighting a specific area
- **wall or ceiling** lights on the interior or exterior of buildings or structures
- **strings** of lights

**BRIGHT IDEAS**

Public lighting should be positioned and angled to correctly illuminate the target area and avoid causing light pollution in shelters.

**Public lighting must be:**

- based on sustainable energy
- cyclone/storm proof
- vandal/theft proof
- waterproof
- easily maintained by local people
- easy to find spare parts for
Oxfam’s research demonstrates that a community-based approach to lighting is more effective and sustainable. It means more than consultation and feedback – it requires actively and consistently working in partnership with different people. The Grand Bargain ‘Participation Revolution’ commitment has brought the involvement of affected communities to the fore of any effective humanitarian agency’s response. IASC response-wide reporting now captures ‘collective efforts’. Consult and involve a representative cross-section of the crisis-affected population throughout the process, in order to:

• enable the active involvement of women, girls and other groups who may be socially marginalized;
• respond to the specific needs of different people;
• build community ownership of lighting projects;
• minimize the risks of anti-social behaviour, theft and vandalism;
• and help to address the issue of maintenance in the long run, including community maintenance groups to monitor performance and identify problems such as light pollution into shelters.

The activities below outline the process for face-to-face consultation to enhance planning and action for lighting projects. Emphasis should be put on:

– using participatory methods wherever possible so that different parts of the community can jointly identify priorities;
– sensitively managing expectations to avoid potentially causing further harm. This can be done by clearly explaining the project process, and only beginning public lighting consultations once firm plans for installing public lighting in the area exist; and,
– in situations where physical distancing is necessary, identifying realistic means to consult communities. Check the WHO’s Risk Communication and Community Engagement technical guidance.

**Tip:** Budget well for a community-based approach – the consultation process happens several times over the course of an intervention, through assessment, co-planning, implementation and in the use of monitoring and accountability mechanisms. Accountability mechanisms may even be managed by separate teams. **Sufficient resources (in time and labour) must be included in workplans,** either through direct implementation or (preferably) in partnership with local organizations.

### 3 COMMUNITY-BASED APPROACH

Oxfam’s research demonstrates that a community-based approach to lighting is more effective and sustainable. It means more than consultation and feedback – it requires actively and consistently working in partnership with different people. The Grand Bargain ‘Participation Revolution’ commitment has brought the involvement of affected communities to the fore of any effective humanitarian agency’s response. IASC response-wide reporting now captures ‘collective efforts’. Consult and involve a representative cross-section of the crisis-affected population throughout the process, in order to:

- carry out regular checks and monitoring: Do this for all forms of lighting. Decide who will be responsible for this (humanitarians or the community)
- maintain and adapt
- design for sustainability and community ownership from the start: Consider energy sources, management and longer-term care and maintenance, especially for after humanitarians leave.
- work with contractors and the community to design a maintenance pack: Make sure that both parties are clear on expectations and roles, have agreed methods of communication and response times. Note that some installers may void warranties if repairs have taken place without their involvement. Make sure all parties know how to activate warranties and guarantees on lights and key parts of public lights, such as batteries and solar panels.
- carry out regular checks and monitoring: Do this for all forms of lighting. Decide who will be responsible for this (humanitarians or the community)
- carry out regular checks and monitoring: Do this for all forms of lighting. Decide who will be responsible for this (humanitarians or the community)
- maintenance groups can monitor and record performance issues: They should identify problems and possible solutions, and be a conduit for ongoing feedback. Train, resource and support such groups beyond initial project funding, and ensure they have approval and support from relevant authorities, as they help maintain and build community ownership of public lighting. Train them to deliver sensitization material on vandalism and share the responsibility for ownership.
- have a repair and maintenance fund: Ensure that contractors have the supply chain for spare parts.
- arrange formal handover of the lights to local formal stakeholders when the project has ended: Ensure clarity over whether the warranty can also be handed over.

