

With a focus on Ethiopia, Kenya and Northern Uganda





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Address

53113 Bonn, Germany T +49 228 44 60-0 F +49 228 44 60-17 66

E cathleen.seeger@giz.de (lead) / natalie.rzehak@giz.de (technical)
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Support to UNHCR in the implementation of the Global Compact on Refugees in the Humanitarian-Development-Peace Nexus Energy Solutions for Displacement Settings (ESDS)

Programme management:

Judith Sánchez (Judith.Sanchez@practicalaction.org.uk)

Authors:

Margaret Wanjiku Ngunjiri (Consultant) Samuel Alemu (Consultant) Philippe Breul (PHB Development) Judith Sánchez (practicalaction.org.uk)

Design/Layout:

kippconcept gmbh, Bonn

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List of Acronyms

AECF Africa Enterprise Challenge Fund

ARRA Agency for Refugees and Returnees Affairs

ASAL Arid and Semi-Arid Lands

BMZ German Federal Ministry for Economic Cooperation and Development

BoU Bank of Uganda

Business, Technical and Vocational Education and Training

CBE Commercial Bank of Ethiopia

CEP County Energy Plan

CRRF Comprehensive Refugee Response Framework

DAE Digital Agents for Energy

DRC Democratic Republic of Congo

EnDev Energising Development Programme

ERA Electricity Regulatory Authority

ESDS Energy Solutions for Displacement Settings

ESP Energy Service Provider

FAO Food and Agriculture Organisation

FCDO Foreign, Commonwealth and Development Office (UK)

FDP Forcibly Displaced Population

FSP Financial Service Provider

GCR Global Compact for Refugees

GIZ Deutsche Gesellschaft für Internationale Zusammenarbeit GmbH

GoE Government of Ethiopia
GoU Government of Uganda

GPA Global Plan of Action for sustainable energy in situations of Displacement

ICS Improved Cookstove

Information Communication Technologies

IDP Internally Displaced Person

IFC International Finance Corporation

IGA Income Generating Activity

KISEDP Kalobeyei Integrated Social and Economic Development Programme

KKCF Kakuma Kalobeyei Challenge Fund

MBEA Market Based Energy Access

MEMD Ministry of Energy and Mineral Development

MFI Micro Finance Institution

MSE Micro and Small Enterprises

MSME Micro Small and Medium Enterprises

NGOs Non-Government Organisations

INGOs International Non-Governmental Organisations

OGS Off-Grid Solar

OPM Office of the Prime Minister

PAYGO Pay As You Go

PIN Personal Identification Number

PUE Productive Use of Energy

PV Photovoltaic

PWDs Persons with Disabilities

RAS Refugees Affairs Secretariat

REA Rural Electrification Agency

SDG Sustainable Development Goal

SHS Solar Home System

SGBV

SCC Smart Communities Coalition
TCG Turkana County Government

TVET Technical and Vocational Education and Training

Sexual and gender-based violence

UNDP United Nations Development Programme

UNHCR United States African Development Foundation
UNHCR United Nations High Commissioner for Refugees
USAID United States Agency for International Development

VSLA Village Savings and Loan Association

WASH Water, Sanitation and Hygiene

WFP World Food Programme



Energy Solutions for Displacement Settings Ethiopia, Kenya and Uganda

Project Info: SUN-ESDS

The BMZ commissioned Global Program "Support to UNHCR in the implementation of the Global Compact on Refugees in the Humanitarian-Development-Peace Nexus (SUN)", implemented by GIZ, seeks to support UNHCR in its role as facilitator of the implementation of the **Global Compact on Refugees** (GCR) and the Comprehensive Refugee Response Framework (CRRF) in selected refugee contexts and sectors. The program is part of the German Special Initiative "Tackling the Root Causes of Displacement, (Re-)integrating Refugees". It currently provides advisory services to UNHCR on a global level and supports UNHCR in creating and mainstreaming knowledge on the operationalization of the GCR.

The Energy Solutions for Displacement Settings (SUN-ESDS) component works closely with UNHCR and local partners to provide energy solutions that cater to the needs of both refugee and host communities in our project countries- Uganda, Kenya, and Ethiopia. SUN-ESDS is also the German contribution to the Clean Energy Challenge issued by UNHCR in 2019 with the following objective: "All refugee settlements and nearby host communities will have access to affordable, reliable, sustainable and modern energy by 2030."

The SUN-ESDS project works through three intervention areas:

Improving the policy framework through providing advisory services to governmental stakeholders to promote the inclusion of refugees into national service delivery systems. The project collaborates with the affected communities, and governmental, non-governmental and private sector partners to develop more sustainable energy solutions.

Greening infrastructure in displacement settings through supporting the solarization of UNHCR offices as well as settlement/camp and communal infrastructure, thereby promoting more environmentally sustainable and cost-efficient energy solutions. The project develops energy delivery models that are attractive to the private sector.

Increasing energy access through developing self-sustaining markets for basic energy related services and products, improving access to finance and promoting participatory design processes benefitting households, social services, and small businesses of both refugees and host communities while reducing the pressure on the environment.

We contribute to the following SDGs















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Glossary of Terms

Cross - fertilisation is defined as the mixing of ideas, customs, etc. of different places or groups of people to produce a better result. In this case, it can refer to complementary skills or activities that can be carried out jointly by refugees and host communities.

Empowerment is a process of enhancing the capacity of an individual or group to make strategic choices, and transform those choices into desired actions and outcomes. In the case of off-grid solar (OGS), this involves enhancing access to assets through financing, skills and jobs. As a result, youth, women and other vulnerable individuals can become agents of positive social change on their own behalf.

Energy-related livelihoods are defined as jobs or Income Generating Activities (IGAs) that either: (i) Form part of the value chain for energy products and services; or (ii) Link Production Use of Energy to other value chains, such as hospitality, service and agricultural value chains.

Forcibly Displaced Populations (FDP) in this report includes refugees, Internally Displaced People (IDP), asylum-seekers and their host communities.

"Gender" is not another word for "women," this refers to the socially constructed roles and behaviours of males and females. The term distinguishes social roles from the biologically determined aspects of being male and female. Social roles place women's energy needs at a higher level than those of men, since they use energy in cooking and require good quality lighting for efficiency in their domestic chores. Just like the men, women also require energy for productive uses.

Gender and Social Inclusion (GESI) in off-grid solar refers to special consideration and inclusion of the varied energy-specific interests of individuals and groups including women, youth, persons with disabilities, IDPs, refugees, nomadic and minority communities, and marginalised households, in all planning, resource distribution, employment opportunities in energy-related areas.

Jobs, Income Generating Activities (IGS) and livelihood activities are terms used interchangeably in this report, and are understood as activities that provide an income to the target population. In the displacement settings target of this study, those can be formal, semi-formal and informal activities.

Incentivised work in this report refers to paid work, which is often encountered in displacement settings and is characterised by being driven by humanitarian actors. For example, since refugees are not allowed to access formal employment in Ethiopia, the Agency for Refugees and Returnees Affairs (ARRA) and Non-Government Organisations (NGOs) pay well-educated refugees an incentive to serve their community as teachers, nurses, or social workers.

Micro, Small and Medium Enterprises (MSMEs): the definition of the Energising Development Programme (EnDev) is adopted in this report. Micro-enterprises have 1 to 4 employees, small enterprises have 5–9 employees, and medium-sized enterprises have 10–50 employees.

Productive Use of Energy (PUE) is defined in this report as those uses of energy (including electricity, and energy for cooking and heating) that increase income and/or productivity. Productive uses of energy and electricity include agricultural, commercial and industrial activities involving electricity services, as a direct input to the production of goods or provision of service.

Executive Summary

Access to energy is an important component of development to improve peoples' livelihoods, their economic status and reduce poverty. Sustainable Development Goal (SDG) number seven, concerning universal energy access, is linked to all other SDGs, thus showing its importance in multiple aspects of improving peoples' livelihoods. In line with the self-reliance objectives and long-term developmental solutions advocated in United Nations High Commissioner for Refugees (UNHCR) Comprehensive Refugee Response Framework (CRRF), well-planned energy strategies can provide significant benefits related to a number of factors. These include, gender equality, food security, education, health, and livelihoods and jobs, amongst others.

Energy Solutions for Displacement Settings (ESDS) is one of four project components of the German Federal Ministry for Economic Cooperation and Development (BMZ) commissioned Global Programme "Support to UNHCR in the implementation of the Global Compact on Refugees (GCR) in the Humanitarian-Development-Peace Nexus" (SUN). This assists the UNHCR and other stakeholders in operationalising the GCR in selected displacement contexts. By providing global advisory services, implementing technical measures and cooperating with relevant stakeholders, ESDS focuses on market based energy solutions. As well as seeking to remedy the lack of sustainable energy supply in order to enhance the self-reliance in displacement settings communities in Ethiopia, Kenya and Uganda.

In line with the GCR principles, the **creation of jobs and sustainable livelihoods are key to promoting self-reliance of refugees** and easing pressure on host communities. A widespread paradigm shift is underway, in which many development and humanitarian agencies recognise the need to transition from the classic humanitarian model of "care and maintenance" to a comprehensive, resilience based development approach. Creating the conditions for refugees to access the labour market, and enacting laws that recognise their right to work are necessary to foster local integration and to increase self-reliance. This study was commissioned to enhance the understanding regarding the opportunities for, and barriers to, improved energy-related livelihoods for displaced populations and host communities.

This report provides an introduction to the ESDS settings and offers a comprehensive overview and assessment of existing energy-related livelihoods and opportunities for promoting Income Generating Activities (IGA). Chapter two provides a brief overview of the context and scope of work for this report. The next chapter details the value chains that are analysed. Chapters four and five assess and outline the opportunities, challenges and the enabling environment for regulatory and other factors for refugees and hosts to access work, such as financial, technical, social and cultural aspects. Chapter six details a set of country specific recommendations for refugee camps in Ethiopia, Kenya and Uganda. Finally, the last chapter details the main conclusions that can be drawn from this study.

In particular the values chains analysed in this report were chosen for their potential to foster energy-related livelihood opportunities. These include value chains for: energy; information communication and technology (ICT); hospitality and services; and agriculture.

The main outcomes gathered about the displacement settings targeted by ESDS are summarised below.

Gambella Region in Ethiopia: Refugees in Ethiopia, and Gambella in particular, are energy deprived communities, this results in negligible energy-related livelihoods in the camps. There are some notable initiatives in other refugee camps that are trying to stimulate livelihood activities using energy, but in Gambella there are no such initiatives and projects. However, there are several private diesel generator owners that are selling electricity to end users and business enterprises. Taking into consideration various studies and pilot projects, the following areas have been identified as having potential for enhancing income through Productive Use of Energy (PUE). These include: briquette, charcoal and efficient stove production; mini-grid energy cooperatives; solar-powered mobile charging services; refrigeration; hair cutting and entertainment services; solar pumping for vegetable farming; and solar millings. To tackle the persistent barriers, key recommendations have been gathered;

- Recommendation for financing schemes: energy technologies for livelihood activities require significant, up-front investment, which the target group often lack. The absence of well-established financial institution networks also exacerbates the issue of an inability to afford such technologies. On the basis of the findings it is recommended that additional blended finance facilities for PUE technologies are explored.
- Recommendation for capacity building requirements: business training, awareness creation and capacity
 building on energy-related livelihoods is needed to stimulate market-based energy-related solutions.
 Including, pilot project research to define and test suitable business models for PUE applications that
 are adapted to the Ethiopian context, as well as and designing women focused capacity building.
- Coordination and policy recommendation: it is recommended that a steering committee composed of
 Agency for Refugees and Returnees Affairs (ARRA), UNHCR and GIZ is formed. This is to enable
 ARRA to give permission to identified private sector energy actors to operate in the camp, and for
 Micro Finance Institutions (MFIs) and UNHCR can take advantage of cash based initiatives for
 energy loan repayments. It is highly recommended to lobby the government to have a more conducive
 policies, to enable easier land allotment and entrepreneurship, specific to refugees.

Turkana West Sub-County in Kenya hosts the Kakuma Refugee Camp and the Kalobeyei Settlement, established in 1992 and 2016, respectively. They present significant opportunities for improved livelihoods, for both refugees and host communities, in the form of a large market for consumer goods and a labour force. However, refugees also face significant challenges related to deprivation and restrictions, which generally leads to a low employment rates amongst refugees. To tackle the persistent barriers, key recommendations have been gathered;

- Recommendation for policy intervention and advocacy for regulatory improvements: there is goodwill to improve the regulatory environment for refugees. However, debate on the Refugee Act, 2019 in Parliament has not progressed, which is necessary to anchor the policy recommendations in the laws of Kenya. GIZ should, along with other stakeholders, engage in dialogue with Kenya's policymakers under whom refugee affairs are anchored. This is needed to create impetus in parliamentary discussions on the Refugee Act, 2019, which provides sufficient justification to address many present challenges.
- Recommendation for capacity building in the energy sector: ESDS should engage in the multi-year
 partnership between the Government of the Netherlands, IFC and World Bank Group (WBG),
 International Labour Organization (ILO) and UNICEF, a partnership that seeks to support inclusive jobs and education to empower refugees. GIZ, through ESDS, is well placed to complement the
 engagement through skills transfer, creation of job opportunities and strengthening markets for youth
 entrepreneurship, for refugees and host communities.
- Recommendation for support to agribusiness value chains: community based groups such as the Natira Self-Help Group, the Turkana Agro-Pastoralists Development Organization (TADO), have championed agriculture through irrigation, which requires additional support. Building skills in entrepreneurship and value chain strengthening through enhanced access to production inputs, adding value and agricultural processing equipment and skills, is needed to make a significant impact on such groups.

- Recommendation for a conflict sensitive approach: there continue to be potential areas of conflict between the refugees and host communities. This is primarily fuelled by the feeling among the host communities that the refugees are more privileged and receive more development support. ESDS should continue to simultaneously empower both the refugees and the host communities. A twin approach that targets projects among both sets of communities is critical in addressing the perceived imbalances in the local development approaches, such as interventions like ESDS.
- Recommendation for gender transformative measures to promote energy-related livelihoods: ESDS should focus on pushing interventions that are targeted to women, whilst also teaching skills based on the gaps in the market and the energy products available Additionally, more women should be enrolled in technical training on energy focused courses, a clear area where women relative to men, have a skills gap. Entrepreneurship programmes are needed where the design targets female entrepreneurs, with flexible repayment schemes to suit the daily wages associated with the majority of female owned small businesses. As well as, innovative financing, consideration for gender preferences for productive use appliances, and technology preferences for women-led enterprises, are good options for gender transformative approaches in the ESDS.

Terego and Madi Okollo Districts in Uganda host 196,674 refugees (from South Sudan), mainly in Imvepi and Rhino camp refugee settlements, which represent 25.5% of these districts 770,600 population. Current levels of livelihood opportunities are extremely low and declining due to COVID19, with a 40% reduction in cash based interventions. Approximately 21% of households use energy for productive purposes related to the hospitality value chain. Two solar powered energy kiosks also sell ICT value chain related services. Small business (mainly trade) owners see the benefits in using solar energy to provide power (longer business hours), which increases the amount of information (radio) and communication (phone charging) they can access. However, much of the population is still dependent on agriculture (in Rhino and Imvepi camps, 24% of the refugees and 75% of the host communities), with farming related PUE activities representing the highest potential for income generation.

There are interesting opportunities for creating jobs and revenue, by capitalising on early successes and lessons learned. Opportunities are identified in the following value chains: energy (solar energy promotion, distribution and maintenance, and mini-grid cooperatives); ICT (sales and maintenance services, solar-powered mobile charging); hospitality and service (refrigeration, hair cutting, TV shows); and agriculture (solar irrigation, drying and refrigeration for fruits and vegetables, crops processing and cold chains for dairy).

The 2016 United Nations Summit for Refugees declared Uganda's refugee policy a model. At the same time, studies highlight that Uganda's refugee accommodating capacity has been over stretched due to continuous influxes of refugees to the country. Due to insufficient means, the asylum process lasts several years, on average five. Many at the local level remain unaware of national policy level approaches, especially regarding the freedom of movement. Specifically, the absence of clear guidance on work permits and the lack of legal documentation are the main constraints that refugees face. It has been convincingly argued in the literature that refugee freedoms regarding movement, employment and education in Uganda have not translated into self-reliance. In response to these limitations, key recommendations have been gathered:

Recommendation for policy interventions and advocacy: these are related to clarifying whether refugees
need work permits or not. In particular, about the best way for refugee business owners and organisations to register as mobile money, banking, and solar solutions agents. It also reiterates the importance
of the Ministry of Education, Ministry of East African Community (EAC) Affairs and the Inter-University Council for East Africa (IUCEA) and other stakeholders to speed up implementation of the
EAC Single Education Area in the domains relevant to the energy sector and livelihoods.

- Recommendation for a focus on technical support: to build the capacities of the humanitarian and development organisations, on energy-related livelihoods along value chains. It would include business and vocational training and support, market linkages to the private sector and the involvement of other system players, such as local government. Finally, it's important to build local partnerships and organisational capacity to sustain energy and natural resource management programmes. Whilst mainstreaming energy and environmental issues into all activities to build community resilience.
- Transformative measures for women and youth: these are especially crucial, as they reduce barriers for women in the workplace significantly and boost welfare and growth. Second-chance programmes can help women and especially youth increase their formal education, obtain recognised certification, and improve their chances of finding or creating a job. In addition, assessing refugees' skills early on and providing up skilling training can help refugees get better jobs and wages right from the start. Limited access to capital, as well as appropriate financing schemes, are key constraints to the growth of energy related livelihoods. The refugees and host communities currently address them mainly through VSLAs and SACCOs. They would greatly benefit from linkages with formal financial institutions that would provide security to savings and adapted credit to develop income generating activities.

The report evidences how access to energy has multiple benefits that can improve peoples' livelihoods. However, creating the conditions for refugees to access the labour market and enacting laws (and their enforcement) that recognise their right to work is also necessary. This subsequently aims to foster local integration and increase self-reliance for displaced populations and host communities. The main outcomes from the study show how the three countries of intervention vary in terms of energy-related entrepreneurial activities and opportunities. The market maturity for energy products and services, as well as regulation, within ESDS settings in Kenya and Uganda, is more mature than in Ethiopia.

Specific recommendations for each country are detailed in this report in Chapter six. However, across each country there is a need for policy advocacy for an enabling environment that recognises and supports refugees and their right to work. Furthermore, it is necessary for capacity building and better coordination across stakeholders to become common themes across contexts. The most certain and efficient measures ESDS and UNHCR can take are at a systems level, which are related to implementing good practices established by previous energy-related livelihood projects. This should lead to scaling the already proven models and interventions, and continuing to test new models and interventions. In addition to improving the learnings sharing and learning creation, and collectively triggering more impact, by exploring partnerships and joining efforts.

1 Introduction and Scope of Work

Energy is increasingly gaining recognition as an underlying facilitator for many humanitarian priorities. In line with the self-reliance objectives and long-term developmental solutions advocated in UNHCR's Comprehensive Refugee Response Framework (CRRF)1, well-planned energy strategies can provide significant benefits related to: gender equality; food security; water, sanitation and hygiene (WASH); education; livelihoods and jobs; connectivity; and environmental protection.

As highlighted by the Food and Agriculture Organization (FAO), poor energy access results in more people engaging in limited, low income livelihood activities, at the expense of other beneficial and sustainable opportunities. Using energy solutions to develop profitable economic activities will increase: (i) Energy use by FDPs for livelihood improvement; and (ii) Purchasing power to pay for high quality and reliable energy solutions.

PUE and energy enterprises have been the subject of considerable research in development settings. However, additional research is needed on the energy needs of enterprises in displacement settings, as well as the legal frameworks, business support environment, national policies and regulations that can be developed to support PUE¹. In this context, the proposed study, commissioned by ESDS aims to enhance the understanding of opportunities for, and barriers to, improved livelihoods for displaced populations (and host communities), which are often interlinked and exist in several ways.

For the current study, energy-related livelihoods shall be defined as jobs or IGAs that either:

- Form part of the value chain for energy products and services; or
- Link PUE (including electricity, cooking energy, and energy for heating) to other value chains, such as hospitality, service and agricultural value chains. This category, includes both Micro and Small Enterprises (MSE).

The common informality of micro-entrepreneurs has resulted in them being excluded from statistical and research exercises². It is therefore important to understand the range of formal, semi-formal and informal jobs and IGAs within ESDS settings to leverage already proven pathways. This should help to avoid any resentment and disruption from new measures.

The study looked at the three ESDS contexts: Gambella region in Ethiopia; Kakuma and Kalobeyei Settlements in Turkana West Sub-County in Kenya; and Terego and Madi Okollo Districts in Northern Uganda.

¹ Thomas, P.J.M., Sandwell, P., Williamson, S.J., Harper, P.W., 2021. A PESTLE analysis of solar home systems in refugee camps in Rwanda. Renewable and Sustainable Energy Reviews 143, 110872. (Accessed 14 July 2021)

² Energy for micro-enterprises in displacement setting, EnDev/PAC 2021

2 Value Chains Researched in this Report

A number of value chains that can improve and/or create more livelihood opportunities for refugees and host communities have been identified. They have been grouped as follows:

- The energy value chain is generally composed of the upstream system (procurement of energy sources, for example, firewood), the production (transformation of sources into different forms of energy, for example, burning firewood for cooking) and the downstream system (distribution of the energy solution or service, after sales services and related services).
- The hospitality and services value chain represent an important opportunity for employment and IGAs. This encompasses activities related to hostelry, restaurants, bars, hair dressing, carpentry, tailoring and entertainment, amongst others.
- The ICT value chain is interesting, as mobile phone penetration is becoming increasingly widespread and it is an important component for all other value chains.
- The agricultural value chains are also crucial, as they employ a high proportion of FDP in most of the displacement settings considered in this study.

