

Guidance Note on Advancing Green Skills and Businesses for Rohingya Refugees and Host Communities in Cox's Bazar, Bangladesh

Developed in collaboration by LSDS and EEN, and to remain as a living document.

Introduction

Purpose of this Guidance Note

Cox's Bazar is a district situated within one of the most climate-vulnerable countries in the world, Bangladesh, exposed to many year-round natural hazards including cyclone, floods, landslides, heatwaves, and lightning. Understanding the need to better equip the communities with resilient livelihoods and self-reliance, and to reduce the environmental pressures and impacts by human activities, there is increasing interests to promote green skills as a sustainable way forward.

This guidance note provides a strategic framework for implementing green skills training and fostering sustainable business opportunities in Cox's Bazar, Bangladesh. For Rohingya refugees, certain green skills are currently permitted under the existing policy framework, which include the professions mentioned in the Skills Development Framework, as well as those focusing on waste management, recycling, soap making, and jute product creation. Host communities, as Bangladeshi citizens, have full access to rights of work, and allowing a broader scope for green business ventures. The intent of this document is to guide practitioners, NGOs, and vocational trainers on ways to incorporate eco-friendly skill-building and business opportunities for both communities, empowering them while promoting environmental sustainability in one of the most climate-vulnerable regions of the world and showcase the partnership of the Energy and Environment Network (EEN) and the Livelihoods and Skills Development Sector (LSDS).

Definition of Green Skills

The International Labour Organization (ILO) defines *green skills* as the "knowledge, abilities, values, and attitudes needed to live in, develop, and support a sustainable and resource-efficient society." Green skills are also known as sustainable skills or environmental skills. They encompass a wide range of competencies, from technical know-how in renewable energy systems to sustainable farming practices, waste management strategies, sustainable agriculture and production processes and more. These skills are instrumental in supporting a global shift toward green economies, reducing environmental impacts, and building climate resilience across various sectors, including renewable energy, sustainable construction, and waste management (ILO, 2021).

Objectives

1. **Green Skills Training:** To equip both refugees and host community members with skills for a green and sustainable economy, while enhancing employability.
2. **Environmental Protection:** To establish practices that minimize waste, reduce pollution, and ensure efficient and effective resource usage.
3. **Income Opportunities:** To create avenues for income generation that comply with the existing policies for refugees and capitalize on the broader range of green business opportunities for the host community.

Green Skills and Business Opportunities in Cox's Bazar

1. Solar Maintenance, Installation, and E-Waste Management

For Refugees: Solar energy plays a critical role in the camps in powering lights and facilities, due to the overall lack of reliable power source in Cox's Bazar and the soaring fuel price. While development actors and aid agencies have invested significantly in the past years in solar, substantial gaps remain, in terms of both coverage and maintenance. In the meantime, as many solar systems and devices passing five-year service, there is an increased need for safe disposal of solar items. As such, solar installation, maintenance and repair has become a viable green skill in high demand. Training in solar panel maintenance allows refugees to help sustain solar lighting and device-charging hubs within the camp. Skill-building workshops in non-formal technical training can cover the basics of solar panel upkeep, battery management, and troubleshooting common issues. Involving refugees in these efforts reduces the need for external technicians and fosters a sense of self-sufficiency. The LSDS partners are already implementing Vocational Training of 360 hours/72 days in Myanmar/ ASEAN curriculum on Solar installation and maintenance. Electronic waste management is an additional need as well as an opportunity in this area, as there is no formal disposal mechanism in place. E-waste collection, repairing, dismantling, recycling, and upcycling are all processes that could be embedded in systematic solar entrepreneurship models, where the sales of these valuable parts could be a source of supplemental revenue.

- **Global Example:** In Jordan's Azraq refugee camp, Syrian refugees are trained in solar energy maintenance, providing power to thousands of residents. This model demonstrates the feasibility of refugees maintaining essential energy sources, which reduces operational costs and empowers participants with lifelong technical skills (UNHCR, 2021).
- **Local Example:** IOM, UNHCR, and more partner agencies, have begun establishing facilities and interventions to repair solar lamp household items in the Rohingya camps. This encourages communities to not dispose of their solar lamps and contribute to e-waste

accumulation, to instead bring them for repair work where other community members can further their technical skills in solar repairs, and the communities have better lighting access at nighttime with a restored sense of safety.

- **Possible pathways:** community-based maintenance hubs, renewable energy cooperatives, e-waste collection repair and management with private sector engagement.

For Host Communities: For host communities, the solar industry offers a broader scope of business opportunities. Skilled locals can establish solar installation services for households, schools, and businesses. Community members can receive training in advanced skills like solar panel installation, repair, and optimization, enabling them to provide these services to rural areas lacking reliable electricity. Through partnerships with NGOs and local government, solar energy hubs could be established, serving as job centers while contributing to energy resilience. In the meantime, LSDS can work together with EEN and WASH Sector to engage private sector partners to explore potentials of responsible management of e-waste inside and outside of the camps.