### Case study: Community-based lighting intervention and maintenance in Lebanon
The Bekaa Valley in Lebanon has hosted informal settlements of Syrian refugees since 2012. Oxfam’s Protection programme supports the creation of peer groups: training groups of 6–12 women and/or men to run community meetings, develop relationships with local authorities and NGOs, and implement community action plans. The latter enable refugees to use their skills in the humanitarian response. The community selected lighting as a focus and used their skills as electricians to install a system. The community agreed to pay for the fuel payments to enable greater sustainability and manage maintenance. Refugees expressed strong appreciation for this approach – being able to make decisions, and treated with dignity and respect.
Key informant interviews (KIIs): It is helpful to engage different stakeholders – e.g. community and religious leaders; military and civilian patrolling groups; camp coordinators and managers; and teachers – to buy into the process and identify security needs not identified by community consultations, e.g. hazards to camp access. Secondly, KIIs can be used for social groups that find travelling challenging, e.g. persons with disabilities, and it may be necessary to hold several KIIs to get a broad range of responses. See Annex – Tool 1 for a KII sample script and safety mapping tool.

Focus group discussions (FGDs): Meet and engage specific population groups to understand their preferences in terms of locations for lights and ideas on who could and should contribute to maintenance. Hold FGDs with a representative cross-section of the crisis-affected community, especially women of different ages, refugees, Internally Displaced Peoples and members of host communities to identify priority locations for lamp posts. See Annex – Tool 2 for observation/mapping scenarios and suggested community roles in maintenance of public lighting. Use FGDs as an opportunity to identify existing skills in the community, and willingness to be trained. The lighting maintenance group can consist of 2–3 members who can also sensitize the community against vandalism or theft.

Surveys: Survey data can provide insights into the scale and types of problems and protection risks the community faces, as well as how they are dealing with the lack of lighting, which can be used to form a baseline. Surveys can sometimes also identify helpful community-led solutions when people are given the opportunity to explain how they are dealing with a problem. See Annex – Tool 3 for sample survey questions.

Meetings and awareness sessions: Sharing insights from the assessment findings with the community will increase the transparency of decision making between agencies and the community. It can help to inform the community about the importance of lighting in reducing risk after dark especially for the most vulnerable people. It is also possible that it could reduce incidents of theft or vandalism if the needs of different social groups are understood by all members of the community and they have been included in the decision making of where the public lights go. It is possible to work with the lighting maintenance groups to hold awareness sessions, for which they can suggest appropriate communication messages and relatable scenarios to discuss with the community.

Remember! It is important to ask questions that do not to steer the responder to a solution you think would be best, as the expectation of support could make them feel that they need to answer in a particular way to receive help.

Review and improve: Listen to the community and continue to involve them in decision making around any changes, and ensure all decisions around lighting are understood and respected by all. Be ready to learn and adapt to improve the intervention before the project closes. Use a Safe Programming approach to avoid inadvertently causing harm, including being conflict-sensitive, preventing or reducing the risks of GBV and upholding humanitarian principles. A risk assessment must be carried out on an ongoing basis; see the Annex – Tool 4 for a risk matrix.

Reducing the risk of GBV: Reporting of GBV incidents is a very unreliable measure of the level of risk, as multiple factors in every context can prevent, discourage or even criminalize reporting. Ethical guidelines preclude humanitarians from directly asking questions about people’s experience of GBV. Oxfam research for lighting is based on perceptions of risk and the fear of GBV was monitored through asking questions around four specific forms of GBV (see the methodology for examples).

Monitoring findings: Oxfam’s monitoring in the Rohingya response found that FGDs on light locations worked well for all consultations except for public lights near latrines. Although not applicable to all contexts, this community preferred to discuss this issue at household level and in KIIs as it was too sensitive to be discussed by several members of the community at once.


3. Oxfam’s ‘Rapid Protection, Food Security and Market Assessment’ (November 2017) was conducted in Cox’s Bazar, Bangladesh to inform the wider humanitarian response to the sudden influx of over 800,000 Rohingya refugees. The lack of lighting was ranked as the number one safety concern. There was a tremendous number of risks: reports of human trafficking, sexual harassment, assault and sexual violence; physical hazards moving around the hills (causing injury); as well as dangerous wildlife. F. Echegut and C. Sissons. (2017). Rapid Protection, Food Security and Market Assessment: Cox’s Bazar, Bangladesh, November 2017. Oxfam. https://policy-practice.oxfam.org.uk/publications/rapid-protection-food-security-and-market-assessment-coxs-bazar-bangladesh-nove-620978


7. GBV is always taking place, regardless of whether it can be seen or people are talking about it. In fact, it is very unlikely that people will talk about it due to stigma and the consequences of doing so, including that survivors are blamed for attacks. Therefore, the research, in line with best practices and ethical standards, is not based on formally reported incidents of GBV but on perceptions of risk and fear.

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