Across the value chains, lighting is a proven impactful use of energy. Small business owners (mainly trade) see the benefits in using solar energy to provide power (longer business hours), and increase their access to information (radio) and communication (phone charging).³ A large number of small business owners also use the energy generated for domestic uses. This reduces energy costs and harmful health impacts associated with kerosene-based lighting, allows more children and youth to study and read at night, and improves security through outside lighting⁴, therefore improving the general quality of life.

³ Paying for darkness, strengthening solar markets for refugees in Uganda, (2019) Rhino Camp and Bidibidi settlements in the West Nile region.

Paying for darkness, strengthening solar markets for refugees in Uganda, (2019) Rhino Camp and Bidibidi settlements in the West Nile region.

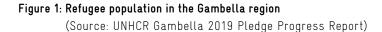
3 An Assessment of Prevalent Energy-Related Livelihoods and Potential Opportunities to Promote and Create New Energy-Related Livelihoods

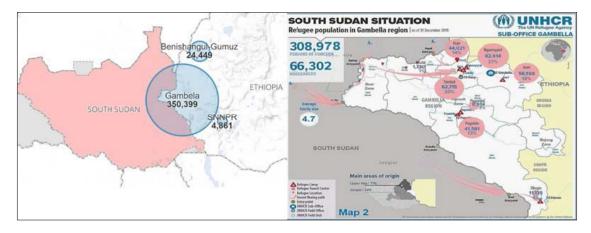
In this chapter, the context of each ESDS setting is presented, including the main social and economic elements. The chapter then identifies the prevalent energy-related livelihoods, and lays out the areas of potential opportunities to promote and create new energy-related livelihoods through market-based energy interventions in the identified value chains.

3.1 Gambella region in Ethiopia

3.1.1 Context of the setting

Ethiopia is the third largest refugee hosting country in Africa, sheltering 808,530 registered refugees and asylum-seekers, as of 31st of October 2021⁵. The overwhelming majority originate from Sudan, South Sudan, Somalia, and Eritrea. Ethiopia has a long history of hosting refugees, but the country is in the process of making significant changes to its refugee policies. The majority of refugees and (IDPs are found in the Afar, Tigray, Somali, the Benishangul-Gumuz and the Gambella regions. The study focuses on Gambella





⁵ https://data2.unhcr.org/en/country/eth updated on Oct 3, 2021

region, which is a target area for ESDS. As of 31st of October 2021, Ethiopia hosted 350,399⁶ South Sudanese refugees living in seven camps in the Gambella Regional State, which is the largest

refugee population in Ethiopia. The camps are Nguenyyiel, Tierkidi, Jewi, Kule, Pugnido 1 and 2, and Okugo, out of which ESDS so far is only operating in Nguenyyiel.

Table 1: Summary of livelihood activities in Gambella camps.

(Source: UNHCR 2021, WINS Global Consult GmbH 2021, Data of percentage of some activities is not found.)

Energy-related livelihood information in			
Main source of lighting Firewood Kerosene lamp, candles, solar lantern, rented electricity or torch			
Cooking fuel Firewood Charcoal			
Energy-related livelihoods	Private distributors of genset based electricity Phone charging stations Barber shops Using refrigerators to sell cold drink Selling electricity for lighting		
Other	Cutting down wood or collecting grass for sale Brewing local alcohol Selling and trading items that they receive in their rations (provided by humanitarian actors) Incentivised work; since refugees are not allowed to access formal employment, the Agency for Refugees and Returnees Affairs (ARRA) and NGOs pay well-educated refugees an incentive to serve their community as teachers, nurses, or social workers.		
Additional information about refu	gees in Ethiopia		
Nature of employment	Paid employees/incentivised work Self-employed Unemployed		
Correlation between gender, nationality and poverty	Poverty rates across the four refugee groups (namely, Eritrean, Sudan, South Sudan and Somalia) are quite heterogeneous, ranging from 38 % (Eritreans) to 72 % (Sudanese and South Sudanese). South Sudanese and Sudanese refugees in Ethiopia have the highest incidence of poverty. As South Sudanese refugees are hosted in Gambella region, the poverty rate in Gambella camps is, therefore, the highest. Every 2 in 3 refugees live below the international poverty line of USD1.90 per day per person at 2011 PPP* Poverty incidence of female headed households is higher than in male headed households for all groups, except for Somali refugees for whom the percentages between women and men are approximately equal.		
The case of COVID-19	Refugees and asylum seekers have reduced access to WASH services, reduced access to healthcare, worse child nutrition outcomes, and poorer quality mental health and psychosocial wellbeing. As of December 2020, a total of 5,183 South Sudanese refugees were tested for COVID-19, and 231 confirmed cases (171 Gambella and 60 Assosa) were identified and transferred to designated treatment centres.**		

^{*} Pape, Petrini, and Iqbal 2018

^{**} SOUTH SUDAN Regional Refugee Response Plan 2020 Year End Report

⁶ https://data2.unhcr.org/en/situations/southsudan/ location/1840 updated on October 31, 2021

3.1.2 Prevalent energy-related livelihoods in the energy, ICT, hospitality and service and agriculture value chains

The scale of energy-related jobs and livelihoods in Gambella region differs between camps, with a range of activities being undertaken. Several initiatives have supported the creation of jobs in the energy value chain. The energy-related livelihoods opportunities are summarised in this section, but further detail on the initiatives can be found in Annex I.

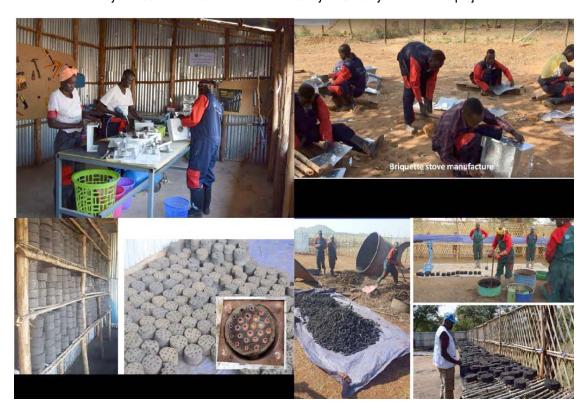
Livelihoods in the energy value chain: Gaia Clean Energy, a local Ethiopian NGO, and UNHCR established refugee business associations that were set up by refugees and local host community members in 2018. Initially, they were formed

in two camps, Sherkole and Tsore in the Benishangul region. Each association had 20 members (12 women and 8 men) with representation from both refugees (70%) and host community members (30%). This is a good example that shows integration of refugee and host communities in productive activities from which they can develop businesses and livelihoods.⁷

The main business activities of the refugee camp business associations are related to the energy value chain, and include:

- Ethanol stove assembly and sales;
- Ethanol fuel sales;
- Briquette production from waste or low-grade biomass resources (Savannah grass, corn cobs, other agricultural residues);
- Briquette stove manufacturing;
- Briquette fuel sales;
- Account keeping and stoves maintenance.

Figure 2: Refugee workers assembling stoves and charcoal briquette production, which they will sell to members of their community - currently not an active project.



⁷ https://projectgaia.com/wp-content/uploads/2019/03/ Assosa-Clean-Cooking-Program_Project-Gaiaupdated-3-12-19_for-web.pdf

 Action for the Needy Ethiopia (ANE) has taken over the above mentioned activities since September, 2019.

With a grant from the IKEA Foundation, UN-HCR developed livelihoods-based cooperatives in the Dolo Ado refugee camps, within the Somali region. The work and energy opportunities now available to refugees are presented in the table below:

amino, the energy cooperative is now installing a new mini-grid to serve the market. Furthermore, the energy cooperative in each camp is responsible for the procurement of spare parts and repairing any malfunctioning solar street lights. The cost of procurement and service is covered by the monthly fee that ARRA collects from each household, (\in 0.1 or ETB 3). The energy cooperative has also set up solar charging shops in each camp.

Table 2: Energy-related livelihoods in refugee camps in the Somali region.

(Source: UNHCR data as of 31st December 2019)

Woreda	Energy (Livelihood connected) opportunities provided	No. refugees benefiting	No. host community members benefiting
Dollo Ado	Solar cooperatives for mini- grids and solar street lights	15 cooperative members	7 cooperative members
	Prosopis* charcoal briquette production cooperatives	128 cooperative members	42 cooperative members
Bokolmayo	Solar cooperatives for mini- grids and solar street lights	27 cooperative members	12 cooperative members
	Cookstove production cooperative	11 cooperative members	1 cooperative member
	Prosopis charcoal briquette production cooperatives	206 cooperative members	9 cooperative members
Total	387 direct jobs and 3,180 indirect jobs created		

^{*} Prosopis is a genus of flowering plants found in subtropical and tropical regions of the Americas, Africa, Western Asia, and South Asia. They often thrive in arid soil and are resistant to drought. Their wood is usually hard, dense and durable.

Five different types of energy cooperatives were established in late 2017, in the Dollo Ado area, for example, energy cooperatives manage the mini-grids and charge its clients a monthly fee for electricity. The fee is calculated based on the number and type of appliances that the customer uses. For example, in the market, about 65 shop owners pay \in 2.9 or 100 Ethiopian Birr (ETB) for one light bulb and one electric socket. The computer centre is currently paying \in 26.50 04 ETB 1,500 for five computers and has agreed to increase the fee to \in 53.20 or ETB 3,000 once they have doubled the number of computers. In Bur-

Figure 3: An energy cooperative's mobile phone charging deck. (Source: RSC/Andonis Marden, 2019)



Building Refugee Economies: An evaluation of the IKEA Foundation's programmes in Dollo Ado.

Likewise, between 2015 and 2017 the Prosopis firewood cooperative in Dollo Ado has helped with the creation of livelihood activities for refugees and host communities. This also advances the protection efforts for women, who were previously exposed to GBV risks associated with the collection of firewood. The business model for the cooperative involves: sourcing and collecting Prosopis; selling the raw wood to the refugee communities (even though the market is lower than for non-prosopis firewood); and finally using IKEA Foundation procured machines to transform the prosopis firewood into charcoal briquettes that are ultimately sold for household fuel use.

Figure 4:
A cooperative member stands in front of stocks of charcoal briquettes made at the Buramino processing centre.
(Source: UNHCR/Eduardo Soteras Jalil, 2019)



Another good example is the Strengthening Host and Refugee Populations Project (SHARPE), which supported a pilot in Jijiga for the distribution of PAYGO products from the company Hello Solar. The partnership seeks to increase access to energy and create jobs. After successful implementation of the pilot, there are plans to scale up to the Dollo Ado and Gambella regions. Given that the pilot was only recently launched in March 2021, it is still in the beginning phases of implementation. Jobs such as credit officers, marketing officers and Hello Solar agents are some of the job opportunities created by the project.

Energy-related livelihoods in the hospitality and services value chain: in Gambella, refugees make a living by providing a range of energy-related services, in the hospitality and services value chain. These include, charging mobile phones, cooling services for water and drinks, broadcasting entertainment shows and Satellite television stations like DSTV (a broadcasting pay on demand television provider, with films and sport shows), tailoring and hair cutting, among others⁹. They use diesel generators and solar power to sell energy-related services as indicated in Table 3 below. Services in the ICT value chain, like phone charging and phone repair can also be found in this value chain.

Energy-related livelihoods in agriculture value chains: some energy-related services are developed in agriculture value chains, like grain milling. A rapid assessment of PUE Potential for Selected Prospective Solar PV Mini-Grid Sites in Nguenyyiel Refugee Camp and Terfam Town Host Community, that is being conducted by Integration Consulting Group in parallel to this study, on behalf of GIZ/ESDS. During this assessment Nguenyyiel Refugee Camp Terfam Town Host Community, in Itang Woreda, were visited, and the following PUE activities being undertaken by refugees and host communities were identified:

⁹ Field report of INTEGRATION Consulting Group "PUE Potential Assessment for Selected Prospective Solar PV Mini-Grid Sites in Ethiopia" that was submitted to ESDS/ GBE/EnDev

Table 3: Energy-related livelihoods in Gambella region refugee camps.

Source: Field report of INTEGRATION Consulting Group¹⁰

Value	Electricity	Service offered	Monthly energy expenditures of businesses that buy electricity from suppliers	End user service charge being charged by businesses
Energy	Gensets (11 units, 3-20KW)	Lighting	250 ETB/month (€ 4,60)	250 ETB/month (€ 4,60)
Hospitality and services		Refrigeration	2,400-2,500 ETB (€ 44-46)	Attracts customers despite there is no difference between the selling price of refrigerated and non-refrigerated drinks
		Entertainment	1,800 ETB (€ 33)	2-5 ETB/person per film or game etc. (€ 0.04-0.1)
		Sewing	1,300 ETB (€ 24)	Unknown
		Hair cutting	1,800 ETB (€ 33)	25 ETB/person (€ 0.5)
ICT		Phone Charging	1,800-2,400 ETB (€ 33-44)	10 ETB/charge (€ 0.2)
	Solar PV (6 units;	Phone Charging	N/A	10 ETB/charge (€ 0.2)
	30-300Wp)	Soldering (phone repair, electronic maintenance)		Unknown (depends on service)
Agriculture	Gensets (grain mills) (10 private, 4 publicly- supported)	Grain Milling	N/A	Private = 1 ETB/kg; (€ 0.02) Publicly supported = < 1 ETB/kg

3.1.3 Gender and cultural dimensions

Livelihood patterns in Gambella region (South Sudanese refugees' context) vary greatly, depending on gender across the refugee hosting areas. Women and girls are involved in small scale trade, as well as collecting wood and materials from forests, making them disproportionately vulnerable to gender-based violence (GBV).

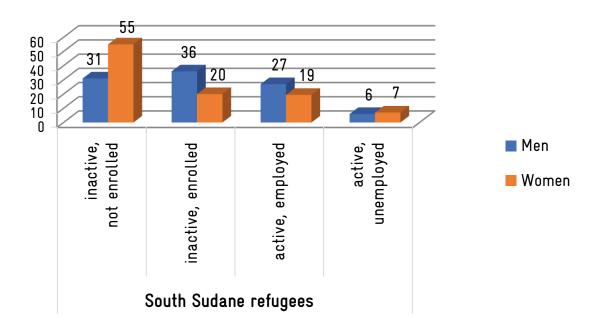
A report on the Context and Conflict Analysis for Gambella – Ethiopia¹¹ indicated that the primary livelihood activities of refugee women in Gambella camps consist of selling firewood, brewing local alcohol, and selling items from the food rations. However, in Gambella camps, not all women have the same opportunity to sell what they have since there is a "tribal component" to consider. According to observations, for selling goods outside of the camp, for instance, some refugee women have

¹⁰ PUE Potential Assessment for Selected Prospective Solar PV Mini-Grid Sites in Ethiopia mid-term briefing report

¹¹ Context and Conflict Analysis for Gambella, Ethiopia-Energy Solutions for Displacement Settings (ESDS) in Gambella

Figure 5: Employment status of South Sudanese refugees in Gambella.

(Source: Pape, Petrini, and Igbal 2018)



been barred from leaving their camp in recent years. Women's attempts to make a living can put them at a greater risk of suffering GBV, including domestic violence, and attacks while collecting firewood.

According to sources of literature¹² there are important differences between men and women participating in the labour force, which are likely to persist in the foreseeable future. Men of a working-age within the population have a higher rate of employment than women (27 % versus 19 %). The author of the below Figure¹³ identifies that "many women are of non-working age or "inactive" (defined by the author of the graph as neither employed, nor employed, nor actively looking for employment) or are not in school (55 %) compared to men in the same situation (31 %)". While there are more women than men who are not currently part of the "formal" labour force, it is conceivable

that more women than men will not be part of it in the future either, since the level of education level for women is likely to remain low. Thus, there are specific gender-related barriers to women in accessing the "formal" labour force, both in the present and in the foreseeable future¹⁴. Household chores as taking care of the household/family is one of the main reasons for refugees not participating in the "formal" labour force, presumably disproportionally affecting women's situation. It also underscores the extent of women's time burden exacerbated by unpaid domestic care work, which leaves women with no time to engage in the formal labour force. Access to energy and labour saving technologies, is one of the ways that that domestic care work can be managed to save women time and allow them to engage in productive engagements including formal labour-force participation.

¹² Pape, Petrini, and Iqbal 2018

¹³ A Skills Survey for Refugees in Ethiopia, 2018, The Word Bank Group

¹⁴ Pape, Petrini, and Iqbal 2018

Figure 6: Labour force participation and employment status (i.e. salary and wage employment).

(Source: Pape, Petrini, and Iqbal 2018)

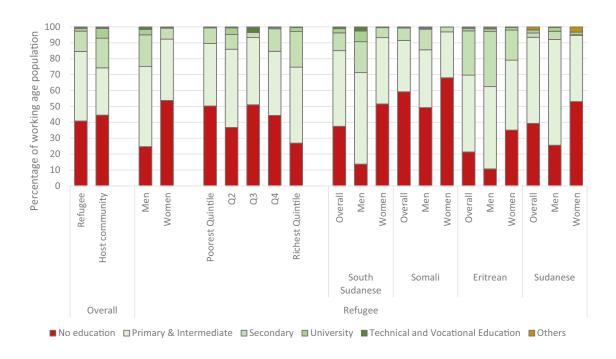
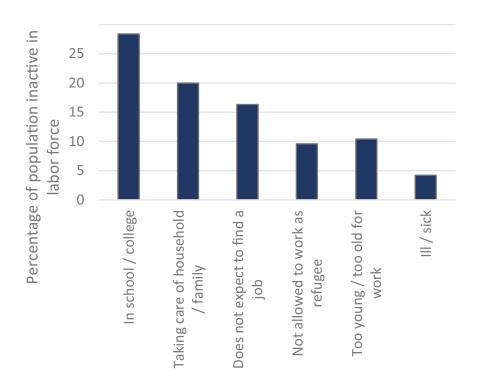


Figure 7: Reasons for not participating in the labour force (refugees)

(Source: A Skills Survey for Refugees in Ethiopia, 2018, The World Bank Group)



3.1.4 Areas of potential opportunities to promote and create new energy-related livelihoods in the energy, ICT, hospitality and service and agriculture value chains

FAO and UNHCR in Ethiopia have collaborated on a joint project to generate evidence on the food security, agricultural and livestock livelihoods situations and the needs of refugees and their host communities in the three main refugee hosting areas of Ethiopia (Benishangul Gumuz/Gambella, Tigray/Afar and Somali).¹⁵ After the selection of value chains for each region, the two agricultural value chains that prevailed in Gambella are horticultural value chains (tomato and okra) and maize value chain. Other livelihood options identified by the same study with potential for creating jobs for host and refugee communities in Gambella are

small retail businesses, briquette making (energy value chain), dairy products, fishing, tailoring, carpentry, pottery, hairdressing, and weaving. In the Dollo Ado area, the IKEA Foundation has piloted the use of innovative models in livelihood projects that have focused on agriculture, livestock, energy, the environment, and microfinance loans.16

In consideration of the above assessment studies and pilot projects, the following areas have been identified as having potential for enhancing incomes through PUE.

Considering the demand assessed at Gambella refugee camps by Integration Consulting firm¹⁷, and also taking into consideration the suitability of a low investment in the technology, and the potential to create impact at scale, the energy-related livelihood with most potential are ranked in the table below:

Table 4: Potential energy-related livelihoods.

Value Chain	Opportunity	Income Generation Potential
Energy	Briquette charcoal production and sales	High
	Efficient stove production and sales	High
	Mini-grid energy cooperative-managing and selling electricity	Moderate
ICT	Solar powered mobile charging services sales	High
Hospitality	Refrigeration-selling refrigerated drinks	High
	Hair cutting services and sales	High
	TV show services and sales	Moderate
Agriculture	Solar grain mill services and sales	Moderate
	Solar pumps for vegetable farming — using pumps to increase productivity and profitability	Moderate

¹⁵ UNHCR-FAO Collaboration Framework: Agriculture and Livestock Sector Development in Refugee hosting areas of Ethiopia.

MELKADIDA (LIBAN ZONE) SOMALI REGIONAL STATE 2019 PLEDGE PROGRESS REPORT- Specifically related to irrigable land, a Tripartite agreement between SRS, ARRA and UNHCR allowed access to 1,000 ha of land. Development continued in 2019, with IKEA Foundation support for 2,000 farmers (1,000 hosts/1,000 refugees).

¹⁷ PUE Potential Assessment for Selected Prospective Solar PV Mini grid Sites in Ethiopia.

Energy-related livelihoods - Energy value chain for cooking:

Camps in Gambella are highly dependent on biomass and firewood¹⁸, which can provide a source of conflict.¹⁹ When rations are reduced or finished refugees collect firewood to provide an income, thus the competition for resources can lead to conflict. Refugee camps in Gambella are the major domestic fuel consumers in Ethiopia, as indicated in Figure 7 below²⁰:

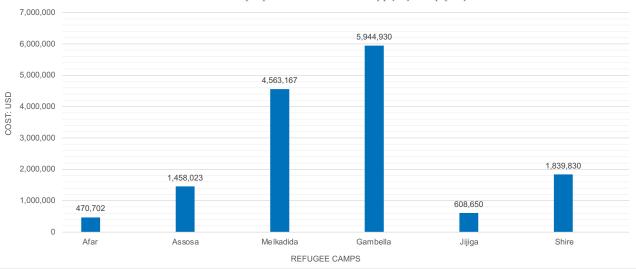
As a result, UNHCR has proposed ethanol fuel and carbonised briquettes to replace the traditional domestic fuels of biomass and firewood.²¹

Figure 8: Mixed energy budget requirement.

(Source: UNHCR - Safe Access to Sustainable Energy for Domestic Cooking, Baking, Heating and Lighting for Refugees and Host Community services.)

Mixed Energy Budget Requirement

Estimated cost for proposed Domestic fuel supply by camp per year



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¹⁸ UNHCR Representation in Ethiopia- Safe Access to Sustainable Energy for Domestic Cooking, Baking, Heating and Lighting for Refugees and Host Community services.

¹⁹ Context and Conflict Analysis for Gambella, Ethiopia-Energy Solutions for Displacement Settings (ESDS) in Gambella.