- **Global Example:** In India, the Barefoot College initiative trains rural villagers, many of them women, in solar panel installation and maintenance. These “barefoot engineers” bring clean energy to their communities while creating job opportunities in areas where formal employment is limited (IRENA, 2022).
- **Possible pathways:** solar energy hubs, renewable energy cooperatives, e-waste collection, repair and management through private sector engagement (EEN Solar Lighting Guideline references several vendors).

2. Waste Management and Recycling

For Refugees: Within the camps, waste management initiatives present a critical opportunity for both economic empowerment and environmental improvement. Small-scale recycling projects allow refugees to repurpose plastic and other waste materials into useful items, such as woven bags, mats, and even construction materials. Refugees can be trained in waste sorting, composting, and simple upcycling techniques, generating products that may be sold within the camp or outside, if allowed by the authorities. This not only generates income but also helps address waste management challenges in the camps. Fecal sludge treatment plant, organic waste composting are some of the great initiatives in the camps.

- **Global Example:** Uganda’s Nakivale refugee settlement exemplifies the potential of waste management in humanitarian settings. Here, refugees transform plastic waste into various sellable products, reducing landfill dependency and creating income streams. Such projects emphasize the dual impact of environmental benefits and livelihood opportunities for refugee populations (UNDP Uganda, 2023).

- **Local Example:** In the Rohingya camps, WFP conducts upcycling operations that consists of collection of aluminum waste from the packaging of distributions through the nutrition programme, which are upcycled for handicraft products produced by Rohingya volunteers engaged in green skills development.

For Host Communities: For host communities, a broader approach to waste management can include setting up recycling centers that serve both camp and local populations. Host community members, especially through the community youth, could manage organic waste recycling for agricultural purposes, transforming compost into fertilizer, while plastics and metals can be processed for reuse or sale. By training community members in waste management operations, Cox's Bazar could establish a scalable recycling economy that attracts investment and offers long-term employment. Youth should be engaged as environmental champions to facilitate trainings for community members, towards fostering ownership and sustainable waste management processes. This should be complemented by stakeholders, including government agencies, encouraging local businesses and humanitarian and development actors to source materials from these waste management operations.

- **Global Example:** In the Philippines, local partnerships between governments, NGOs, and small businesses have led to sustainable recycling initiatives, including the establishment of community recycling centers. These centers have significantly reduced plastic waste in rural areas, and participants gain valuable skills while supporting their communities' environmental goals (World Bank, 2022).

3. Soap Making

For Refugees and Host Communities: Soap making is a versatile green skills activity that supports hygiene and provides an opportunity for income generation. Both refugees and host community members can participate in small-scale soap production using natural ingredients, sustainable processing methods, and locally available resources, such as herbs and oils. Training can cover basic soap chemistry, safe handling of materials, and simple packaging techniques. Refugees can use soap for personal use or limited sale within the camp, while host communities have the flexibility to scale production and sell in nearby markets.

Global Examples:

- **Lebanese Soap making:** In Lebanon, Syrian refugees are trained to produce artisanal soap using olive oil and local herbs, a culturally relevant product with strong demand. This initiative not only preserves traditional skills but also provides sustainable income sources for displaced populations, underscoring the viability of green businesses in constrained settings (UNHCR Lebanon, 2023).

- **Uganda’s Herbal Soap Making:** In Uganda, community cooperatives make herbal soap from natural ingredients like aloe vera and honey. This provides an affordable, eco-friendly alternative to conventional soaps.
- **Ghana’s Shea Butter Soap Industry:** Women’s cooperatives in Ghana produce shea butter soaps, creating jobs and preserving traditions. These soaps are popular in both local and international markets.

4. Jute and bamboo Product Development

For Refugees and Host Communities: Jute, a sustainable and biodegradable resource, is widely available in Bangladesh and can be transformed into marketable goods such as bags, rugs, and handicrafts. Training programs can introduce refugees and host community members to weaving, dyeing, and crafting techniques that turn jute into attractive products for local and even international markets. UNHCR has introduced jute bags to replace plastic bags in its NFI distribution to mitigate the use of plastic. For refugees, jute products can be sold within the camps or at designated marketplaces, while host communities have more flexibility to market these items in broader commercial settings. Bamboo and jute are fast-growing, sustainable materials ideal for crafting products like bags, furniture, baskets, and household items. These materials are both renewable and biodegradable, and they have a significant market demand locally and internationally. It should be noted that bamboo-made materials need adequate treatment processes to ensure durability. As a baseline, humanitarian and development actors in the response should commit to sourcing their operational materials (workshops & trainings, NFI distributions, visibility items etc.) from such production areas, to boost the local economies further.

- **Bangladesh Host Community example:** In the Sundarbans region of Bangladesh, local communities produce eco-friendly jute products for national and international markets. This initiative illustrates how traditional crafts can evolve into sustainable businesses, empowering local artisans while promoting environmental conservation (ILO, 2022).
- **In Rohingya Camps:** In Cox’s Bazar Rohingya camps international quality jute handicraft are being produced. These products could be used for day to day life activities need.
- **Global Example- Vietnam’s Bamboo Crafts:** Communities in Vietnam have long utilized bamboo for crafts, including furniture, handicrafts, and building materials, creating income and promoting sustainable practices.