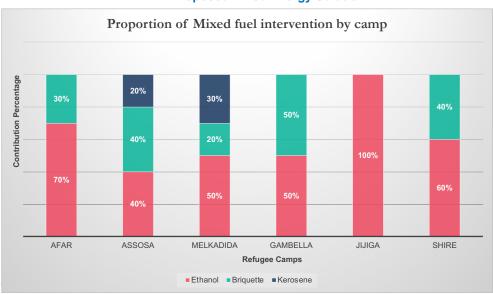
²⁰ UNHCR Representation in Ethiopia- Safe Access to Sustainable Energy for Domestic Cooking, Baking, Heating and Lighting for Refugees and Host Community services.

²¹ UNHCR Representation in Ethiopia- Safe Access to Sustainable Energy for Domestic Cooking, Baking, Heating and Lighting for Refugees and Host Community services.

Figure 9: Proposed energy solutions.

(Source: UNHCR Representation in Ethiopia- Safe Access to Sustainable Energy for Domestic Cooking, Baking, Heating and Lighting for Refugees and Host Community services.)

Proposed Mixed Energy Solution



2/18/22 14

UNHCR The UN Refugee Agency

Energy-related livelihoods - Ethanol value chain

UNHCR and Gaia Clean Energy have piloted an ethanol fuel distribution centre in Sherloke Camp in Benishangul region. Ethanol is transported by trucks from Finchaa Sugar Factory to the Assossa camps, where it is stored in tanks. Such as the 45,000 litre²² one in Sherloke Camp, displayed in Figure 9 below. The fuel is sold to households in 10 litre jerry cans from small stores in the camp, as depicted below.

Figure 10: A 45,000 litre ethanol tank and containers in Sherkole Camp.

(Source: @Gaia Clean Energy)





²² Transformative cooking solutions in the Assosa Refugee camps of Ethiopia.

However, continuity of supply of ethanol fuel from sugar factories is always in question, especially nowadays since ethanol is being used as an ingredient for sanitiser production. As a result, for instance Sherkole camp is not getting the required supply. Moreover, the high involvement of stakeholders like UNHCR and the Government of Ethiopia (GoE) is very important to ensure there will be continuous and sufficient supply of ethanol fuel. Opportunities for fostering job creation within the ethanol fuel value chain include:

- Ethanol fuel retail selling ethanol fuel that is supplied by sugar factories
- Ethanol stove assembly and retailing

Energy-related livelihoods -Carbonised briquette stoves

Carbonised briquettes can be made from savannah grass as well as other agricultural residues. The carbonised briquettes value chain has a high market in Gambella refugee camps and can therefore create job opportunities for the host and refugee communities. The host communities can provide the feedstock supply and a cooperative composed of refugee and the host communities could run these businesses. Table 5 shows the potential areas along the carbonised briquette value chain that can foster job creation:

Energy-related livelihoods Energy efficient stove production

According to a study²³, all respondents from both the refugee and the host community in Gambella use firewood and charcoal for cooking. However, the open three-stone stove is the predominant stove type being used by both communities. Both communities reported that due to a lack of improved cookstoves, the traditional three-stone stove is consuming a lot of energy and exposes them to smoke. Respondents of the study have also indicated that any improved stove in the market need to fit their cooking tradition. To ensure this, GIZ and UNHCR have initiated a user centric approach where the user is at the centre of the design process for a new charcoal briquette-based cook stove that would best fit the local cooking needs. The above study showed that there is a big demand for energy-efficient cookstoves in Gambella camps. The production of energy-efficient stoves can be done with locally available materials and will create good livelihood opportunity for refugees and host communities. However, to make it more attractive and a suitable source of income for refugees, arrangements like subsidising sales of stoves, developing markets through technical and financial means are crucial.

Table 5: Carbonised briquette charcoal value chain livelihood for refugee and host community.

Value chain	Which community?	Remark
Feedstock/ Savannah grass supply for carbonised briquette production	Host	To avoid conflict over Savannah grass resources, this value chain needs to be left to the host communities
Stove clay lining supply	Host	To avoid conflict over resources, this value chain needs to be left to the host communities
Carbonised Briquette production	Both	Both communities produce carbonised briquettes and supply them to their respective market
Carbonised Briquette distribution	Both	Both communities can retail charcoal in their respective market segment.
Briquette stove production	Both	Both communities can produce the stove for their respective market

²³ End-user finance and payment systems in displacement settings: Kenya, Uganda, Ethiopia Final Report

Energy-related livelihoods -Mini-grid energy cooperative

Another energy-related livelihood opportunity would be the replication of what has been piloted in the Dollo Ado area. This could be done by establishing an energy cooperative for camps in Gambella that will manage and be in charge of Operations and Maintenance (O&M) of mini-grids, Solar Home Systems (SHSs) and solar pumps, streetlights, as well as a women led charcoal making cooperative. Furthermore, in Dollo Ado, a shared refugee host community irrigation project has been piloted and can be expanded to Gambella.²⁴

Energy-related livelihoods in the ICT value chain: Solar-powered mobile charging solutions

Mobile charging is an inevitable, but necessary cost to stay connected, and, therefore, people are willing to pay high prices to charge their phones. With a one-time investment on a complete solar charging kit, an entrepreneur can make an income from offering a phone charging service. There are all-in-one solutions that can charge up to 30 mobiles a day.

The rapid PUE assessment, carried out by the Integration Consulting Group in Nguenyyiel refugee camp and Terfam town host community, showed that people are paying ETB10 (€ 0,20)/ charge, and that a given phone charging service provider has, on average, 60 customers a day.

Figure 11: Energy related livelihoods in Dollo Ado refugee camps.



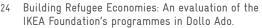






Table 6: Income from mobile phone charging services.

(Source: PUE potential assessment for selected prospective solar PV mini-grid sites in Ethiopia.)

Service offered	Average number of customers	Service tariff	
Phone Charging	60	10 ETB (€0,20)/charge	

Energy-related livelihoods in the hospitality and services value chain: refrigeration, hair cutting and TV shows

Decentralised solar refrigeration solutions have the potential to increase income for small entrepreneurs without investing in additional human resources or extra efforts.²⁵ Since camps in Gambella experience high temperatures, people often consume refrigerated drinks. A considerable number of businesses are generating revenue from selling cold drinks, using diesel powered refrigerators. Solar refrigeration solutions can offset these diesel powered refrigerators and have a high potential to be an IGA for existing small businesses.

Table 7: Potential income from solar refrigeration services.

Service offered	Average number of customers	Service tariff	
Refrigeration	11	15 ETB (€0,30)/charge	

Figure 12:

© Rensys Engineering & Trading PLC-solar mini-grid powered refrigerator being used for income generating activity on Dek Island, Ethiopia.



²⁵ Humanitarian Energy: Energy for micro-enterprises in displacement settings

Solar powered barber shops: In the absence of a power supply, people have to travel to the nearby town to get their hair trimmed. Therefore, a solar powered barber shop, which can be established in any location, is an attractive business prospect. In densely populated refugee camps like those in Gambella, a barber shop can make a significant profit from hair cutting services.

Energy-related livelihoods in the agriculture value chains: grain mills and irrigation

Milling arguably has the potential to become one of the most important PUE technologies, not only because of the universal need that off-grid communities have for milling services, but also because it is a uniquely gender-segregated house-

Table 8: Potential income from hair cutting services.

(Source: PUE potential assessment for selected prospective solar PV mini-grid sites in Ethiopia.)

Service offered	Average number of customers	Service tariff
Hair cutting	5–10	25 ETB (€ 0,50)/person

There are youths in the refugee camps who are fans of major football competitions in Europe and there are a number of businesses that offer DSTV shows for these fans. The PUE Potential Assessment for Selected Prospective Solar PV Mini-Grid Sites in Ethiopia has also indicated that there are many businesses that are offering films and sport shows through electricity that is purchased from diesel generator owners. A solar powered TV and sound system represents an ideal PUE in such settings. However, we must acknowledge the potential harm from video halls in case people are allowed to drink alcohol. It may lead to cases of sexual and gender-based violence (SGBV), including intimate partner violence.

hold task. Women and girls are always the ones in charge of food processing. A study conducted by USAID and Ethiopia²⁶ identified the main problems with respect to the work of rural women in Ethiopia, These included: limited access to land for growing food; limited availability of grinding mill services for them to get the service; limited participation in community decision making; limited access to credit; and limited access to transportation (especially for domestic transport tasks). Although men still retain the ownership, having a mill minimises the work of women. Automating grinding mill services would free up a significant amounts of time for women and girls, which could then be put towards other productive or educational activities, and support women's empowerment.

Table 9: Potential income from hair entertainment.

(Source: PUE potential assessment for selected prospective solar PV mini-grid sites in Ethiopia.)

Service offered	Average number of customers	Service tariff
Entertainment	1,800	2-5 ETB (€0.04-0.1)/ person per film or game etc.

The PUE Potential Assessment for Selected Prospective Solar PV Mini-Grid Sites in Ethiopia²⁷ indicates that there are plenty of diesel powered mills in Gambella refugee camps that have high operating costs. Hence, replacing them with solar powered mills – that can be run by solar mini-grids or standalone solar systems – will make a significant difference in livelihoods by avoiding recurring fuel costs that would have been invested for diesel mills. However, piloting and research on suitable business models are needed, and we recommend ESDS and GIZ carry out further research to identify suitable business models for solar grain milling.

Solar powered irrigation (small-scale solar irrigation pumps or large central solar irrigation pumps) for the production of vegetables and crops represent an important opportunity too. Gambella is endowed with surface and shallow underground water that can be used for irrigation purposes. As per the assessment conducted by UNHCR-FAO²⁸, there is a high potential for making a living from the production of vegetables in Gambella, and hence, a solar powered irrigation pump that can draw water from lakes and rivers would enable refugees to make a business using energy productively. Since these pumps have minimal operational costs, users will significantly benefit from these appliances. This livelihood opportunity is present for both host communities and refugees who will benefit from the 10,000 hectares of irrigable land allocation, pledged by the GoE.

Figure 13: Solar Grain Mill.

(Source: Solar milling: exploring market requirements to close the commercial viability gap*.)



* https://storage.googleapis.com/e4a-website-assets/SolarMilling_Market-Requirements.pdf

²⁷ Rapid Site Assessment – Refugee Camp Nguenyyiel and Host Community Terfam Town Energy Solution for Displacement Settings (ESDS), July 2021

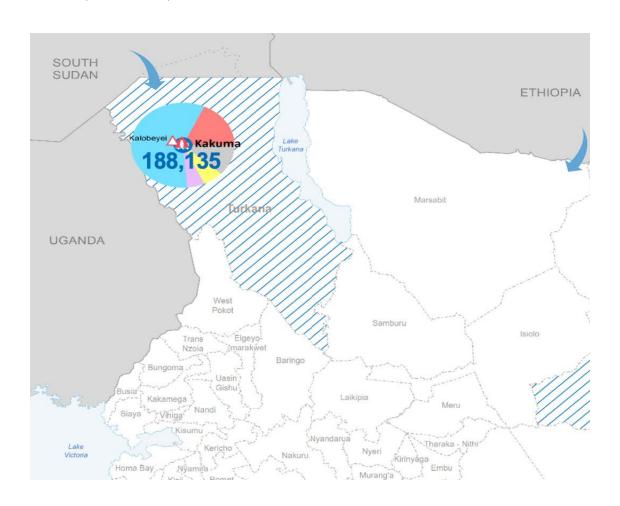
²⁸ UNHCR - FAO COLLABORATION FRAMEWORK, 2020

3.2 Turkana West Sub-County in Kenya

3.2.1 Context of the setting

Turkana West Sub-County hosts Kakuma Refugee Camp, one of the two refugee camps in the country. The other is Dadaab Refugee Camp, which is in Garissa County, bordering Somalia. Kakuma Refugee Camp has two settlements: the Kakuma Refugee Camp with four villages established in 1992, and the Kalobeyei Settlement, which was established in 2016, to decongest the older camp²⁹. The demographic makeup of refugees in the Kakuma area indicates that the majority of the refugees are from South Sudan (55 %) and Somalia (26 %)³⁰. Other refugee nationalities represent Burundi, Rwanda, Ethiopia, Sudan and the Democratic Republic of Congo. Kalobeyei Settlement was established in 2016 as a joint

Figure 14: Location of Kakuma Camp in Kenya's Turkana County, in Kenya's North Western region.
(Source: UNHCR)



²⁹ Betts et al, (2019)

³⁰ IFC, 2018

initiative of both the Turkana County Government and UNHCR. The Settlement is located approximately 3.5 km from the Kakuma Camp, and was established to ensure self-reliance for refugees

and enhanced greater refugee interaction with the host communities³¹. By 2020, the settlement was home to approximately 39,623 refugees³².

Figure 15: The Kalobeyei Settlement. (Source: UNHCR)



Figure 16: A section of Kakuma Refugee Camp. (Source: UNHCR)



³¹ Betts et al. 2020

³² UN HABITAT, 2021

The Kalobeyei settlement's development is guided by the Kalobeyei Integrated Social and Economic Development Programme (KISEDP), a framework for market based approaches for the management of contexts of forced displacement, which differs to the usual aid based model elsewhere, including in Kakuma³³. At a glance, these two settlements offer a large system of informal trading and a vibrant marketplace: it hosts a multi-income community, which is economically dynamic³⁴.

In the recent World Bank and UNHCR socio-economic study, refugees were noted to be mostly young with the majority of households headed by women, leading to high dependency ratios³⁵. During the Kenya population Census in 2019, the female-headed households in Turkana West sub-county were 56 %, compared to 32 % for Turkana County and 52 % at national level³⁶.

The table below provides a snapshot of the characteristics of the community in Kakuma:

Table 10: Summary of social and economic characteristics in Kakuma Refugee Camp.

(Source: World Bank and UNHCR, 2021)

Summary of social and economic characteristics		
Main source of lighting	 8.8% had no form of lighting at all 3% used firewood 51% used a kerosene lamp, candles, or a torch 24% used biogas 13% used electricity from a generator or other mini-grid 	
Cooking fuel	 69% used firewood collected from the area around the camp 18% used purchased firewood 13% used charcoal 	
Energy-related livelihoods	 Private distributors of genset-based electricity Gradual entry of solar mini-grid electricity distributors Phone charging stations Cyber cafes, photo and printing shops Restaurants, bars and butcheries requiring freezers, refrigeration and lighting Hair salons and barber shops ICT laboratories in public and private schools Refrigeration and lighting in public and private dispensaries 	
Employment	 Only 20% of refugees were in employment compared to 71% at national level and 62% in Turkana County 78% were outside the labour force (i.e. not searching, not available or/and not jobless) 20% were reported to be jobless, available and searching 	
Nature of employment	 45% were paid employees 22% were self-employed 19% earned an income from agriculture 21% were in family businesses 5% were in apprenticeships 23% were volunteers 	

³³ UNHCR, 2018. KISEDP

³⁴ University of Oxford, 2018

³⁵ World Bank and UNHCR, 2021

³⁶ Kenya Population and Household Census (2019).

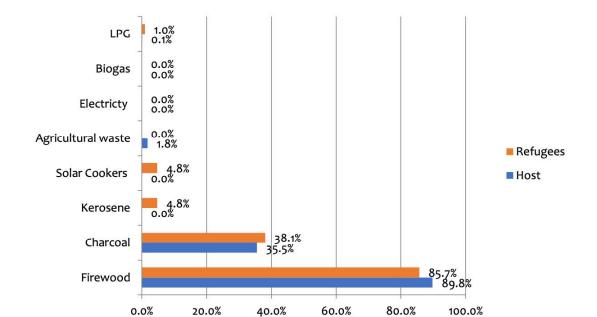
Correlation between gender, nationality and poverty	 The report noted that the poorer refugees were likely to be South Sudanese, those that had been recently displaced, households that were larger and female-headed households. The poverty headcount in Kakuma in 2019 was 68%. 80% of refugee households are highly food insecure with female-headed households being most severely affected by food insecurity.
The case of COVID-19	 Refugees are disproportionately vulnerable to COVID-19 shocks compared to host communities, as they face lower employment rates. Women are likely to be more affected by unemployment compared to men in the context of COVID-19, and yet carry a heavy burden of care and nurture of sick relatives.

In the Energy Value Chain

Cooking energy for refugees and host communities: While the host communities largely collects firewood from open fields, refugees are provided with free fuel wood and, most recently, cash for fuel. Both use firewood and charcoal for cooking to a large extent, with LPG, electricity and biomass used to a lesser extent. Figure 16 below provides a snapshot of the sources of energy for cooking for refugee and host community households.

Lighting energy for refugees and host communities: Both refugees and host communities use a variety of lighting sources for their households. According to the Turkana County CEP (2020), the choice is determined by 'availability, affordability and reliability' of the source³⁷. Solar energy was preferred by the majority of both the refugees and host communities at 66.7 % and 46.7 %, respectively. The Figure below provides a summary of the lighting energy outlook, based on various energy options:

 $\label{lem:figure 17: Energy sources for cooking for refugee and host community households. \\$

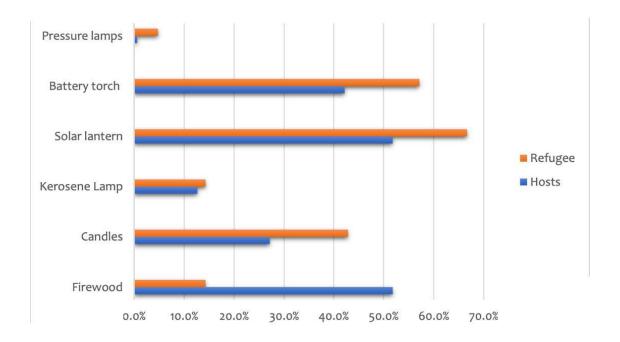


(Source: Turkana County CEP, 2020)

³⁷ Turkana County Energy Sector Plan (CEP), 2020: 44

Figure 18: Summary of different energy sources for lighting.

(Source: Turkana County Energy Sector Plan, 2020).



Energy access is limited in Kalobeyei compared to Kakuma, being the newer settlement of the two and with people mostly relying on charcoal and firewood as cooking fuel and kerosene or candles for lighting, in addition to solar pico lanterns. Solar energy has been highly adopted due to the efforts of organisations such as GIZ and LOKADO that have promoted the use of renewable energy sources. GIZ has for instance helped in the installation of several solar-powered lighting masts that have improved mobility at night³⁸.

3.2.2 Prevalent energy-related livelihoods in the energy, ICT, hospitality and service, and agriculture value chains.

Formal and informal jobs: Humanitarian assistance offers the biggest source of livelihood for refugees. Of all formal jobs in the refugee camps, 58% are from humanitarian assistance, including from NGOs, while in the host town 79% of formal employment is offered by Kenyans³⁹.

With regard to the economic outlook of the refugees, those in Kakuma Villages 1 and 2, which are the older parts of the camp, are more likely to have economic activity as opposed to those in Kakuma 4, which is more recent and has less economic activity. A recent study by the University of Oxford noted that the Kakuma area boasts thriving entrepreneurship with "bustling retail markets"

³⁸ UN HABITAT, 2018

and restaurants in Kakuma 1". With the new market-based Kalobeyei settlement (becoming) an exemplar of the shift towards private sector-led development in refugee contexts⁴⁰. Approximately 30 % of the refugees in Kakuma 1 or 2 have a source of livelihood, whereas those in Kakuma 4 have significantly less at only 5.5 %⁴¹. Kakuma's informal economy is thriving with more than 2,000 businesses (mainly micro-businesses), mostly retail, such as kiosks, cosmetic stores, mobile phone stores, and service sector businesses, like hotels, barbershops and salons⁴². Other prominent businesses in the area include grocery stores, food stalls, cafes, and M-Pesa kiosks.

According to the 2018 IFC assessment, common IGAs are small general stores (which account for 31 % of the businesses in the host own and 33 % of the businesses in the camp⁴³), clothing and shoes stores, vegetable groceries, hotels and restaurants, butcheries, electronics and mobile phone stores, tailoring, fruit vendor businesses, barbershops, hardware shops, cosmetics and salons, mechanics and photo studios. Other businesses observed in the town centres during fieldwork data collection in June 2021, included welding shops, ice making, hotels, hospitals, schools, and technical and vocational education institutions, cyber cafes, printers, and registration services; among others. For example, a typical bakery would have up to 10 employees⁴⁴.

The most common jobs in the Kakuma host town slightly differ from the common jobs in the camp.

In the town, the most common jobs are car drivers, guards, small shop employees, barbers and hairdressers, boda boda drivers⁴⁵, and transporters and cart pushers. The small shops mostly trade in clothing, shoes, household items, medicines, stationery, and cosmetics. Fish from Lake Turkana is also sold in the area⁴⁶. In the camp, the most common jobs are teachers, guards, translators, community mobilisers, shop employees, cooks and cosmetic store employees⁴⁷. The table below summarises the different types of jobs by comparing the refugee camp and the host communities:

The Turkana County CEP (2020) reported that more of the refugee households engage in more productive uses of energy compared to the host community households. The refugee community was reported to engage in PUE at a higher level in the sale of goods, use of power for education purposes or for powering their appliances, compared to the host community as summarised below⁴⁸.

Table 11: Jobs in host town communities and refugee camps.

Types of jobs for Host Town Community	Types of jobs for Refugees
- Car drivers	- Teachers
- Guards	- Guards
- Shop employees	- Translators
- Hairdressing and barbers	- Community mobilisers
- Clothing and shoe stores	- Shop employees
- Fish trading (from L. Turkana)	- Cooks in restaurants

⁴⁰ Betts et al, 2019: 4; IFC and UNHCR, 2018.

⁴¹ Betts et al, 2018

⁴² EnDev, 2020.

⁴³ Betts et al, 2018

⁴⁴ Sud, 2018

⁴⁵ Boda boda's are motor cycles that ferry passengers and goods for a fee, more like a taxi cab.

⁴⁶ Betts et al, 2018

⁴⁷ IFC and UNCHR, 2018.

⁴⁸ Turkana County CEP, 2020

Table 12: PUE activities in the host communities and refugee camps.

(Source: Data from the 2019 Kenya National Population and Housing Census.)

Value Chain	PUE activity	Host Community	Refugees
Trade	Selling OGS products and goods	4.2 %	19 %
	Energy for lighting	33%	42%
Hospitality and services	Energy for appliances (TV and radio)	20%	33%
Agriculture	Agriculture Use of mini-grid electricity for water pumping		14.3 %
	Use of solar energy for water pumping	23.5 %	52.4%

3.2.3 Gender and cultural dimensions

Economic integration of women is approximately just above 20 %⁴⁹. Refugee women from Burundi, DRC and Turkana have the highest level of economic integration, while South Sudanese women had the lowest⁵⁰. According to a report by MarketShare, women are concentrated in care work (domestic chores), retail, hospitality and services – including tailoring and baking – all being activities that require lower starting capital and skills,

and also yield considerably less income compared to other economic activities⁵¹. A study by IFC in 2018 noted that refugee women's earning was only nearly half that of male refugees, while for the host community, women earned double that earned by refugee women. Notably, women are more flexible and open to new job opportunities compared to men, who were reported to find it hard to explore new opportunities preferring to remain idle than venture into new businesses⁵². The Table below provides a snapshot of a selection of the employment indicators:

Table 13: Livelihoods characteristics

(Source: IFC, 2018)

Livelihood characteristics	Host Town		Refugees/camp	
	Male	Female	Male	Female
Self-employed or owning a business	40%	39%	23%	7 %
Business is registered	Gender disaggregation was not clear though 51 % had registered compared to 38 % in the camp		49%	22%
Unemployed and not looking for a job	27%	14 %	8 %	13 %

⁴⁹ Hall, Samuel, 2016; IFC, 2018

⁵⁰ Betts et al, 2018

⁵¹ MarketShare, 2019

⁵² MarketShare, 2019

A majority of the businesses are owned by men. Female entrepreneurs face numerous challenges that limit their abilities to set up including; legal, regulatory, and policy barriers, lack of required documentation, restriction on ownership of productive resources, cultural barriers, and technological barriers. All these factors result in limited access to finance for female entrepreneurs and subsequently, a limited number of female investors and female-owned businesses⁵³.

Gender gap in employment and entrepreneurship

Women's low level of education correlates directly with their higher level of unemployment, with 73 % of all women in Kakuma reported by IFC in the 2018 study as having no education and also being unemployed. Further, the study noted only 24 % of the men and 4 % of the women had a bank account. In addition to nationality, occupation and level of education, gender has been reported to be a major determinant of income. Investment in technical and vocational training provides an excellent opportunity to build women's skills and boost their potential for employment.

Other measures to address the gender gap in employment include boosting access to financing for women groups involved in PUE, including those who have ventured into agribusiness and horticulture. In addition, given the high demand for energy, particularly renewable energy resources, it will be worthwhile to bolster the capacity of women's associations to venture into off-grid solar

supply chains both as energy entrepreneurs and as employees and business owners. More specific recommendations are provided in Section 5.

3.2.4 Areas of potential opportunities to promote and create new energy-related livelihoods in the energy, ICT, hospitality and service and agriculture value chains

The IFC estimated a total consumption market in Turkana West of € 49,5 million, implying a significant consumer goods market for food items such as maize and wheat flour and rice; and other non-food household goods such as TVs, motorbikes and solar panels⁵⁴. Energy consumption and provision potential in Kakuma camp are considerably higher, since there is a high population density that drives this consumption market. Common energy-related consumable non-food items include, cooking fuel, electricity, loan repayment, and airtime and mobile phone charging, fuelled by high unsatisfied demand. The table below provides an analysis of the energy related value chains vis-à-vis the potential for income generation (IG). It has been rated as high, where there is high demand for the service and capacity to undertake the service, and moderate, where either of these are lower.

Table 14: Value chain opportunities and potential

Value Chain	Opportunity	IG Potential
Energy	Trade in off-grid solar solutions	Moderate
	Waste recycling	High
ICT	Sales and maintenance services, Solar powered mobile charging	High
Hospitality and services	Refrigeration	High
Agriculture	Solar pumps for horticulture	Moderate

53 Dutta, 2018

54 IFC, 2018.

Livelihoods in the energy value chain: unmet demand for household and business energy

With growing trade in OGS, there is now a growing market and business opportunities for the following renewable energy products and services:

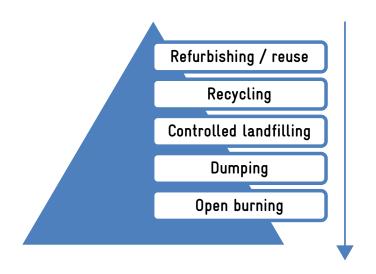
- Sale of solar panels, pico lamps, SHSs. Some of the industry players include Bboxx, Azuri, Sunking, M-KOPA, D-light, among others.
- Solar installation and after-sale maintenance services.
- Provision of solar powered electricity to power businesses through mini-grids or larger SHSs, as witnessed through investments such as Renewvia Energy, Okapi Green and Yelele Energy.
- Sale of batteries, bulbs, TV sets and radios.
- Establishment of video shops, including the sale of video decks and TV screens, as well as video screening at a fee. Video shops are likely to also have fans and air-conditioning, all energy-consuming appliances.
- Training programmes for youth and solar energy artisans, offering opportunities for students to learn about solar technologies.
- Phone charging services.

Livelihood opportunities, where women, who are relatively less skilled and tend to offer more labour-intensive services may be involved, include: sustainable biomass harvesting, conversion of organic residues into fuel briquettes, home gardening and use of grey water for irrigation⁵⁵. The youth tend to shy away from labour-intensive work, preferring technology-based job opportunities.

Waste recycling: Kenya has not finalised its draft environmental management and coordination e-waste regulations; hence regulatory guidelines are still inadequate. UNHCR has a central role to play in the management of electronic waste resulting from renewable energy and other waste products. GIZ is presently supporting e-waste management, an intervention that should continue in future phases of ESDS. Greater attention in refugee settlement areas should now shift from burning and dumping waste towards more sustainable approaches. Such as reuse and recycling to both generate energy, but also conserve the environment, as illustrated in the image below from SOFIES.

Figure 19: Different ways to recycle or dispose of waste products.

(Source: SOFIES, 2020)



⁵⁵ Source: Stakeholder interviews

Sanergy⁵⁶ recycles household and other waste, converting it to organic fertiliser, insect-based animal feed and renewable energy. Fraternity for Development Integrated (FRADI) is another initiative focusing on waste recycling in Turkana County. Waste recycling offers an opportunity for new jobs given the expanding settlements and market demand for recycled products, including biogas.

The Raphael Recycling Plant in Kakuma



The Raphael Recycling Plant is an initiative led by Raphael Bazemi, a refugee from the DRC. The project operates in Kakuma 4 and is not formally registered, although it employs over 500 employees. The project has been presently contracted by the Lutheran World Federation to produce plastic rulers for all schools in the Turkana County. Other products include plastic cups and plates that are sold in the local market, all illustrated in the images below. Consultations with the project pointed to a significant untapped recycling potential that GIZ could further bolster.

Energy-related livelihoods in the ICT value chain

High demand for information and communication technologies: Given that IDPs represent over six countries with families strewn across the globe, the need to communicate and send money cannot be overstated. Efficient internet systems, smartphone technology and reliable energy all underscore the core ingredients of an efficient global ICT system. Stakeholders in Turkana West emphasised this need, given the remote nature of Kakuma in the context of its geographical location in a remote part of North-Western Kenya⁵⁷.

The IFC estimated a mobile phone market share of € 425,000 annually in Kakuma. Support for local businesses to invest in mobile phone-based technologies in addition to sales and maintenance services is a feasible investment area. Refugees and members of host communities have mobile phones with prepaid plans. The IFC study noted that mobile phone ownership is 69 % for camp residents and 85 % for town residents. 31 % of these in the camp and 86% in the host community rely on their phones or SIM cards for mobile banking and money transfers⁵⁸. However, despite limited functionality in the mobile money service for refugees, which only operates to purchase food tokens inside the camp, this points to a large opportunity in the camp to work towards expanded mobile money penetration, and mobile banking interventions in the Kakuma area⁵⁹.

Okapi Green

Okapi Green, a refugee-owned energy enterprise, registered the NURU Access ICT Centre (NURU) in 2018, to address the significant ICT needs in Turkana West. NURU offers internet access through Wi-Fi, virtual meeting tools such as Skype, Zoom and others, sales of computer software, access to government digital platforms such as KRA and e-Citizen accounts, copying, printing, among others.





Realising the need for a reliable energy source, they established a solar powered mini-grid, which was producing more energy than the business could consume, which led to sales of Okapi power as the next business offering. The main challenge faced by Okapi is a significant delay in accessing the EPRA permits to allow power distribution to businesses and households.

⁵⁸ IFC, 2018

⁵⁹ IFC, 2018

Energy-related livelihoods in the hospitality and services value chain

High temperatures and the demand for room cooling and refrigeration: Turkana West Sub-County temperatures average 300 °C. This implies a high demand for refrigeration for eateries and restaurants, primarily for soft and cold drinks, meat and dairy products and cooling for vegetables. There is also a high energy demand for room cooling fans and air conditioning, household refrigerators and a variety of energy driven appliances. Yelele indicated that the electricity demand cannot be matched by the supply presently available⁶⁰.

There is also a high willingness to pay, as a lot depends on access to reliable energy; including business expansion.

There is also a high demand for entertainment, leading to the establishment of bars, video showings and shops that require energy for appliances such as TV sets, screens, radios, lighting and internet sources⁶¹.

The biogas project: Shade Hotel and Jean de Santosn



Through field interviews, it was observed that many businesses have not expanded because of the energy uncertainty that arises due to high cost of the available gensets that often malfunction and require frequent repairs. The mini-grid energy providers had also underestimated the demand, often rationing electricity.*

* Source: KII data

There is presently a biogas project aimed at addressing some of the energy-access challenges. The biogas project is an initiative of two refugee-owned eateries — the Shade Hotel and Jean de Santos. The biogas is generated from processing the bio-waste that is then used to meet the demand for cooking and proving lighting to the two hotels.



O Source: KII data 61 IFC, 2018

Energy - related livelihoods in the horticultural value chains and agribusiness

A study in 2016 on horticultural value chains noted that there is a high demand for horticultural products such as tomatoes, fresh fruits and vegetables⁶². These products are often very expensive in the markets in Kakuma as they are mainly sourced from as far as Kitale and are highly perishable. Investment in local production of these products is viable and would present a great opportunity to ease access and create jobs. Possible investment areas include drilling water sources, supporting solar irrigation, access to financing, and capacity building in horticultural production and agribusiness, including value addition. Agribusiness could particularly offer employment opportunities for the unskilled demographic, including women, and should be explored.

3.3 Terego and Madi Okollo Districts in Northern Uganda

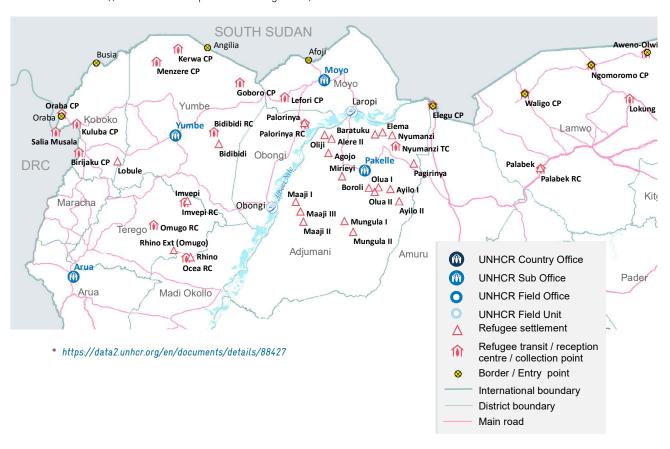
3.3.1 Context of the settings

Uganda is one of the top refugee hosting countries worldwide. As of June 2021, Uganda had 1,475,312 refugees and 23,130 asylum seekers, with 94 % living in settlements in 13 districts and 6 % in Kampala.

Terego and Madi Okollo districts host 196,674 refugees, mainly from South-Sudan, concentrated in Imvepi and Rhino Camp Refugee Settlements, representing 25.5 % of this district's population (770,600).⁶³

Figure 20: Map of refugee camps and UNHCR offices in Uganda

((Source: UNCHR presence in Uganda*)



⁶² Samuel Hall, 2016.

³ Statistics Dashboard – June '21

The table below provides a snapshot of the characteristics of the community in Imvepi and Rhino Camp Refugee Settlements:

Table 15: Summary of socio-economic characteristics

Summary of socioeco	nomic characteristics
Main	Cumulatively, 99% of the households use energy for cooking, while 67% use energy for lighting. Less than 5% of households use energy for productive purposes. The main sources of lighting and electricity are: - 26% torch - 3% kerosene lamp - 49% solar lamps - 9% solar panel and bulbs - 4% battery - 9% others
Cooking fuel	The main source of cooking fuel in the settlements (97%) is wood biomass. Firewood accounts for 81% of fuels and charcoal for 19%, while others (crop residue, briquettes, kerosene for cooking, etc.) are used to an insignificant extent. ^{c)}
Energy-related livelihoods	 Private distributors of Energy Access Solutions Phone charging stations Cybercafes, photo and printing shops Restaurants, bars and butcheries Hair salons and barber shops
Other livelihoods	In Rhino Camp and Imvepi settlements trade, employment opportunities and other non-agricultural activities for both populations are to a large extent rooted in agricultural production (crops and livestock). ^{d)}
Correlation between gender, nationality and poverty issues	74% of refugees in the West Nile live under the poverty line compared to 24% of host country nationals. ^{e)} Gender relations in South Sudan are shaped by the social and economic realities of being one of the world's least developed countries, and by decades of conflict. Prevailing gender norms are based on a traditional, patriarchal concept of strict and clearly delineated roles of women and men. Gender relations in host communities are also characterised by prevailing and deeply entrenched gender inequality, often accompanied by gender-based violence and very limited decision-making power by women and girls. The pressure put by refugees on local communities and the scramble for resources this entails for all, but particularly for women and girls, is further exacerbating gender inequality. ^{f)}
The case of COVID-19	COVID-19 has put extreme pressure on livelihoods. The last monitoring from the WB and WFP ^{g)} indicates that employment rates among refugee respondents declined from 43% in October/November 2020 to 32% in February/March 2021. Ownership of family businesses declined from 37% before the lockdown in March 2020 to 23% in February/March 2021. The West Nile region is especially affected due to the additional effect of bad weather conditions. The COVID-19 pandemic, combined in 2020 with a 40% reduction in food rations, worsening the well-being of refugees in Uganda. There were reports of increased negative coping mechanisms including child marriage, survival sex and theft. The number of attempted and completed suicides increased by 129% compared to 2019, with a total of 347 incidents in 2020. ^{h)} The effects of the second lockdown and related measures (from June 2021) are still to be evaluated. ^{l)}

- a) FAO and Practical Action. 2020. Key success factors and obstacles for FAO energy projects in humanitarian settings. Rome.
- b) Ibi
- c) EnDev (2019), the State of Sustainable Household Energy Access in Refugee Settings in Uganda Survey Findings.
- d) World Vision (2017) Inter-Agency Livelihood Assessment Targeting Refugees and Host Communities in IMVEPI and Rhino Camp Settlement
- e) Development Pathways 2020, Analysis of refugee vulnerability in Uganda.
- f) CARE (2017) Key findings from CARE's rapid gender analysis in Rhino and Imvepi settlements
- g) Monitoring Social and Economic Impacts of COVID-19 on Refugees in Uganda: Results from the High-Frequency Phone Survey Third Round: (October-November 2020)
- h) https://reporting.unhcr.org/node/5129?y=2020#year
- i) REACH (2021). Rapid Briefing Note: Impact of the COVID-19 resurgence in refugee-hosting districts Uganda.

3.3.2 Prevalent energy-related livelihood in the energy, ICT, services and hospitality and agriculture value chains

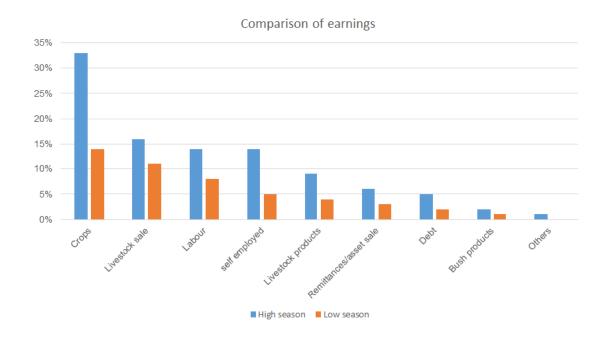
Trade, employment opportunities, and other non-agricultural activities for both populations are to a large extent rooted in agricultural production (crops and livestock). There is a significant drop in earnings between the high season (harvest) and the low season⁶⁴.

Several refugees and hosts derive their livelihoods from small businesses that are powered by solar energy and biomass fuels such as charcoal and briquettes. Individual interviews were conducted with 25 entrepreneurs involved in different businesses such as hair salons, phone repair, phone charging, restaurants, milling, cold drinks, secretarial services, cook stoves, baking, briquette production, and entertainment halls.

Palm Corps and solar irrigation

Livelihood implementers such as Palm Corps, who train farmers to plant and earn revenue from tomato farming, promote the usage of solar irrigation. Solar irrigation allows farmers to plant more frequently, thereby ensuring more harvests. The quality and quantity of yield will depend on whether farmers observe proper farming practices while the prices will be driven by the quality of the produce as well as the season. Low prices are observed during the wet season as a consequence of large supply, whereas during the dry season the supply drops thereby attracting higher prices.

Figure 21: Comparison of earnings from refugees and host communities' livelihood assessment.



⁶⁴ World Vision (2017) Inter-Agency Livelihood Assessment Targeting Refugees and Host Communities in IMVEPI and Rhino Camp Settlements Arua District, Northern Uganda

Arua City is poised to be a regional trade hub.

There are small-scale industries that include joinery, tobacco processing, wineries, bread baking, maize milling, welding and carpentry. Despite its strength, the West Nile economy has its challenges. This corridor constantly has a limited and erratic electricity supply, which has constrained industrial development. The scale of manufacturing industries is negligible, hence limiting employment creation, value addition in agriculture and GDP growth. Most citizens are employed in the informal sector. In West Nile, according to the 2016/17 census for the population aged from 14 to 64, these are types of employment people are involved in:

- 22.7 % are paid employees,
- 1.6% are employers,
- 67.8 % are self-employed,
- and 6.9 % are contributing family workers.

These are the different sectors where these people work, mainly in agriculture and trade:

- 42.8 % work in agriculture, forestry, and fishing,
- 20.8 % in trade,
- 15.2% in manufacturing,
- 3.4% in transport and storage,
- 3.5 % in construction,
- 2.8 % in education,
- 1.1 % in other service activities,
- 3.4% in hotels, restaurants and eating places, and
- 7% in other sectors.

Livelihoods in the energy value chain

In Rhino and Imvepi settlements, energy vendors are mostly from the host communities. Their businesses are small scale and solo ownership, mainly operated by male stall holders. 78 % of energy vendor businesses in Rhino Camp and 80 % in Imvepi are run by other people or relatives, rather than the proprietors. The product range in the energy vendor stalls is limited to low-value products (60 % of energy products on the market are counterfeit, 40 % are branded products that were

handed out for free to refugees who decided to sell them). The most common items include non-rechargeable batteries, torches, bulbs and solar pico PV lamps.

FAO and Practical Action reported⁶⁷ the issue of market distortion. Some NGOs have distributed in-kind energy products, creating dependency and leading to market distortion, ultimately hindering the scale-up of commercial models. For example, in Imvepi, 81 % of the households reported having received their lighting technology from UNHCR, while 17 % said they got the lighting technologies from the Danish Refugee Council (DRC).

Energy-related livelihoods in the ICT chain

The energy-related livelihoods identified during the field visits along the ICT value chain are sales and maintenance services, and phone charging. The solar-powered energy kiosks also sell services related to the ICT value chain, like phone charging, printing, photocopying, rechargeable batteries, as well as other secretarial services and offer computer training. Some shop owners installed computers for printing services to demonstrate PUE for income generation. Poor internet connectivity affects its implementation. They also use solar systems for powering a fridge. ⁶⁸

Energy-related livelihoods in the hospitality and service value chain

The energy-related livelihoods identified during the field visits along the hospitality and service value chain are off-grid refrigeration, barber kits, and television showcasing. In the Rhino and Imvepi settlements, about 21 % of households use energy for productive purposes related to these two value chains. The activities include eateries operated by 15.6 % of the households, while another 5.2 % are involved in brewing local beer.⁶⁹

⁶⁵ UNHabitat (2020), West Nile Region, integrated and multi-scalar planning

⁶⁶ UBOS Statistical Abstract 2020

⁶⁷ FAO and Practical Action. 2020. Key success factors and obstacles for FAO energy projects in humanitarian settings. Rome.

⁶⁸ Endev (2021) Humanitarian Energy: Energy for microenterprises in displacement settings

⁶⁹ FAO and Practical Action. 2020. Key success factors and obstacles for FAO energy projects in humanitarian settings. Rome

Insights from the field

Small business (mainly trade) owners see the benefits in using solar energy to provide power (longer business hours), to increase access to information (radio), and communication (phone charging).* Although most businesses are powered by solar, a big number of small business owners reported in the interviews that their solar panels and batteries don't have the capacity to power their businesses for long (ranging from 20 to 240W). As a result, many businesses plan to upgrade their systems. This will not only enable them to work for longer hours, but also to power additional equipment, e.g. hair clippers for salons, fridges for restaurants. The key challenge is access to appropriate financing. The most available form of financing is from VSLAs, which have loan amount and repayment period limitations.

* Paying for darkness, strengthening solar markets for refugees in Uganda, (2019) Rhino Camp and Bidibidi settlements in the West Nile region.