5. Environment and Wildlife Conservation

For Host Communities: Protection of the environment and wildlife is an area of revenue as well as service. Nursery management, tree planting, and landscape restoration skills are needed by the local tourism industry (especially focusing on eco-tourism), as well as conservation efforts by the

government and NGOs. Human-wildlife conflict management and biodiversity conservation are also services needed by local communities and the government, particularly the Bangladesh Forest Department (BFD).

- **Local Example:** The Rohingya camps were erected on the previous corridor for Asian elephants to the Teknaf Wildlife Sanctuary, as well as Inani Sheikh Jamal National Park. It became a persisting issue of human-elephant conflicts as the elephants were forced to encroach into human settlements. UNHCR intervened with a Nature-based Solution of training host communities in bee farming, to create beehive fencing to prevent elephant intrusions. It has mitigated the issue since the intervention. In addition, FAO has conducted initiatives to develop the capacity of front liner staff of BFD and forest dependent communities to mitigate human-elephant conflicts. Training modules on technical, operational, and financial management were developed for nursery owners and operators.
- **Promotion of agro-forestry practice in the host community:** As the camp were established in the protected forest area with hilly terrain, and soil fertility is poor with loose binding, traditional agricultural practices are harmful and further increase soil erosion. Therefore, there is great emphasis on the importance of green skills in *sustainable* agro-forestry practices. While agro-forestry is not promoted in the Rohingya camps, due to limited space and potential harms to conservation efforts, agro-forestry in the host and local communities must be addressed carefully in conjunction with the BFD to balance environmental conservation, improved livelihoods, and green skills development.
- **Promotion of Organic Agro-Business:** As crop agriculture is one of the major modes of livelihoods in the host and local communities, farming practices highlighting and using organic fertilizers and insecticide control measures are needed for to ensure healthy consumers and environment. Product branding and sales of organic pesticide are possible avenues for entrepreneurship.

More Case Studies: Global Green Skills Initiatives

1. Green Villages Initiative, Rwanda

Rwanda's Green Villages initiative offers a comprehensive model for building sustainable communities. Local residents and refugees are trained in eco-friendly practices such as soil conservation, rainwater harvesting, and sustainable farming techniques. The initiative enhances food security, conserves natural resources, and promotes self-reliance. This model demonstrates how green skills can be integrated into community-building efforts to yield long-term social, economic, and environmental benefits (UNDP, 2022).

2. Plastic Upcycling in Northern Thailand

In Thailand, community-led projects in northern provinces are transforming plastic waste into sellable goods such as baskets and handbags. Women play a central role in these initiatives, which not only address local waste challenges but also provide an income

source in regions with limited economic opportunities. This example shows the potential of green skills to tackle environmental issues while supporting local entrepreneurship (World Bank, 2023).

3. **Solar Technicians in Jordan’s Refugee Camps**

Jordan’s Za’atari refugee camp, home to Syrian refugees, has successfully implemented a solar training program that enables participants to maintain solar installations powering the camp. By training refugees as solar technicians, the program reduces the need for external energy assistance, enabling refugees to support themselves and maintain essential services within the camp (UNHCR, 2022).

4. **Sustainable Farming in Kenya’s Arid Regions**

In Kenya, climate-resilient agriculture projects are teaching drought-resistant farming methods to both refugees and host communities in arid regions. These green skills not only help communities adapt to climate change but also foster food security and reduce reliance on external food aid. This example showcases how green skills can be leveraged to address climate vulnerability, a crucial aspect for regions facing environmental challenges (FAO, 2021).

Implementation Strategy

Step 1: Market Assessment

A baseline study will identify existing skills and potential market demands, establishing a foundation for program development tailored to community needs and with consultation with EEN and LSDS.

Step 2: Development of Training Modules

Develop targeted, culturally relevant training materials in collaboration with local vocational experts to ensure accessibility and impact.

Step 3: Partnership Building

Forge partnerships with NGOs, private sectors, and government bodies to leverage resources and ensure sustainable support, and guidance from EEN and LSDS.

Step 4: Monitoring and Evaluation

Implementing agencies to ensure regular monitoring to assess skill acquisition, economic benefits, and environmental impact, making adjustments as needed.

Policy and Advocacy Recommendations

1. **Advocacy for Policy Adaptation:** Advocate for policies that allow expanded economic activities for refugees, especially in sustainability-driven industries.
2. **Stakeholder Engagement:**
 - Raise awareness among government officials and private sector leaders about the economic and environmental benefits of green skills initiatives.
 - Raise awareness among Rohingya and host communities, especially the youth as climate leaders, on the long-term impacts of climate change and the importance of environmental protection, through existing multi sector awareness and outreach mechanisms in the Rohingya refugee response.
3. **Collaboration with Multilateral Entities:** Engage with development banks, UN agencies, and NGOs to align efforts, attract funding, and share successful models.

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