Energy-related livelihoods in agriculture value chains

Much of the population is dependent on agriculture. In Rhino Camp and Imvepi settlements, 24% of the refugees are engaged in farming activities while 75% of the host communities depend on agriculture. Farming-related PUE is gaining increased interest from donors. For example, solar irrigation and milling machines in the cassava value chain. PUE opportunities in the agriculture value chain will be further discussed in section 3.3.4.

3.3.3 Gender and cultural dimensions

Women and girls are primarily responsible for firewood collection among many other domestic chores, which poses a time burden and is linked to risks of conflict and SGBV. The length of journeys to collect fuel wood varies by location, with the longest reported time spent being up to eight hours, three times per week (in Rhino Camp,

Ofua 6). Moreover, refugee women and girls report fear and incidents of assault and tension with the host communities. However, despite these fears, some women and girls also recognise firewood as a valuable asset, one of the few resources they can freely access for both household use and occasional reselling. According to Mercy Corps, the lack of existing opportunities in energy-based income generation makes it difficult for women and girls to rank or envision energy priorities in the production realm. Some respondents mentioned tailoring and hair salons as examples of small businesses enabled through energy access.⁷²

Evidence shows that if energy companies target specific enterprises where women are employed, for example training women in food preparation or food vending sectors, and processing (e.g. diary and fish processing), PUE in these enterprises can increase. The agricultural processing sector presents a big opportunity for PUE uptake by women.

⁷⁰ World Vision (2017) Inter-Agency Livelihood Assessment Targeting Refugees and Host Communities in IMVEPI and Rhino Camp Settlements Arua District, Northern Uganda

⁷¹ Shell Foundation (2019), Productive use of off-grid energy

⁷² Mercy Corps (2019): Energy in Emergencies, Mitigating Risks of Gender-Based Violence Uganda Case Study.

3.3.4 Areas of potential opportunities to promote and create new energy-related livelihoods in the energy, ICT, hospitality and service, and agriculture value chains

Interesting opportunities emerged from the literature review and field interviews. These are summarised in the table below and further analysed in this section.

- ESPs employ refugees and hosts in their own shops, which are limited in number, especially around displacement settings.
- Refugees and hosts become ESP' agents.
- Energy kiosks developed by community groups, can also become ESP agents (potentially manufacturing their own solutions too, like improved cookstoves).
- Saving and Credit Cooperative Organisations (SACCOs), and related Village Savings and Loan Associations (VSLAs) groups, can engage with ESPs in a distribution agreement (including maintenance and adoption support).

Table 16: Value chain opportunities and potential

Value Chain	Opportunity	IG Potential*
Energy	Solar energy promotion, distribution, maintenance	Moderate
	Mini-grid energy cooperative	Moderate
ICT	Sales and maintenance services, solar powered mobile charging	Moderate
Goods trading	SHS for small business owners	Moderate
Hospitality and services	Refrigeration	Moderate
	Hair cutting	Moderate
	TV Show	Moderate
	Restaurant and Bakery	Moderate
Agriculture	Solar irrigation	High
	Agricultural processing	High
	Reliable cold chain for dairy	High

^{*} The Income Generation (IG) potential is indicative and linked to the number of people who can increase their revenues. It is further illustrated below for each value chain.

Livelihood opportunities in the energy value chain

A growing number of refugees and hosts are involved in solar energy promotion, distribution, and maintenance. Through our interviews, we identified that many Energy Service Providers (ESPs) are involving refugees and host communities to better reach rural areas, including refugee settings. Engie, D.light, BrightLife, SolarNow and New Energy Nexus are some notable examples. Through interviews, four ways in which ESPs involve refugees and hosts in the energy value chain were identified:

There is also a clear opportunity to scale past interventions that have demonstrated the benefit of using solar energy to create and increase revenues by new and improved services along:

- The ICT value chain: providing phone sales and maintenance services and phone charging
- Energy value chain: sales agents, and innovations⁷³

⁷³ For example, the youth group in Ofua 3 develops energy driven innovations like house alarm and electrical hand washing kits.

Kumi Kumi, savings and financial inclusion

Groups such as SACCOs, VSLAs also contribute to increasing financial literacy and building a saving culture among members to acquire energy products. For example, the community cooperative Kumi Kumi have implemented a digital saving product among members to enable them to save over time and acquire SHSs and efficient cookstoves. Now most refugees rely on savings groups and VSLAs, highlighting the need for formal Financial Service Providers (FSPs) to provide formal financial inclusion.*

* Endev (2021) Humanitarian Energy: Energy for micro-enterprises in displacement settings

• The hospitality and services value chains: offgrid refrigeration, barber kits, and television showcasing. For instance, solar fridges can allow a small business to sell, on average, 30 more drinks a day, which roughly equates to UGX 6,000 (1.5 €) in extra profit, covering the cost of the solar fridge daily PAYGO repayment fee of UGX 5,500⁷⁴ (1.35 €).

Livelihood opportunities in the goods trading value chain

The use of a SHS for small business owners (to extend business hours) is essential to support the development of the energy market both from the supply and demand sides. On the supply side, the development of distribution and maintenance capacities will lower the costs of products and services. The increased maintenance capacities will also make the investment in energy solutions safer. In addition, increased experience with the use of OGS businesses will also provide useful insights on product preferences and pricing adaptations to the refugee settings. This will meet the demand and needs of the target population in a better way.

Overall, the development of the global energy markets will support PUE for small business owners and establish the awareness, the distribution and maintenance infrastructure for more advanced PUE.

Livelihood opportunities in agriculture value chains

In 2019, the International Labour Organisation (ILO) conducted an integrated enterprise and market systems assessment in Arua District, in the context of the "Partnership for improving Prospects for host communities and forcibly displaced persons" (PROSPECTS).⁷⁵ The assessment identified local sectors and value chains with potential for growth, profitability and employment for refugee and host communities, such as cassava, sesame and cattle farming. Another study conducted in 2018 by UNHCR⁷⁶ also identified the cassava, sesame and groundnuts value chains to develop.

With respect to energy-related opportunities along agriculture value chains, the € 177 million Development Response to Displacement Impacts Project (DRDIP) implemented by the Office of the Prime Minister (OPM) with funding from the World Bank⁷⁷, identified several energy-related opportunities in the pilot district of Adjumani along the traditional value chains (goat, sesame, soybean, tomato, okra) and through agricultural

⁷⁴ Shell Foundation (2019), Productive use of off-grid energy

⁷⁵ ILO (2020), Paving the way for better jobs and improving livelihoods for refugees and host communities in Arua, Uganda

⁷⁶ UNHCR (2018), Market Systems Development Assessment Report in Arua and Yumbe district

⁷⁷ https://projects.worldbank.org/en/projectsoperations/document-detail/P164101?type=projects https://documents1.worldbank.org/curated/ en/512841532690959822/pdf/Uganda-DRDIP-Final-ESMF-July-24-2018.pdf

processing, bakery, confectionery and carpentry. Solar energy has been identified as an option to mitigate the high cost of fuel for small processors and of electricity for the medium and large processors.⁷⁸

Processing and milling grain can add value to crops, by up to three times, when compared to unprocessed crops.⁷⁹ Energy-efficient machinery available at a more localised level would allow producers to reduce their largest expense in production while empowering farmers. An UOMA pilot indicated the following challenges with the existing technology that could hinder scale up:

- 1. high-cost vs return on investment,
- small-scale solar mills have a maximum capacity of 300kg per day, while comparable diesel mills have maximum capacity of 1,000kg per day,
- 3. the end product from solar mills does not match what customers demand.

During interviews with SolarNow, we also identified that the use of the solar installation must be optimised by additional usage during the offpeak season to reach profitability. The GIZ RISE agricultural livelihood project in West Nile⁸⁰ appreciates the need to add value to crops like cassava and sunflower, so they can generate higher revenues. As such, they plan to venture into local processing.

A comprehensive energy need assessment of the potato value chain carried out by DanChurchAid established that there is need to add value by milling sweet potatoes, which can be used to make porridge.

Findings from the field: cassava value chain

Beneficiaries of the Security, Protection and Economic Empowerment (SUPREME) programme, co-implemented by World Vision, SNV, ZOA and RICE-West Nile, expressed the need for a cassava milling machine and a groundnut grinding machine to enable the farmers to gain better prices. The GIZ RISE livelihoods programme focuses on the cassava value chain, among other enterprises. Beneficiaries expressed the need for an energy powered mill so they can process the cassava into flour.

Solar irrigation presents many benefits if systems are tailored to the unique needs of the farm. Solar pumps have a high initial cost (€ 855–2650 per acre) but are proving to be the more cost-effective option with two years payback for high value fruits and vegetables. The costs and specifications are highly dependent on the specific needs of the irrigated land, but the SolarNow water pump SF1 can be used as a reference point (UGX 2,500,000 (625€) for a pump and four sprinklers to cover half an acre). From interviews, it was clearly identified that this technology use is better adapted to "value added" farming (like fruits and vegetables) to address the main challenges of profitability, potentially finding an additional use during rainy seasons, and maintenance.

⁷⁸ Value Chain Assessment Report Adjumani

⁷⁹ Shell Foundation (2019), Productive use of off-grid

⁸⁰ https://www.giz.de/en/worldwide/74940.html

Findings from the field: livelihood programmes and solar irrigation

Beneficiaries of the step-up livelihoods programme implemented by Palm Corps in Rhino Camp utilise solar irrigation pumps at all their six block farms. Since the region experiences a long dry season, the farmers have benefited from being able to grow tomatoes during the dry season, fetching prices as high as UGX 1,200,000 (300€) in a harvest from a 30 by 10 metre plot. The Security, Protection and Economic Empowerment (SUPREME) programme, co-implemented by World Vision, SNV, ZOA, RICE-West Nile, also focuses on the tomato enterprise, among others. Although solar irrigation hasn't been implemented yet, beneficiaries appreciate its value, and with access to appropriate financing hope to use solar irrigation systems in the future.

Due to the high cost of PUE equipment, End-User Financing (EUF) has to be based on farmer's cash flow and given the seasonality of income, this can be a challenge. Farmers pay monthly fixed amounts and higher amounts when they harvest. However, seasons are unpredictable, and tracking when farmers have sold produce or should pay a higher amount presents a challenge. Also given that some farmers practice block farming as groups, EUF has to have options to serve groups and individuals. The limitation is that the most available savings and loan options are savings groups. As a result, it's important for programme implementers to include capacity building components tailored to the savings groups so that they can borrow money from financial institutions, which can offer higher loan amounts, flexible interest rates and longer repayment periods.

Solar drying this is utilised to extend the shelf lifeof crops like tomatoes and cassava. As pointed out by farmers in the tomato enterprise of the step-up livelihood programme, drying is important to extend the shelf life of unsold tomatoes so they may be sold during the dry season when food is scarce.

Mechanised solar – powered drying machines have the potential to eliminate those shortfalls, thereby boosting earnings and food security for refugees and hosts. With the financing limitations, the EUF should take into consideration building a linkage with more established formal FSPs who can then advance group loans. Income from high value crops like tomatoes, which can be grown all year round (with irrigation), offer a good livelihood opportunity for refugees and hosts, who can potentially use loans to invest in the required technology. Energy for grating would quicken the process of grating cassava into smaller millable pieces. According to a youth group that

Findings from the field: livelihood programmes and solar irrigation

Cassava farmers under the Strengthening Resilience and Inclusive Governance (STRENPO) programme implemented by RICE, expressed the need for an energy driven drier that can dry huge quantities of cassava in a short period of time so that it can be chipped and then milled more quickly. Traditional cassava drying involves putting the cereal in water to rid it of the starch so that it can then be softened and cut or chipped it into small pieces, and then put out under the sun to dry. This process has its limitations such as the labour-intensiveness, the lengthiness of the drying process and the effect of the transformation process on the quality of the crop.

is currently using a manual grater, it takes up to 20 minutes to grate a 50kg sack of cassava. An electricity-powered grater will grate more cassava in a shorter timeframe, thereby offering a potential to increase the group's earnings during the harvest season when the demand is high.

Energy for Baking: a Creative Capacity Building (CCB) Project

The project run by Kulika and funded by Malteser International runs CCB trainings, using a curriculum designed by MIT D-Lab. e This project trains refugee and host community youth groups in Rhino Camp in the design of technologies, including ovens that can be used to bake bread, donuts and biscuits. The oven that was built by one of the youth groups is powered by charcoal or briquettes with a capacity of baking 90 buns or donuts in one go. The youth have identified the high demand for bread, which is eaten for breakfast and as a snack for lunch. As such, they plan to develop a bigger oven, which can bake 150 buns at once. However, they are unable to expand due to the limited capital and financing options. With average monthly sales ranging from UGX 70,000 to UGX 100,000 (equivalent to 16 € - 25 €). They believe that if they have access to financing options, they could purchase materials to build a bigger oven, and supplies to make more bread to satisfy the demand in Rhino Camp.

Reliable cold chain for dairy; this could reduce milk losses in regions with dairy surpluses, while stimulating demand for PUE. Strategically placed collection centres can service processing points, increasing dairy farmer income by more than 20 %. 81 Refrigeration can also reduce waste in the

fruit and vegetable value chains⁸². Furthermore, research could be conducted from the food system analysis of Arua District by the Wageningen Centre for Development Innovation.⁸³

Energy for shelling; currently, groundnut shells are manually removed, consuming farmers' time and energy. According to interviewees participating in the groundnut enterprises under the GIZ RISE programme and SUPREME programme, energy-powered shelling equipment will play a big role in taking off the husks of hundreds of kilograms of groundnuts in a short period of time, thereby allowing them to process much faster.

Energy for grinding; once groundnuts have been shelled, the next step is to grind them into a paste known locally as "odi". This paste, which can be made from either groundnuts alone or groundnuts and sesame, which) fetches more money on the market i.e. up to UGX 3,000 (0.75 €) compared to UGX500 (0.12 €) for a cup of groundnuts. Currently the manual process of grinding is time and effort consuming. As a result, less paste is made, and less money is earned. An electric driven grinder will therefore grind more groundnuts and /sesame, thus increasing revenue for the farmers.

Energy for packaging; hibiscus farmers under the STRENPO livelihood programme would like to pack the tea and juice that are processed from hibiscus. This will require a machine that can fill up the packages and seal them automatically. Packed tea or juice will enable farmers to target markets outside the settlement, e.g. Arua, DRC.

Approach integrating energy and other value chains; mini-grid development is promoted by international development agencies⁸⁴. BMZ, for example, is providing support to the Government

⁸¹ Shell Foundation (2019), Productive use of off-grid energy

⁸² Ministry of Agriculture, animal industry and fisheries, Agriculture Sector Handbook

⁸³ Rozemeijer, N. and Roefs, M., 2021. Food system analysis of Arua District in Uganda; Report 1, Proposed research framework and description of the food system. Wageningen Centre for Development Innovation, Wageningen University & Research. Report WCDI-21-157. Wageningen.

⁸⁴ GIZ (2016–21), Promotion of Mini Grids for Rural Electrification in Uganda

of Uganda (GoU) and the private sector to set up mini-grids. This will promote PUE and increase income. 25 mini-grid sites are currently being tendered by the Rural Electrification Agency (REA) and GIZ. A key learning is that residential demand and growth are often insufficient to make the business case for a high capacity generation. PUE however has the potential to supplement demand, lower costs and drive economic growth. In the long term, increased energy access stimulates economic activity in communities, which in turn increases income and the proportion of income spent on energy, creating a continuous virtuous cycle. USAID also supports this approach, promoting market-based community energy solutions coupled with internet infrastructure, market development and livelihood programmes in the Rwamwanja refugee settlement and host community85.

⁸⁵ Smart Communities Coalition (2019), 2019 year in review

4 Enabling and Hindering Factors that Impact Refugees' Ability to Work

In this chapter, we first outline and analyse the key enabling and hindering **regulatory factors** that impact the ability to work for refugees in the three ESDS countries, with a focus on energy-related livelihoods.

As a next step, the chapter assesses which **additional factors** either have an enabling or hindering effect on the ability of refugees, as well as hosts to gain access to energy-related livelihoods. Aspects explored include:

- Access to finance
- Access to mobile services and mobile money
- Availability of Technical Vocational Education and Training (TVET)
- Qualifications, skills sets, access to information and language
- Existing social and community networks
- Cultural and gender dimensions
- Coordination between hosts and refugees' communities along the value chains

4.1 Gambella region in Ethiopia

4.1.1 Key regulatory conditions that impact refugees' ability to work

Ethiopia adopted a new Refugees Proclamation ⁸⁶ on 17 January 2019. UNHCR and the international community acclaimed it as "the one of the most advanced refugee proclamations in Africa" introducing substantive changes on refugees' access to basic and social and economic rights, services, and durable solutions. Most importantly, Article 26 of the Proclamation explicitly stipulated refugees' right to work, and this created huge excitement among the refugee community, international humanitarian and refugee organisations.

In addition to approving the refugee Proclamation, at the 2016's Leader's Summit, the GoE made nine pledges to further improve refugees' access to social economic services, work, and livelihoods, as well as local integration. Among others, Ethiopia pledged to expand its Out of Camp Policy (OCP) to benefit 75,000 (10%) refugees and to provide work permits to refugees in the areas permitted for foreign workers. Under the pledge on the 'expansion of the out of camp policy', Ethiopia undertook to further enlarge the scheme (which had applied 'only to Eritreans') to all refugee nationalities hosted in the country by up to 10% of the current refugee population. This is mainly intended to enhance refugees' movement, self-reliance and livelihood opportunities, as well as increase access to training, education and services.

⁸⁶ The Proclamation repealed the previous Refugee Proclamation No. 409/2004

⁸⁷ https://www.unhcr.org/news/press/2019/1/5c41b1784/ unhcr-welcomes-ethiopia-law-granting-rights-refugees. html

Additionally, Ethiopia pledged to make available 10,000 hectares of irrigable land to allow 100,000 refugees and members of host communities to engage in crop production by facilitating irrigation schemes. Ethiopia also pledged to work with international partners to potentially build industrial parks that could employ up to 100,000 individuals, with 30 % of the jobs to be reserved for refugees.⁸⁸

Having the above in mind, an assessment has been conducted to identify the key enabling and hindering regulatory conditions that impact the ability to work for refugees.

The right to work

Article 26(1) of the 2019 Refugees Proclamation provides refugees with the right to engage in wage earning employment, self-employment and joint project employment. ⁸⁹ Encouraged by the new legislation, for instance, Gaia clean energy and UNHCR, established refugee camp business associations, as explained in Chapter 3. In general, Ethiopia's regulatory framework is conducive for the right to work for refugees.

Residency and work permits

Article 26 of the Ethiopian Refugee Proclamation (No. 1110/2019) outlines the right to work for refugees in wage employment, self-employment and enterprise development options. The Directive to Determine the Procedure for Refugees' Right to Work (Directive No. 02/2019) is particularly designed to help facilitate the implementation of Article 26 of the revised refugee proclamation that grants refugees the right to work in Ethiopia. Accordingly, this Directive outlines three avenues of job opportunities and the respective procedures for refugees to engage in them. The avenues through which refugees can participate in the job and labour sectors are: i) joint projects; ii) wage earning employment; and iii) self-employment. Of these

The work and residence permit required differ according to the employment type, as follows:

• Wage earning employment: to engage in wage earning employment, a refugee needs a work permit issued by the Ministry of Labour.

Wage earning employment: to engage in wage permit issued by the Ministry of Labour and Social Affairs (MoLSA). However, two categories of refugees are exempt: (i) a refugee who is legally married to an Ethiopian national or has a child or children from an Ethiopian national; and (ii) a refugee who has already been issued with a residence permit to work in a joint project. Unlike a residence permit, a work permit is issued by the MoLSA, and could be applied for by either a refugee them self, or an employer. Nonetheless, work permits will be issued if the work for which the work permit is sought cannot or may not be covered by Ethiopians. In this case ARRA should write a support letter confirming this and other details to MoLSA.90

three options, the joint projects option accords ref-

ugees' equal status and treatment as Ethiopian na-

tionals engaged in the same joint project, while the

remaining two try to protect the right of Ethiopian

nationals and restrict refugees' engagement to areas that cannot be **covered by Ethiopian nationals**.

- Joint projects: as per the Directive, to participate in a joint project, a recognised refugee is expected to meet the following criteria: (i) fulfil the requirements set by or for the joint project; (ii) be selected by ARRA; and (iii) hold a residence permit issued by ARRA for the purposes of their participation in the joint project.
- Self-employment: to access self-employment, refugees must meet three basic conditions:
 (i) self-employment areas should be in areas that are open for foreigners91; (ii), ARRA

⁸⁸ Local Integration Focus: Refugees In Ethiopia

⁸⁹ The Government of Ethiopia has pledged to reserve 30% of jobs in new industrial parks to refugees. The industrial parks are to be implemented jointly by the government and partners in the humanitarian sector.

https://regionaldss.org/wp-content/uploads/2020/11/ ReDSS-Ethiopia-Policy-Brief-Refugee-Right-to-Work.pdf

According to the Civil Servants Proclamation, foreign nationals are not eligible to be civil servants. The Proclamation Provides that government institutions may appoint a foreign national temporarily if it is impossible to fill a vacant position that requires high-level professionals by an Ethiopian through promotion, transfer, or recruitment. Foreigners are not also allowed to be employed as public prosecutors, judges, and as members of the security, foreign Affairs, and other similar political establishments

should write a support letter to a licensing body; and (iii), applicants should secure a license from the relevant government body. Refugees can also engage in self-employment by obtaining a residence permit issued by the Immigration, Nationality and Vital Events Agency. This is different from the residence permits referenced above that are issued by ARRA for the purposes of employment in joint projects. As per Article 19(3) of the Directive, a refugee who has been granted a residence permit by ARRA may be self-employed in joint projects without having to obtain a work permit. Yet again, a refugee who is married to an Ethiopian national or has children in possession of Ethiopian nationality may be self-employed in joint projects as well, without a residence permit, but should obtain a license permit instead. Lastly, refugees, along with Ethiopians, can also participate in self-employment in such areas as agricultural and irrigation works via lease arrangements. This has to be agreed upon between ARRA and a regional government where the project is to be implemented.

Generally, documents needed from refugees by each of the three employment types are shown in the below table:

Restrictions on movement

Subject to laws applicable to foreign nationals generally in the same circumstances, every recognised refugee or asylum-seeker in Ethiopia has the right to liberty of movement and freedom to choose his or her residence, as well as the freedom to leave the country at any time. However, the Proclamation has also indicated that ARRA may arrange places or areas where refugees and asylum-seekers may live. ARRA may facilitate enabling conditions for recognised refugees and asylum seekers to use their right of movement. While most refugees are housed in camps, the government, as part of the nine pledges, has applied an OCP that allows at least 10 % of the refugees to live in urban areas for education, medical or special protection needs. This only applies if they can demonstrate they have the economic means to live outside of the camp. As of mid-2020, around 27,000 Eritrean refugees were residing in Addis Ababa with OCP status.93

Existence and length of asylum process

Ethiopia's refugee proclamation says "ARRA shall examine and decide on the asylum application presented to it within a six months period of time of registering the application after verifying that

Table 17: Documents needed from refugees for different types of employment

Employment type	Documents needed
Wage-earning employment	MoLSA-issued work permit + ARRA
Self-employment	License from the relevant authority + a residence permit from immigration agency + ARRA
Joint projects	ARRA

In the first half of 2020, ARRA made significant progress with regard to the implementation of the Economic Opportunity Program (EOP) and Refugee Right to Work Directive. Linked to this, 2,600 residence permits for registered refugees were processed.⁹²

the criteria provided are fulfilled". Eritreans, South Sudanese, Sudanese, Yemenis and Somalis originating from South and Central Somalia are recognised as refugees at first sight, also known as prima facie.

⁹² Ethiopia country refugee response plan 1 Jan-30 Jun 2020

⁹³ Ethiopia country refugee response plan 1 Jan-30 Jun 2020

Entrepreneurship regulations

Article 26(2) of the 2019 Refugees Proclamation states that every recognised refugee shall have the right to engage, individually or in group, in agriculture, industry, small and micro enterprise, handicrafts and commerce, in the same circumstances as the most favourable treatment accorded to foreign nationals under Ethiopian law. In addition, Article 26(4) of the 2019 Refugees Proclamation provides that refugees engaged in rural and urban projects jointly designed by the Ethiopian government and the international community to benefit refugees and Ethiopian nationals, including in environmental protection, industry and small and micro enterprises (the "Projects"), shall be given equal treatment as accorded to Ethiopian nationals engaged in the same Projects. Under Article 26(6), ARRA may issue a residence permit, subject to renewal every five years, to any refugee selected to engage in such Projects.

The Investment Proclamation No. 280/2002 as amended by Proclamation No. 849/2014 ("Investment Proclamation") requires foreign investors to obtain an investment permit from the Ethiopian Investment Commission before starting a business or acquiring an existing business in Ethiopia. Certain sectors are reserved for the government, joint investment with the government or domestic investors. Foreign investors and refugees are permitted to invest in areas other than these reserved sectors⁹⁴.

Any foreign investor is required to allocate the following capital:

- The minimum capital requirement for a foreign investor investing jointly with domestic investors shall be € 133,000.
- The minimum capital required from a foreign investor investing in architectural or engineering works or related technical consultancy services, technical testing and analysis or in publishing shall be: (i) € 88,500 if the investment is made wholly on his own; (ii) € 44,500 if the investment is made jointly with domestic investors.

Therefore, current minimum investment capital requirements under the Investment Proclamation are relatively high compared to the expected means of refugees.

In addition to an investment permit, the Commercial Registration and Business Licensing Proclamation No. 686/2010 (the "Commercial Registration Proclamation") requires an investor to obtain a business license in order to set up a business enterprise. For a foreign investor, the application will require the submission of their residence permit. The 2019 Refugees Proclamation provides that every recognised refugee has the right to remain in Ethiopia in accordance with the provisions of the Proclamation and, as noted above, provides that ARRA may issue residency permits to refugees selected to engage in the Projects, but does not otherwise specifically deal with residency permits for refugees outside of these circumstances.

Article 33 of the 2019 Refugees Proclamation provides that every recognised refugee has the right to open a personal bank account, deposit, transfer or withdraw money and obtain other banking services, using identification documents issued by ARRA.

⁹⁴ The Investment Regulation reserves the following small scale businesses exclusively for domestic investors (Ethiopian nationals):- secretarial services; retail trade, guest house, tearoom, coffee shops, bars, nightclubs, restaurants, travel agency, trade auxiliary, and travel ticketing business; car hire service; bakery products and pastries for the domestic market; grinding mills; sawmilling, timber-making, and assembling of semi-finished wood products; barbershops, beauty salons, smithery, and tailoring work; brick and block manufacturing; private employment agency services, quarrying; customs clearance services, lottery and sports betting; brokerage and security services. It also reserves the tour operator business, construction, water well and drilling, maintenance and repair, transport, banking, insurance, micro-credit, and micro-savings services; wholesale trade, import trade; export trade of raw coffee, chat, oilseeds, pulses, hides and skins bought from the market, products of natural forest, live sheep, goat, camel and cattle not raised or fattened by the investor, and mineral trade; hotel, lodges, resorts, and motels etc.

Land rights and allotment

Article 29(1) of the 2019 Refugees Proclamation provides that recognised refugees shall be entitled to the most favourable treatment accorded to foreign nationals with regard to the acquisition of movable or immovable property, to leases and other contracts relating to property.

Under the Constitution of Ethiopia, however, only the Ethiopian state and Ethiopian nationals have the right to own freehold interests in rural and urban land and natural resources.

Foreign investors may apply to the Ethiopian Investment Commission to acquire land on a leasehold or rental basis.

However, with the new government pledge, the GoE committed to allocate 10,000 hectares of land to allow refugees and local communities to engage in crop production. Though the implementation of this pledge is slow, there is a good showcase that was implemented in the Dollo Ado area. In the Somali Regional State, ARRA and UNHCR have signed a Tripartite Agreement that allows access to 1,000 hectares of arable land. 750 hectares of irrigated land in the refugee camps and host community areas of Buramino, Hilaweyn, Kole, Kobe, and Melkadida were developed.⁹⁵ The construction of the remaining hectares and an irrigation scheme in Hilaweyn was concluded in October 2019, bringing the total developed area to 1,000 hectares (detailed in the table below). Altogether, the agricultural sites offer livelihood

opportunities to 2,000 farmers: 1,000 refugees and 1,000 host community members. All irrigation schemes are run by cooperatives supported by UNHCR and partners.

As part of a transition to the use of digital cash transfers and the wider digital inclusion of refugees, UNHCR's pilot distribution of SIM cards in the Somali Regional State reached 4,325 families in 2019 and will be expanded.⁹⁶

Accreditation requirement

Asylum seekers and refugees have been given the right to recognition of their certificates of education, training and skills. They will also have the right to access vital documents and recognition of academic credentials for professional refugees who would like to practice their profession. Furthermore, asylum seekers or refugees are not expected to pay for travel documents, IDs and visa related fees. This was not the case under the 2004 refugee law.

Refugees will be given a UNHCR proof of registration (a family level document), and those over the age of 14 will be issued with a refugee ID card jointly issued by ARRA and UNHCR. ARRA takes the lead role and is responsible for the printing, issuing, reprinting, and authentication of refugee ID cards. UNHCR is responsible for the referral of eligible refugees and provides material and technical support, as required.

Table 18: Land allocated for host and refugee communities as a result of the Government's Pledge

(Source: UNHCR data on irrigable land, as of 31st December 2019.)

Implementation area	Land Available in 20128 (ha)	Land Available in 2019 (ha)	No. of refugees benefiting	No. host community benefiting	
Dollo Ado	750	722	1.000	1.000	
Bokolmayo	0	278	1,000	1,000	
Total	750	1,000	1,000	1,000	

⁹⁵ Melkadida (Liban zone) Somali Regional State 2019 Pledge Progress Report

⁹⁶ Ethiopia Country Refugee Response 2020-2021

Access to mobile services and mobile money

The refugee proclamation gave every recognised refugee or asylum seeker a right to access telecommunication services using the identification document issued by ARRA.

In Ethiopia, a refugee ID card jointly issued by the ARRA and UNHCR allows legal access to a SIM card. As of January 2019, only 37% of the refugee population had been issued such an ID credential by the government, though this figure is expected to rapidly increase.⁹⁷

In conclusion of this analysis, we investigate and outline:

- To what extent adapted regulations in line with the implementation of the GCR have so far contributed to the creation of livelihoods and the formalisation of local economies in refugee hosting areas.
- To what extent the current regulatory framework and its implementation pertaining to livelihoods is in line with the principles of the GCR,

The primary remaining **regulatory barriers** to promoting economic self-reliance and integration for refugees.

Table 19: Status of regulations

Title	New or Adapted	Implemented	Persisting Barrier
The right to work	Yes	Yes	
Residency and work permits	Yes	On good track	In wage earning employ- ment, work permits will be issued if the work for which the work permit is sought cannot or may not be cov- ered by Ethiopians.
Accreditation requirements- refugee ID is given immediately and educational documents get recognised	Yes	Good	
Restrictions on movement	Partially	Partially-10% of refugees to be given 'out-of-camp' status	Continuous encampment of the majority of the refugees
Existence and length of asylum process- up to six months	Yes	Good	
Entrepreneurship regulations	Yes	Partially	Investment capital require- ments under the Investment Proclamation are relatively high compared to the ex- pected means of refugees
Land rights and allotment	No	No	No approved regulation except the pledges
Access to mobile	Yes	Fully implemented	

⁹⁷ https://www.unhcr.org/innovation/wp-content/ uploads/2019/04/Displaced-Disconnected-WEB.pdf

Table 20: Regulation framework and its relationships with GCR

Title	Creation of livelihoods	In line with GCR Principles	Regulatory Barriers
The right to work	Yes	Yes	
Residency and work permits	Yes	Partially	Wage-earning employment is restricted
Accreditation requirements	Yes	Yes	
Restrictions on movement	Yes	Yes	
Existence and length of asylum process	Yes	Yes	
Entrepreneurship regulations	Yes	Yes	
Land rights/allotment	Yes	No	It's not being done based on approved regulation but on special pledge

4.1.2 Other factors that impact refugees' ability to work

Access to finance

Article 33 of the 2019 Refugees Proclamation gives the right to every recognised refugee to open a personal bank account, deposit, transfer or withdraw money and obtain other banking services, using identification documents issued by ARRA.

Before the legislation of the Proclamation, refugees have been obtaining bank accounts and drivers' licenses through illegal means. However, the Commercial Bank of Ethiopia in Jijiga, Somali Region stated that the first refugee to open an official bank account under legal methods did so in mid-September 2019. Since September 2019, under the coordination of UNHCR and ARRA, Somali refugees, for instance, residing in Kebribeyah camp have been entitled to open bank accounts, in particular with the Commercial Bank of Ethiopia (CBE), a bank with the highest number of branches and presence. This followed a one-day briefing session by CBE managers who orientated the refugees on the key requirements for opening a bank account.98

However, when it comes to accessing loans from financial institutions, the major bottleneck for refugees to access loans is the lack of collateral. MFIs and commercial banks require asset collateral to approve loans. There was a project that was piloted in Dollo Ado area where IKEA Foundation created a 13.2m ETB rotating fund to set up a microfinance scheme, with 7.6m ETB (€ 209,000) to be disbursed to refugees and 5.6m ETB ((€ 154,000) to hosts. The loans are intended to support the creation of profitable business enterprises and are available to eligible individuals. Funds were allocated via a private MFI, Dedebit Microfinance-Ethiopia, which is working with ReSTCPDA as the implementing partner.⁹⁹

During stakeholder consultation, a solar distribution company in Ethiopia, revealed that solar companies in Ethiopia do not want to operate in refugee settings, where refugees' income is low and irregular. This factor, coupled with the lack of financial mechanisms accessible to refugees (e.g. to access solar products) prevents the private sector from entering the settings. The company expressed the view that if appropriate financing mechanisms were set in place, significant jobs and livelihoods could be created along the energy value chain.

⁹⁸ Integrated labour market assessment in Jigjiga and Kebribeyah A marketplace in between resilience and integration

⁹⁹ Building Refugee Economies: An evaluation of the IKEA Foundation's programmes in Dollo Ado

Access to mobile services and mobile money

The Refugee Proclamation gave every recognised refugee or asylum-seeker a right to access telecommunication services using the identification document issued by ARRA. These regulatory measures influenced the market actors' decisions to open branches in Dollo Ado and Bokolmanyo. In particular, the Commercial Bank of Ethiopia, Oromia International Bank, Somali Micro Finance Institution have opened new branches in the refugee communities. Mobile money service is also being delivered by the aforementioned financial institutions.

M-Birr, Hello Cash, E-Birr and Sahay are the four mobile banking solutions that are the most commonly found, who provide mobile money services around Jijiga camps.¹⁰⁰ However, it has to be noted that mobile money is relatively new to the Ethiopian market where the first mobile money deployment, M-Birr, was introduced in 2015.

As of December 2019, 10 mobile money services were being provided by 18 financial institutions to nearly 10 million registered accounts in Ethiopia. Until Tele-birr was launched, Ethiopia's financial sector used a bank-led model for the provision of mobile money services. Mobile money agent networks are also still a relatively new concept; in Ethiopia there were about 13,000 agents in 2019, compared to about 400,000 in Ghana, 206,000 in Kenya, and 110,000 in Rwanda in 2018 (International Monetary Fund 2020)102

Availability of Technical Vocational Education and Training (TVET)

In Gambella, the Danish Refugee Council (DRC) Vocational training and OPENO TVET College have trained youth on vocational skills. Development and Inter-Church Aid Commission (EOC-DICAC) and Adventist Development and

Relief Agency (ADRA) are working on launching a TVET training programme in the Somali region to provide Solar installation and maintenance training for host community and refugees in Aw-Barre, Sheder and Kebribeyah. The programme will be supported by GIZ QEP (Qualification for Employment Perspective).

Qualifications, skills sets, access to information and language

According to The Refugee Proclamation, every recognised refugee and asylum-seeker may have access to secondary education; higher education; TVET, and adult and non-formal education within available resources and subject to the education policy of Ethiopia. All refugees shall have the same rights to property ownership, association, and degree and skill certification as other foreigners.

Existing social and community networks

There is a Refugee Central Committee (RCC) that liaises with any entity that has business with the refugee community. Furthermore, there is a counterpart of RCC in the host community, which is called Local Central Committee (LCC), that enables the two committees to work hand in hand to benefit them both in terms of development and to ensure a peaceful coexistence. The RCC is a bridge between the refugee community and humanitarian stakeholders for project implementation and community mobilisation.

Cultural and gender dimensions

In terms of culture, the line between refugees and hosts is sometimes blurred. In the peripheral border areas of Gambella, national identities and "refugee and host" status are bureaucratic categories, to which people have a rather utilitarian attitude (Carver/Guok 2020).¹⁰³

¹⁰⁰ Integrated labour market assessment in Jigjiga and Kebribeyah

¹⁰¹ Humanitarian cash and voucher assistance programmes in Ethiopia: Context analysis and capability assessment of the mobile money ecosystem

¹⁰² Ethiopia National Digital Payments Strategy

¹⁰³ Context and Conflict Analysis for Gambella, Ethiopia Energy Solutions for Displacement Settings (ESDS) in Gambella

Meaningful participation of women and girls in Ethiopia refugee settings are still limited. Women as a category among the broader refugee populations do not feel empowered enough to be active members of the community.¹⁰⁴

Among South Sudanese refugees, men of working-age have a higher rate of employment than women (27 % versus 19 % respectively). Therefore, there are more women than men who are unemployed. However, to make the situation worse, more women than men will not be part of labour force in the future, because there are presently no efforts to enhance their access to education. Thus, there are specific gender related barriers for women in accessing employment, both in the present and in the foreseeable future. While recognising that women, girls, men and boys face

SGBV, women and girls nevertheless continue to be the most affected.

The impact on the environment is clear and the consequences are being greatly felt by refugees, particularly girls and women who are traditionally responsible for collecting firewood for cooking. But as the firewood becomes increasingly scarce because forests are being depleted, so does refugees' access to sufficient cooking energy, which can lead to conflict over resources.

Skill sets

Most of the refugees lack skills that position them for better employment. The most common skills observed in refugees are for farming, homeworking, livestock keeper, student and domestic labour.

Table 21: Other hindering and enabling factors

Title	Creation of livelihoods
Access to finance (capital and credit)	Hindering: Refugees are not getting credit because of the collateral requested, which the refugee community in unable to provide.
Access to mobile services	Hindering: Refugees can access SIM cards with their refugee ID. The number of mobile money service providers in Ethiopia is increasing with recent launch of Tele-Birr (a Telco-owned Mobile money service provider) changing the mobile banking service sector. When it comes to refugee camps, so far only Hello Cash has agents in all Somali region refugee camps.
Availability of TVET	Mixed: There are organisations that are providing TVET training, though it's not consistent across all refugee camps.
Qualifications	Hindering: Refugees are required to provide authenticated documentation to access different types of employment opportunities. However, refugees might not have their relevant educational and qualification documents with them, and they may not even be able to authenticate such documents, as they could not subject themselves to the jurisdiction of their country of origin.
Skill sets	Mixed: The wage earning skill set requirement is usually higher for nationals, than it is for refugees.
Language	Mixed: Though refugees can use English, in addition to their mother tongue language, to communicate with host communities, most host communities don't understand as they are non-English speaker.
Existing social networks	Enabling: The presence of The Refugee Central Committee and the Local Central Committee supports the execution of projects and programmes in camps and host areas, as well to development of peaceful coexistence between the two communities.
Cultural dimensions	Enabling: Camps are established in areas where refugees and host communities have similar culture which enables easy integration of the two communities
Gender dimensions	Mixed: Compared to men, refugee women are worse off in terms of education levels and rates of employment.

¹⁰⁴ Ethiopia National Refugee Strategy for Prevention and Response to Sexual and Gender based Violence 2017 -2019

¹⁰⁵ Pape, Petrini, and Iqbal 2018

Coordination between hosts and refugee communities along the value chains

Local integration of refugees within the host community is desired in any displacement context. Among other efforts, energy can be used to improve economic development and integration of host and refugee communities, for example by buying and selling energy products and services. It is important to make sure the opportunity created for one group is not harming or reducing the other group's revenue. Additionally, it needs to be ensured that the two communities complement each other rather than competing against each other over resources. The below tables show the interaction between host and refugees in terms of economic interaction as well as "Do No Harm" analysis.

Table 22: Coordination and cross-fertilisation between refugees and host communities

Value Chain	Coordination (avoiding conflicts)	Refugees work with hosts	Host work with refugees
Energy	Both communities can complement each other, in solar value chain, briquette production (to avoid conflict on feedstock supply), stove production and charcoal production value chains.	Yes, they buy feedstock from host communities and are working with hosts as sales agents on the distri- bution of solar equipment.	No: refugees are highly dependent on host's products and feedstock suppliers.
Food & Beverage Trading	Highlanders, non-indigenous people from other parts of Ethiopia, who own most of the shops, restaurants, banks, and commercial building, and are the region's primary traders.	Yes, hosts sell products to refugees.	No
ICT	Yes	Yes, as ICT providers are from host communities.	No
Hospitality and service	Limited interaction as refugees don't frequently go to the host communities, and vice versa.	Hosts serve their own market segment.	Refugees serve their own market.
Cereal Crops	There are limited inter- actions between refugees	Labour market offer from hosts largely covers the	Labour market offer from refugees largely covers the little demand.
Fruits and Vegetable	and hosts.	little demand.	
Livestock Poultry Fishing	There are limited inter- actions between refugees and hosts.	Labour market offer from hosts largely covers the little demand.	Labour market offer from refugees largely covers the little demand.
Summary	The interaction is more or less good, except in an event where there is a competition for limited resource exploitation, like charcoal or firewood.	There are opportunities for refugees to work in energy, ICT and trade activities.	There is currently very limited opportunities for hosts to benefit from refugees' economic activities (except in the humanitarian sector where the hosts get employment opportunities, selling products and services for humanitarian actors etc.).

Table 23: Do not harm and gender considerations

Value Chain	Losses among hosts	Involvement of women	Potential for interventions	
Energy	Feedstock for briquette charcoal production, as well as firewood demand of refugees, which creates environmental pressure on hosts and can be considered as a loss for the hosts.	Yes, on cold drink sales, briquette charcoal production and improved cookstove production.	Yes, promoting distribution of solar energy solutions by women (in VSLA).	
Food & Beverage Trading	No, there won't be harm.	Yes	Yes, promoting solar pow- ered refrigerators.	
ICT	No, there is a large unmet demand in settlements.	Yes, women traders are involved.	Yes, they could benefit from improved business and technical skills (and funds).	
Hospitality	No, they are independent markets that benefit from the presence of NGOs and UN workers	Yes, this is dominated by women.	An important opportunity for improved cookstoves, solar electricity and refrigeration.	
Cereal Crops	No, as there are limited interactions between	More dominated by males.	Limited	
Fruits and Vegetable	refugees and hosts (and demand is high).	Yes, at (very) small scale.	Important opportunity to improve productivity, processing and marketing.	
Livestock Poultry Fishing	Limited as hosts are not actively in these value chains.	Yes, at small scale.		
Summary	In general, losses in the host communities are limited except by the environmental pressure, resulting from the high demand of the refugee community for charcoal and firewood. This loss can be reduced by promoting energy efficient cookstoves.	Women involvement is strong, except for cereal crops, an activity that is strongly dominated by men.	There are a lot of potential interventions to improve women livelihoods along the main value chains (except cereal crops).	

4.2 Turkana West Sub-County in Kenya

4.2.1 Key regulatory conditions that impact refugee's ability to work

Kenya Government's regulations and policies on refugees: Refugee Act of 2006

Kenya deployed an integration policy between 1963 and 1991, a period when the number of refugees was low¹⁰⁶. This policy allowed refugees to settle in urban areas. However, with a bigger influx of refugees from 1991, following those from Somalia and Sudan, the regulations changed and became more constraining. The integration policy initially perceived refugees as transitory awaiting repatriation, but over time there was a shift towards the provision of camps and controlled movement of refugees. Despite these occurrences, there was no formal refugee legislation in Kenya until 2006. The Refugee Act (2006), embraced the encampment policy and allowed the establishment of institutions to manage refugee matters, although this was seen to lack proper human rights protection for refugees¹⁰⁷. The encampment policy constrained the integration of refugees in terms of economic and social life. This also paved the way for the establishment of large refugee camps in remote areas that were close to the refugees' countries of origin¹⁰⁸. A new Bill was drafted and presented to Parliament as the Refugees Bill (2019), which sought to address some of the challenges and constraints associated with the Refugees Act (2006). However, it has not been passed into law and thus the Refugees Act (2006) is still in force.

Right to work

The regulatory environment constrains refugees' ability to work in Kenya. The *Refugee Act* (2006), which was further tightened in 2012 through the

encampment policy, grants refugees the right to employment, movement and ownership. However, due to practical constraints and the encampment policy, refugees are unable to exercise these rights. Refugees are legally entitled to formal employment as they are technically able to get work permits, seek and get employment, and start a business. Though, due to the movement restrictions that have been imposed by the same act, they are unable to move around and visit the necessary offices in Nairobi to get the work and business permits they need to work.

Many refugees work informally as "incentive workers" or "interns" in NGOs, earning approximately KES 8000 (€ 62) per month, just under the minimum wage of KES 10,000, (€ 78) beyond which one would require a work permit in Kenya109. While they could earn more, the process of acquiring a work permit is protracted, lengthy and expensive due to the requirement for professional certificates, which refugees often do not have. However, the refugees are vulnerable to exploitation under these working conditions, and without legal recourse¹¹⁰.

Accreditation of refugees

The Refugees Affairs Secretariat (RAS) determines refugee status, and is responsible for issuing alien identity (ID) cards. This process is lengthy, taking three months or more before one gets the ID, often due to a backlog of applications. The Mandated Refugee Certificate, also referred to as 'the Manifest' is the only other option available for refugees to use as some form of ID, which is however not useful for business-related transactions. The alien ID is needed for registration of a SIM card, opening M-Pesa or bank accounts, applying for a business permit and business registration, applying for the National Hospital Insurance Fund, or National Social Security or Kenya Revenue Authority PIN¹¹¹. As indicated earlier in this report, the Alien ID is only valid for three months, after which one needs to apply for another one. Given the uncertainty involved and difficulties in

¹⁰⁶ Crisp, 2000

¹⁰⁷ Marazza, 2014

¹⁰⁸ Crisp, 2000

¹⁰⁹ MarketShare, 2019

¹¹⁰ IFC, 2018.

¹¹¹ MarketShare, 2019.

applying for these documents, many refugees opt to remain without them.

Restriction on movement

Refugees require written authorisation to leave the camp by the Kenya Government for whatever reason, including seeking medical services, or seeking permits and business registration documents. Many times business owners need to travel outside the camp to replenish business stock, but are unable to get passes, leaving them to rely on middle men and women to negotiate on their behalf and deliver the goods, usually at a higher price. The RAS is responsible for issuing movement passes for refugees. Once granted, these passes are valid for a period of 21 days. However, due to the backlog of applications and the slow process of issuance of the passes, the whole process is protracted and uncertain for the refugees, leaving many discouraged from applying¹¹². In addition, refugees have a daily curfew of 6:00 a.m. to 6:00 p.m., which prohibits their movement, unless with the written approval of the RAS.

Access to finance

Unlike before, when refugees received aid in-kind, with the cash based approach (Bamba Chakula, cash-for-shelter, etc.), refugees are now able to deposit and hold money in the bank, which makes them somewhat bankable. The idea behind cash based approaches was aimed at encouraging greater flow of money within the refugee economic systems. The cash-for-shelter helps refugees decide what types or size and structure of houses to build, using local contractors. With the cash-forfuel, the refugees can now purchase their preferred fuel source for cooking, whether firewood or charcoal, which is limited to cooking energy¹¹³. Typically, the cash will be sent to a limited-use mobile money account that is disabled outside the camp¹¹⁴. For refugees who live outside the camp, they are barred from accessing M-Pesa, which is a critical part of Kenya's payment infrastructure. Restricted access to bank accounts, given the

Low financial literacy remains a hindrance among refugees who have not received training with basic financial concepts and entrepreneurial skills. Women particularly bear the brunt of this since they suffer the twin challenges of poor literacy and financial exclusion. In the camp, 73 % of the refugees have no information or basic training on financial services, including potential sources of financing¹¹⁷. The situation for refugees is further compounded by the high cost of doing business, which is associated with the restrictive regulations, remoteness of the region, poor transport, telecommunication, and ICT infrastructure; and high rental charges for business premises in Turkana West. Another hindrance is a poor savings culture, attributed to low financial literacy with only a small percentage of the people in the area having any savings. This ends up limiting their ability to accumulate the often badly needed business capital.

Land use and land adjudication

In Turkana County, where the predominant economic activity for the Turkana people is pastoralism, land is held in trust by the Turkana County Government on behalf of the community. However, in urban and market centres, the Turkana County Government allots land at a fee. Kakuma Town, which is the major town in Turkana West Sub-County is in the process of being made a municipality to ensure that title deeds and leases are offered to encourage the private sector to set up

requirement to have a KRA PIN, compounds access to mobile banking for refugees. Even where UNHCR has made arrangements for refugees to open bank accounts, as was the case with Equity Bank, such accounts do not allow them to access credit facilities due to a lack of collateral and formal documentation needed as part of credit-related due diligence processes¹¹⁵. Further, digital lenders do not lend to foreigners fearing defaults in repayment¹¹⁶.

¹¹² MarketShare, 2019.

¹¹³ Source: Stakeholder consultations

¹¹⁴ IRC, 2021

¹¹⁵ Equity Bank has opened at least 10,000 bank accounts for refugees in Kakum and Nairobi since 2017.

¹¹⁶ IRC, 2021.

¹¹⁷ IRC, 2021.

businesses and industries in Kakuma¹¹⁸. Refugees are not allotted land by the County Government, but by UNHCR within the designated refugee settlement areas to construct their houses. Upon relocating from the camp, refugees have to return the land to UNHCR for reallocation to other refugees. Some of the conflicts that arise between the refugees and host community are related to land use. Consultations with some of the refugee business owners who needed more land to farm indicated that they were on many occasions not allowed by the host community to plant trees in their allotted plots, as '... the land does not belong to them'¹¹⁹.

Entrepreneurship regulations

Previously, refugees could establish their businesses freely. However, they now need a single business permit that costs KES 3,500 per year to establish a business, payable to the Turkana County Government¹²⁰. Private companies need to be registered, a process that requires the directors' IDs and a KRA PIN, documents that refugees often do not have. However, the establishment of the Huduma Biashara Centre at Kakuma, from which both refugees and host communities can access IDs and other permits should ease this process. A recent policy intervention by the Turkana County Government has brought a sigh of relief given the previously limiting legal and regulatory processes such as those that made business registration a long and protracted process.

Kalobeyei Integrated Socio-Economic Development Plan

The Kalobeyei Integrated Socio-Economic Development Plan (KISEDP) is a 15-year multi-stake-holder and multi-sector initiative of the Turkana County Government, UNHCR and other partners aimed at creating an enabling environment for refugees and host community Turkana West Sub-County for livelihoods improvement. Specifically, it seeks to create an enabling environment for energy, clean cooking technologies and private sector investment and partnership, among others.

There are specific programmes and policies in place to ease refugees' access to livelihood sources including businesses and jobs. These include the following:

- 1. The Kakuma Kalobeyei Challenge Fund
 (KKCF) has been established to support
 emerging businesses: KKCF is a five-year
 programme of the International Finance
 Corporation, implemented by the Africa Enterprise Challenge Fund (ACEF), the TCG,
 and UNHCR. It is 'designed to unlock the
 economic potential of refugees and their hosts
 in Turkana County by increasing private
 sector investments. It aims at enabling better
 economic integration and self-reliance of
 displaced populations' (AECF, 2020¹²¹).
- 2. A Huduma / Biashara Centre, a one-stop point where both refugees and host community members can access investment counselling, legal information on business opening, permits and civil registration documents, without having to travel far to access these as the case was previously.
- 3. Finalisation of the Turkana County Energy Sector Plan (TCESP) in 2020, which charts the path for enabling expansion and maximisation of energy access and utilisation for both the refugees and host communities. The TCESP provides good gender-differentiated data on Turkana County with regard to energy planning and energy resource mapping.
- 4. The Kenya Comprehensive Refugee Programme (KCRP)¹²² rationalises the multi-stakeholder approach led by the Kenya Government that provides a framework for stakeholder engagement and provides for market development, in order to encourage the role of the private sector and private-public partnership refugee programmes.

¹¹⁸ Turkana County TCESP, 2020.

¹¹⁹ Field based consultations

¹²⁰ MarketShare, 2019; IFC, 2018; Stakeholder Consultations

¹²¹ http://www.aecfafrica.org/index.php/portfolio/Kakuma-Kalobeyei-Challenge-Fund

¹²² https://globalcompactrefugees.org/sites/default/ files/2019-12/Kenya%20Comprehensive%20Refugee%20 Programme%20%282019%29.pdf

- 5. The Kenya Revenue Authority has started issuing single business permits in Kakuma and Kalobeyei that allow for registration of both the business and the KRA PIN, simultaneously.
- 6. The presence of 3G/4G internet connectivity has been an enabler for communities in Kakuma and Kalobeyei to access online training platforms for skills-building¹²³.

The Table below provides a snapshot of the status of these regulations:

Table 24: Status of regulations

Title	New or Adapted	Implemented	Persisting Barrier
The right to work is enshrined in the Refugee Bill (2019).	Yes	No	The Bill has not been enacted.
Residency and work permits - issued after Refugee Status Determination (RSD).	Yes	Partially	The protracted process of RSD ranges between 3 and 24 months, yet it is capped at no more than 90 days.
Accreditation requirements — Issuance of Permit Class M, to those with refugee status, enabling them to take up em- ployment or engage in entrepre- neurship.	Yes	Partial: Lengthy process of im- plementation	Continued encampment policy constraints access to these permits.
Restrictions on movement - Refugee Bill (2019) allows for freedom of movement.	Yes	Partially	Continued encampment policy constraints freedom of movement.
Existence and length of asylum process – the government directive of 18th December 2012 to stop reception and registration of asylum seekers and refugees has constrained this process.	Partially	Partially	This directive was informed by terrorist attacks in Kenya and with the government's new concern, a lot of gains made were lost with the increasing concern and uncertainty over continued hosting of refugees in Kenya.
Entrepreneurship regulations: refugees have the right to work but struggle with practical applications.	Partially	Partially	Requirements actualise this right include: - Requirement for offer of employment - Limitations on pay grade - Policy on encampment - Movement limitations unless with a movement pass (0'Callaghan
Land rights/allotment: TCG allocates land to host community and businesses while UNHCR allocates land to refugees. Once upgraded to a Municipality, land in Kakuma Town will now have title deeds, which will make it more attractive to the private sector.	Partially	Partially	Lack of accountability and transparency on the side of the government and that of the RAS, which interfaces with refugees leads to challenges in the smooth transfer of land.

4.2.2 Other factors that impact refugee's ability to work

Access to finance

Access to credit remains low. Poor access to capital has been reported to constrain business openings and operations. Thus, access to credit and use of informal lending mechanisms presents opportunities for formal financial institutions to expand to Kakuma. In addition, low financial literacy illustrated by low access to loans, limited information on financial matters including saving, and the high demand for banking services is a pointer to an untapped opportunity to deepen financial inclusion.

Access to mobile services/mobile money

In both Kakuma Refugee Camp and Kalobeyei Settlement, mobile money is now well entrenched and use of the mobile phones has become a pivotal aid to business transactions. Electronic shops, general groceries, and cyber cafes continue to offer phone charging services at a cost of between KES 20 - KES 50 per phone, further boosting business income. Access to and actual use of mobile money by refugees is still an area that requires policy intervention because upon acquiring alien IDs, their validity is only three months, at the end of which refugees need to apply for another one. This means that even upon registering for M-Pesa, which requires an ID, they can only use it for three months at a time. This makes it difficult to track refugee payment history, especially for PAYGO related payments, to subsequently build a credible credit score. The limited level of mobile money available to refugees has constrained its functionality, presenting an opportunity for GIZ's policy intervention.

Refugees and members of the host community have mobile phones with prepaid plans. The IFC study noted that approximately 69% of camp residents and 85% of town residents had mobile phones, with only 31% of these in the camp and 86% in the host community using their phones for mobile banking and money transfers¹²⁴. The insatiable market can be explained through the finding that 86% of those in Kakuma Town and 31% of those in the refugee camp reported that they rely on their phones or SIM to transfer money. This points to a large opportunity in the camp to expand mobile money penetration and mobile-banking interventions in the Kakuma area.

Technical and Vocational Education Training Institutions

The Don Bosco Technical Institute in Kakuma is an initiative of the Catholic Church and is registered as a private technical and vocational college in Turkana County. It operates from Kakuma, offering training to both refugees and the host community. The area is also served by the St. Claire of Assisi Training Institute, operated by Catholic nuns. Courses offered target both male and female learners and include welding, metal fabrication, mechanical and electrical engineering, dress making and agriculture, among others. Both institutions are regulated by the Kenya National Industrial Training Authority (NITA), which also accredits the courses offered. It is notable that the institutions do not seem to offer courses related to OGS maintenance and installation skills for technicians, and the various agricultural processing related needs, which are emerging in Turkana West, an area that presents opportunities for complementarities between the institutions with the ESDS.

Existing social networks

A significant proportion of the refugees have social networks that have been proven to be an enabler for improved livelihoods. Social networks provide useful business linkages and often a source of business capital through remittances. Refugees with wider social networks, particularly those from Somalia and Ethiopian origin, tend to have more supportive networks, compared to other refugees and the host community. As noted elsewhere in this report, there is a strong correlation between business ownership and social networks.

Cultural dimensions

Culture presents mixed influences; on the one hand, strong cultural networks and affiliation provide a positive support system for refugee acquiescence with their circumstances within the camps, and a rich heritage that offers them an identify even if they have been uprooted and displaced from their countries. On the other hand, cultural stereotypes tend to cause constraints, particularly on women, due to the strong patriarchal ideology that transcends the different cultures represented in Turkana West.

Gender dimensions

There is also limited understanding and focus on gender-based and other social disparities, among the majority of the private sector players. For instance, most of the SMEs consulted during field work indicated that they do not have any special focus on excluded groups such as women, persons with disabilities (PWDs) or the youth in their customer acquisition strategies¹²⁵. Only the "Raphael Recycling Project" indicated a specific focus on persons with disabilities, widows and other vulnerable groups for inclusion in their work force. There is a clear opportunity to build the capacity for private investors to be more sensitive and responsive to gender and social disparities including building skills on possible ways for inclusion of women in all available job and training opportunities.

Consultations with both the host community and refugees during field work indicated that among refugees, socio-cultural factors like intermarriage between communities and across religious affiliations have had a negative impact on the women, to an extent that they are unable to run their businesses freely for fear of discrimination. The Raphael Recycling targets women separated from their husbands, single mothers, and vulnerable men for employment.

¹²⁵ Source: KIIs

Table 25: Other hindering and enabling factors

Title	Creation of livelihoods
Access to finance (capital and credit)	Hindering: Exclusion from financial services for entrepreneurs seeking capital to start businesses since the financial institutions consider refugee-financing a risk, particularly for the undocumented refugees .
Access to mobile services	Mixed: While refugees have access to mobile services, they do not access the full functionality at the same level as host citizens.
Availability of TVET	Enabling: There are two TVET institutions that offer a great array of courses accessible to both refugees and the host community. These institutions could however expand their course offering to include the increasingly growing OGS industry, with courses targeting solar technicians and value addition in the different value chains.
Qualifications	Hindering: Majority of the people (both refugees and host communities) lack adequate formal education needed to put skills and talents to use. This makes it difficult for commercial firms and social enterprises to find qualified candidates for employment, another contributor to underemployment.
Skill sets	Mixed: Refugees tend to have a more diverse skills set compared to the host community. Even then, the skills they present are not adequate and often require more training to adequately serve the local market. Subsequently they end up serving as support staff at construction or welding sites rather than actual skilled artisans. Skills building is an area that requires greater attention.
Language	Enabling: Language diversity does not cause any hindrances as most of the residents in Turkana West are able to communicate amongst themselves. To a large extent, Swahili remains a unifying language between the host communities and refugees, as most refugees can converse in the language. Refugees from South Sudan and Ethiopia communicate in English. Given the informal interactions between refugees and the host community over many years, language has not been a barrier.
Existing social networks	Enabling: Most of the refugees have social networks that have been proven to be an enabler for improved livelihoods. Social networks provide useful business linkages and often a source of business capital through remittances. Refugees with wider social networks particularly those from Somalia and Ethiopian origin have relatively more supportive networks, compared to other refugees and the host community.
Cultural dimensions	Mixed: Culture presents mixed influences, offering on one hand strong cultural networks and a support system for refugees' identity in a foreign country, while on the other hand presenting cultural stereotypes that constrain especially women.
Gender dimensions	Mixed: Most of the development agencies with interventions are cognisant of gender disparities and endeavour to address these in their activities. However, private sector players exhibit low capacity and appreciation of gender and social exclusion. This is an area that would require more sensitisation and awareness creation.

In conclusion to this analysis, we investigate and outline:

- To what extent adapted regulations in line with the implementation of the GCR have so far contributed to the creation of livelihoods and the formalisation of local economies in refugee-hosting areas;
- To what extent the current regulatory framework and its implementation pertaining to livelihoods is in line with the principles of the GCR.
- The primary remaining regulatory barriers to promoting economic self-reliance and integration for refugees.

Table 26: Regulation framework and its relationship with GCR

Title	Creation of livelihoods	In line with GCR principles	Remaining main barriers
The right to work	Yes	Partially	Kenya's encampment policy limits access to jobs and livelihoods opportunities
Residency and work permits	Yes	Partially	Wage-earning employment is restricted be- cause permits are only issued to refugees with special skills or investments
Accreditation requirements	Yes	Yes	
Restrictions on movement	Yes	Yes	by the requirement for refugees to seek per- mission before leaving the camps
Existence and length of asylum process	Yes	Yes	
Entrepreneurship regulations	Yes	Partially	Self-employment within the camps is allowed without requirement for authorisation. But outside the camp, refugees must adhere to the set regulations for entrepreneurship
Land rights/allotment	Yes	No	Allotted plots were reported to be too small and with only limited usage allowed. The refugees often conflict with the host community when they plant trees or seem to undertaken longer-term investments on land*

^{*} Source: Key informant interviews

4.3 Terego and Madi Okollo Districts in the Northern Uganda

4.3.1 Key regulatory conditions that impact refugee's ability to work

Uganda has been praised for having one of the most progressive and generous refugee laws and policy regimes in the world. In fact, the 2016 United Nations Summit for Refugees declared Uganda's refugee policy a model¹²⁶. Uganda's favourable protection environment for refugees is grounded in the 2006 Refugee Act and the 2010 Refugee Regulations. These provide refugees access to basic and social services equal to Ugandan nationals: the right to work, establish a business and have freedom of movement. The GoU introduced the Settlement Transformation Agenda (STA)¹²⁷ in 2015, which operationalises the national legal framework and aims to achieve self-reliance and bring social development to Ugandan nationals in refugee hosting areas.

In line with the commitment to leave no-one behind in the 2030 Agenda for Sustainable Development, the GoU included refugee management and protection in its own domestic planning framework by incorporating the STA into Uganda's National Development Plan II (NDPII). These foundational building blocks predated and inspired the negotiations for the New York Declaration for Refugees and Migrants, which laid out a vision for a more comprehensive response, known as the Comprehensive Refugee Response Framework (CRRF). Uganda was one of the first countries to implement the CRRF (in 2017).

Uganda's National Action Plan on the Implementation of the GCR was developed to fulfil Uganda's commitments in the GCR¹²⁸. The most recent version was endorsed by the CRRF Steering Group in March 2021 to guide GCR and CRRF implementation in 2021/2022.

The National Working Group on Energy and Environment (WorkGrEEn) and the Sustainable Energy Response Plan (SERP) for Refugees and Host Communities present a considerable potential to implement long-lasting strategies. They are aimed at delivering affordable, reliable, and sustainable access to clean cooking, lighting, and power, to enable refugees and host communities in the country to become more self-reliant and resilient.

The energy policy framework is comprised of the Energy Policy (2020) and the Renewable Energy Policy (2007), which aim to increase the share of renewable energy in the national energy mix. The Electricity Connections Policy (2018) also aims to increase access and provide cleaner energy for Ugandans¹²⁹.

The Rural Electrification Strategy and Plan (RESP)¹³⁰ encourages rural electrification through demand-driven, private sector-derived proposals, including PPPs where market conditions made rural electrification projects only viable with capital subsidies. The policy created a Rural Electrification Fund (REF), to be administered by a Rural Electrification Agency (REA).

¹²⁶ UNDP (2017), Uganda Contribution to Refugee Hosting

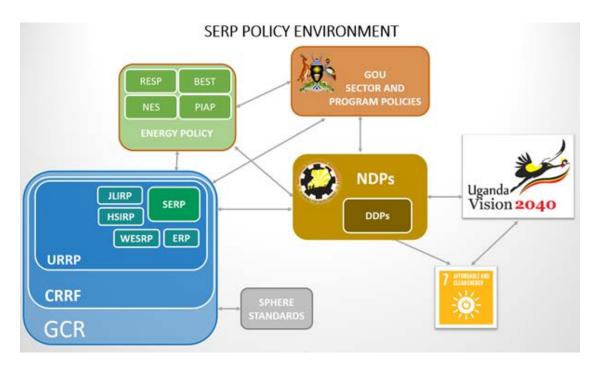
¹²⁷ The Settlement Transformation Agenda Project 2016 – 2021, Office Of The Prime Minister, 2016.

¹²⁸ Gov. Uganda, 2018. Uganda National Action Plan to Implement the Global Compact on Refugees and its Comprehensive Refugee Response Framework. Uganda's Revised CRRF Roadmap 2018–2020.

¹²⁹ Gov. Uganda, 2020. Draft National Energy Policy

¹³⁰ MEMD, 2013. Rural Electrification Strategy and Plan Covering the Period 2013 to 2022.

Figure 22: SERP Policy Environment*



^{*} Comprehensive Refugee Responses in the Horn of Africa: Regional Leadership on Education, Livelihoods and Durable Solutions

Studies highlight that Uganda's refugee accommodating capacity has been over stretched due to continuous influxes of refugees to the country. ¹³¹ In this section we analyse the regulatory conditions which could impact the ability of refugees to gain access to energy-related livelihoods in each of

the three ESDS' contexts.

Right to work – refugee and labour and employment law¹³²

The *Refugee Act* 2006 guarantees that recognised refugees shall receive the same treatment as "aliens generally in similar circumstances". This relates to the right to engage in gainful employment and states that "gainfully employed refugees shall pay taxes," suggesting that refugees are a group with the right to work.¹³³

¹³¹ Betts, A., Chaara, I., Omata, N. and Sterck, O. (2018): Refugee Economies in Uganda: What Difference Does the Self-Reliance Model Make? Refugee Studies Centre, Oxford University

Hovil, L. (2018): "Uganda's refugee policies: the history, the politics, the way forward", Rights in Exile Policy Paper, The International Refugee Rights Initiative, Uganda

¹³² KNOMAD (2016) refugees right to work and access to labour market

¹³³ Respectively, Section 29(1)(e)(vi) and Section 35(f) of the Refugee Act 2006

Residency and work permits

For some, the right to work under the Refugee Act 2006 and the 2010 regulations is subject to legal interpretation, especially in relation to work permits, where uncertainty persists. The Refugee Act 2006 does not state that refugees are exempt from obtaining a permit to work, and the fact that Article 64 of the 2010 Regulations states that "recognised refugees shall exceptionally be exempt from any requirement to pay any charges or fees prior to the taking up of any offer of or to continue in his or her employment" implies that in most cases refugees are required to obtain and pay a fee for a work permit. Two interviewees (one currently employed, and the other previously employed) stated that they were not required to obtain work permits. Perhaps it's because the positions are and were low level paying positions.

Yet, there appears to be some confusion or at least different views within the government as to whether refugees need work permits¹³⁴. Refugees do not enjoy the benefits of social security, unemployment, or disability insurance, nor does labour legislation protect them. There is also a discrepancy of views in relation to asylum seekers' right to work. Some legal experts posit they do not have such a right because "the rights framework applicable under the Refugees Act applies only to formally recognised refugees, leaving asylum seekers with no specific protections beyond those provided by human rights law more generally."¹³⁵

Asylum seekers cannot own businesses or other productive assets.¹³⁶ On the other hand, the *Refugee Act* 2006 also states that "where asylum seekers are permitted to reside in Uganda, they shall be subject to the general treatment and rights accorded to refugees under this Act," which could imply that they also have the right to work.¹³⁷ Other reports confirm that interpretation highlights that "despite the fact that employment is legal for asylum seekers in Uganda, job prospects are rare."¹³⁸

Accreditation requirements

One obstacle for some refugees is that some cannot prove their qualifications from their home countries (missing documents etc.) and sometimes, these are not recognised by the Ugandan institutions. These qualified people end up under employed. Two interviewees, one currently employed and the other previously employed at a health centre 3 and a local NGO respectively, mentioned that their employers didn't require them to prove their qualifications and also there were no issues regarding the recognition of their qualifications.

Freedom of movement

Freedom of movement is part of the Uganda Refugee Policy (2006) and the Refugee Regulations (2010). It is recognised as a reference for other countries to enable positive economic interactions between refugee populations and host communities, for example fostering growth of the local economy, rather than separating both communities and missing these potential positive impacts.¹³⁹

¹³⁴ The joint assessment by the OPM, the UNHCR, and WFP has interpreted the Refugee Regulations 2010 differently, stating that the regulations "expressly exempt refugees from having to pay fees required of foreign nationals working in Uganda," Government of Uganda, Office of the Prime Minister, Refugee Department, UNHCR, and WFP (2014) "Uganda Joint Assessment Mission," www.unhcr.org/54d3762f0.pdf, 19. The Immigration Department interprets the regulation to mean that refugees require work permits like other aliens;, on the other hand, for the OPM, once a refugee is in the country, he or she is de facto granted the right to work, Betts, A., L. Bloom, J. Kaplan, and N. Omata (2017) Refugee Economies: Forced Displacement and Development, Oxford, UK: Oxford University Press

¹³⁵ Sharpe, M., and S. Namusobya (2012) "Refugee Status Determination and the Rights of Recognized Refugees under Uganda's Refugees Act 2006," International Journal of Refugee Law 24 (3)

¹³⁶ United States Committee for Refugees and Immigrants (2009) "World Refugee Survey – Uganda"

¹³⁷ Section 25 (5) of the Refugee Act 2006.

¹³⁸ Rory Peck Trust (2015) "The Refugee Process in Uganda"

¹³⁹ FAO Working Paper (2

Freedom of movement is subject to restrictions under the Refugee Act 2006.140 Although Section 30(1) provides that all refugees in Uganda are entitled to freedom of movement, Section 30(2) provides that this right may be restricted in line with the laws of Uganda or the direction of the Commissioner for Refugees applicable to aliens in the same circumstances. The restriction of rights is permissible "especially on grounds of national security, public order, public health, public morals or the protection of the rights and freedoms of others." Moreover, there are limits on where refugees may be able to establish themselves, and Section 44(1)(b) of the 2006 Act provides that the minister responsible for refugees may designate public lands for the "local settlement and integration" of refugees; Section 44(2) requires that any refugee who wishes to reside outside designated areas must apply to the commissioner for a movement permit valid for up to 90 days.¹⁴¹ Permits to move are free for refugees in settlements, but most cannot afford to pay for the transport to obtain them. Refugees are also only eligible for aid if they stay in one of the settlements, which dissuades many from moving outside.142 With the exception of the COVID-19 lockdown, during which inter district travel was banned143 for everyone (locals and refugees), refugees are generally free to move in and out of the settlement when they please.

Existence and length of asylum process

The legal framework sets an ambitiously short time frame for the resolution of asylum applications, both in the first instance and at appeal. Currently there is an outstanding asylum caseload of tens of thousands (23,130), and only one Refugee Eligibility Committee (REC) for the country who has adjudicated 3,980 asylum applications (with an overall recognition rate of 90 %). Thus, we can estimate that the process will take on average five years for the asylum seekers to get an answer, which is far from the legislated timeframe. Long delays create uncertainty for asylum seekers and exacerbate their vulnerabilities. 144

Entrepreneurship regulations

Uganda has been scored by the World Bank Index of Doing Business¹⁴⁵ as the 116th country in the world for doing business, 169th for starting a new business, and 168th for getting electricity, out of 190 countries worldwide. Creating a new business using electricity in Uganda, and especially in a refugee setting, may well be the most difficult challenge in the world. For starting a business, 13 procedures are needed (vs 4.9 in OECD high income countries), it costs 40.5 % of a person's per capita income, and certainly much more for a refugee (vs 3 % in OECD high income countries)¹⁴⁶. It is thus understandable and common that refugees work on a self-employed basis. The regulation for refugees is not specifically a hindering factor but the national Ugandan legislation for starting a business is.

¹⁴⁰ KNOMAD (2016) refugees right to work and access to labour market

^{141 912.} Hovil, L., and M. Chrispus Okello (2008) "The Right to Freedom of Movement for Refugees in Uganda, Refugee Rights: Ethics, Advocacy, and Africa," Georgetown University Press.

¹⁴² International Refugee Rights Initiative (2014) "Conflict in South Sudan: Refugees Seek Protection in Uganda and a

¹⁴³ https://www.africanews.com/2021/06/07/ugandaimposes-another-lockdown-what-are-the-restrictions//

¹⁴⁴ NRC (2019) Refugee status determination: A study of the process in Uganda

¹⁴⁵ https://www.doingbusiness.org/en/data/ exploreeconomies/uganda

¹⁴⁶ https://www.doingbusiness.org/en/data/ exploreeconomies/uganda

Findings from the field

Refugees in Rhino Camp that were interviewed reported that most energy-related livelihoods are performed under different legal status, other than that of a private enterprise with shares (the one considered in the World Bank Doing Business study). They often establish themselves as a sole proprietor business, a refugee led organisation, a group, VSLA, SACCO (cooperative) or local organisation. The registration process is not problematic, with the registration beginning at the sub-county and ending at the district level. According to the interviewees the registration process took a few days, if the applicants have the required documentation, such as the constitution for a Community-Based Organisation (CBO). Then, on a yearly basis, they are required to pay for a trading license fee, which ranges from UGX 10,000 to UGX 50,000 ($2.5 \$ to $12.5 \$) depending on the type of business. This tax is not based on earnings but on being operational. Some refugees selling baked products go to the market (on market day) and are charged an entrance fee of UGX 500 ($0.12 \$). Overall regulation pertaining to a refugee setting up a business is smooth and quick. They are also charged a monthly tax of UGX 5,000 ($2.5 \$) for being operational.

Land allocation

The GoU continues to implement its progressive policies, and especially regarding land attribution¹⁴⁷, aimed at hosting refugees and asylum-seekers in safety and dignity. Providing refugees with agricultural land significantly improves their welfare and resilience, while generating positive income spill overs within the host communities.¹⁴⁸ It's worth noting that the land initially allocated to refugees in Rhino Camp is only 20 by 30 metres. With good farming practices like the ones implemented by Palm Corps, tomato farmers can earn UGX 500,000 (125€) in three months. Refugees can use the assigned land, but they neither have land ownership nor the right to sell, rent out or use the land as collateral for credit from financial institutions.149

Under pressure to accommodate one million new refugees in 2016 and 2017, the GoU has pulled back on its land allocation policy and restricted the size of the land attributed and, in some cases, reclaimed land allocated to long-established refugees. So for some refugees in Rhino Camp and all in Imvepi (that was only reopened in in 2017) the land parcels are 15 by 15 metres or even smaller.

Challenges in the implementation

However, while promising on paper, various challenges have been noted in the implementation of Uganda's policy framework¹⁵¹. The centralisation of decision-making with OPM means that many at the local level remain unaware of national policy level approaches. Therefore, commitments on refugees' rights are not always upheld in practice¹⁵². This is exacerbated by inconsistent

¹⁴⁷ Comprehensive Refugee Responses in the Horn of Africa: Regional Leadership on Education, Livelihoods and Durable Solutions

¹⁴⁸ Zhu H., Taylor J. E., Gupta A., Filipski M., Valli J. & Gonzalez-Estrarda E. 2018 Economic Impact of Giving Land to Refugees. Selected paper/poster prepared for presentation at the 2018 Agricultural & Applied Economics Association Annual Meeting, Washington, DC, 5–7 August 2018

¹⁴⁹ UNDP (2018). Understanding Land Dynamics and Livelihoods in Refugee Hosting Districts of Northern Uganda

¹⁵⁰ Coggio, T. (2018). 'Can Uganda's breakthrough refugeehosting model be sustained?'. Migration Policy Institute, 31 October

¹⁵¹ Hargrave, Mosel and Leach (August 2020) Public narratives and attitudes towards refugees and other migrants, Uganda country profile, ODI

¹⁵² ACMS – Africa Centre for Migration and Society, and Samuel Hall (2018) Free and safe movement in East Africa: research to promote people's safe and unencumbered movement across international borders. Open Society Foundations Report. Cape Town: African Minds

interpretations of policy provisions across different parts of central government. For example between the OPM and Uganda's Immigration Department, which at times leads to inconsistent enforcement and confusion¹⁵³. In addition, central government support to areas hosting refugees has been channelled primarily to district levels, leaving local municipalities poorly resourced¹⁵⁴.

It has been convincingly argued in the literature (see details hereafter) that freedom of movement, employment, and education for refugees in Uganda have not translated into self-reliance. A range of regulatory, legal, and administrative barriers that work to restrict refugees to settlements and limit their capacity to build livelihoods beyond sustainable agriculture objectives 155/156. This is notable in relation to the viability of its land allocation model in rural settlements, the inadequacy of access to education in the settlements, and the ineffectiveness of urban assistance, remain barriers for improving the self-reliance of displaced persons.

Meanwhile, Uganda's refugee self-reliance policies have failed to demonstrate clear results, with 80% of refugees living below the international poverty line^{157/158}. This can largely be attributed to Uganda's settlement approach, whereby refugees are granted freedom and movement, as well as

granted freedom and movement, as well as

that are socially, ecc
included in a sustain
ment by 2025"164.

the right to work. However, they are required to reside in Uganda's rural settlements, where land is allocated, in order to access support. In practice, this means that freedom of movement is curtailed, with most refugees remaining in remote settlements where livelihood opportunities are limited¹⁵⁹. The plots of land allocated, which have reduced in size in recent years with the sharp growth of Uganda's refugee population, have provided benefits in terms of cultivation for household consumption, but are not large enough to allow excess production and sale of produce160/161. 'Self-settled' refugees in urban areas have often been able to achieve higher degrees of self-reliance. However, this has been effective due to refugees' own initiative outside the support provided by national policies; as municipal authorities lack the power, resources and, crucially, data needed to provide additional support to urban refugees¹⁶².

In response to these limitations, the Ugandan Ministry of Gender, Labour and Social Development issued, in April 2021, a Jobs and Livelihoods Integrated Response Plan for Refugees and Host Communities (JILRP) in Uganda – 2020/2021–2024/2025¹⁶³. The plan "envisions a secure, self-reliant and resilient refugee and host community households in refugee hosting districts, with a goal of ensuring refugees and host communities that are socially, economically and financially included in a sustainable manner in local development by 2025"¹⁶⁴.

The Table below provides a summary of the status of these regulations:

¹⁵³ Betts, A., Bloom, L., Japlan, J., et al. (2016) Refugee economies: forced displacement and development. Oxford: Oxford University Press.

¹⁵⁴ Lozet, F. and E. Easton-Calabria (2020) 'Counting urban refugees during COVID-19' Forced Migration Review 64: 79-80

¹⁵⁵ Betts, A., Chaara, I., Omata, N. and Sterck, O. (2019a). 'Refugee economies in Uganda: what difference does the self-reliance model make?'. Refugee Studies Centre, University of Oxford.

¹⁵⁶ Hovil, L. (2018). 'Uganda's refugee policies: the history, the politics, the way forward'. International Refugee Rights Initiative, Kampala

¹⁵⁷ FAO and OPM - Food and Agriculture Organization of the United Nations and Office of the Prime Minister of Uganda (2018) Food security, resilience and well-being: analysis of refugees and host communities in northern Uganda. FAO Food Resilience Analysis Report. Rome: FAO

¹⁵⁸ Development Pathways (2020) Analysis of refugee vulnerability in Uganda and recommendations for improved targeting food assistance development pathways. Development Pathways Working Paper, Orpington: Development Pathways

¹⁵⁹ Crawford, N., O'Callaghan, S., Holloway, K., et al. (2019) The Comprehensive Refugee Response Framework (CRRF): progress in Uganda. Humanitarian Policy Group Working Paper. London: ODI.

¹⁶⁰ FAO and OPM, 2018

¹⁶¹ Crawford et al., 2019

¹⁶² Lozet and Easton-Calabria, 2020

¹⁶³ https://data2.unhcr.org/en/documents/download/86295

¹⁶⁴ Jobs and Livelihoods Integrated Response Plan for Refugees and Host Communities (JILRP) in Uganda – 2020/2021–2024/2025

Table 27: Status of regulations

Title	New and Adapted	Implemented	Persisting Barrier
The right to work	Yes, from Uganda Ref- ugee Policy (2006) and the Refugee Regulations (2010)	Yes	
Residency and work permits		Yes	Uncertainty persists (legal in- terpretation) on work permits
Accreditation require- ments		Yes	Some cannot prove their qualifications from their home countries (missing documents etc.) and sometimes, these are not recognised in the Ugandan institutions.
Freedom of movement		Yes partially (local implementation depends on location)	Settlements are in isolated areas, so costs of movement are high
Existence and length of asylum process	Yes	Yes, with insufficient means	Estimated time of the process is around 5 years
Entrepreneurship regulations	Yes	Yes	Uganda is ranked as the 168th country in the world in starting a Business but refugees and hosts prefer to register as local organisations (with light requirements)
Land rights/allotment	Yes	Yes, with land size re- duction for newcomers	Some settlements are not adapted for agriculture (e.g. Imvepi)
Summary	The policy and regulation are a reference in the region	Many at the local level remain unaware of national policy-level approaches	The absence of clear guidance on work permits and lack of legal documentation are the main constraints that refugees specifically face. While possibility to farm and enterprise are common to Ugandans

4.3.2 Other factors that impact refugees' ability to work

We identified important hindering factors related to qualifications (high education generates high unemployment) and cultural dimensions. These include pervasive discrimination by SMEs, incomplete or wrong information on their right to work, the required documentation and low level of trust towards locals. Refugee women are less likely to look for jobs due to their many household activities including care work, and refugee youth

experience more than three times higher unemployment rates than nationals.

Access to finance

Compared to most other markets, Uganda has a conducive legal, regulatory, and policy related environment that does not present obstacles for FSPs to serve refugees. However, FSPs need to adjust their requirements to do so¹⁶⁵.

¹⁶⁵ NPM diagnostic study Uganda

OPM is mandated by the 2006 *Refugee Act* to "issue refugee IDs to refugees and all members of their family (Art. 42)". A challenge however is that the issuance of these ID cards is often delayed. As Refugee IDs are often only issued to the head of refugee households, the Asylum Seeker Attestation Letter may be preferred by FSPs, as it includes the names of all registered refugee family members¹⁶⁶.

The Ugandan National Strategy for Financial Inclusion (2017–2022) does not recognise refugees, while the Bank of Uganda (BoU) has avoided issuing specific regulations related to refugees. The BoU has, on occasion, issued letters in favour of financial inclusion for refugees, emphasising that regulatory requirements for Ugandans need to be observed for refugees as well, these include:

- Know Your Customer (KYC) in the Anti-Money Laundering Act (2013), which requires financial service providers (FSPs) to verify the identity of a client.
- ID rules in the Financial Institutions (Anti-Money Laundering) Regulations 2010, i.e. address of applicant, utility bills and a letter of introduction.

With regards to address verification, self-settled refugees may be able to provide a rental agreement signed by a landlord and a utility bill in the landlord's name. Alternatively, refugees could be required to provide a letter of introduction, for example from LC-1 officials, Refugee Welfare Committees (RWC), or Block Leaders in settlements, and their residence could be physically verified by FSP staff. 167

We identified several challenges related to the application 168:

- Delayed process for obtaining a refugee ID card. In 2019 the government allowed refugees to obtain SIM cards using an Attestation Letter issued by the government while they await their IDs. At one point however, the Ugandan Communications Commission placed a ban on refugee SIM cards. The ban has since been lifted, but misinformation about the changing policy continues to hinder access.
- Uganda's laws do not specify requirements for financial service providers when on-boarding refugees, creating both a barrier and confusion on which rules to apply. Requirements to access bank accounts depend on the bank's own regulations and practices. Depending on the perceived risk of clients, some financial institutions accept only passports and national IDs, while others accept refugee IDs or an attestation letter.

The financial institutions that were interviewed (RUFI, BRAC Bank, Vision Fund, UGAFODE, Centenary Bank, POST Bank, FINCA, Pride Micro Finance) accept refugee IDs and attestation letters from refugees as KYC.

Findings from the field

Individual interviews were conducted with 25 entrepreneurs involving businesses ranging from hair salons, phone repair, phone charging, restaurants, milling, cold drinks, secretarial, cook stoves, baking, briquette production, and entertainment halls What all the livelihoods have in common is a desire to acquire PUE technologies or upgrade the ones they have. However, they lack appropriate financing to bridge the gap between their low incomes and the costly PUE equipment.

¹⁶⁶ Ibid

¹⁶⁷ NPM diagnostic study Uganda

¹⁶⁸ Covid-19 and refugees' economic opportunities, financial services and digital inclusion

The most common savings and financing option is VSLAs. They however have limitations such as high monthly interest rates (10%) limitations on the loan size (UGX 300,000 {75 €}) as well as short loan repayment periods (1–3 months). Still, regarding access to financial services, the 2004 Financial Institutions Act¹⁶⁹ authorises financial institutions to lend or extend credit in consideration for interest which varies by financial institution. To ensure financial stability, the BoU utilises several tools including the Central Bank Rate (CBR). To control inflation, the BoU either increases or decreases it prompting commercial Banks to adjust their lending rates (usually in the same direction for high CBR). However, when the BoU lowers the Central Bank Rate (as was done in 2020, when it was lowered to 7%), commercial banks didn't lower their lending rates. By keeping the cost of borrowing high, borrowing is discouraged.

The Credit reference framework¹⁷⁰ was designed to provide timely and accurate information on borrowers' debt profile and repayment history and to enable lenders make informed decisions about allocation of credit which reduces default probabilities of borrowers. Financial institution borrowers are therefore required to have a card and a positive credit history to be able to borrow money. The limitations however are;

- The financial card costs UGX 30,000 (7.5 €) which is out of reach for many refugees and hosts who earn a low income below UGX 100,000 (25 €).
- The regulations are not clear on whether refugees can apply for financial cards. It is left at
 the discretion of the financial institution.

The 2004 Financial Institutions Act was amended in 2016171 to include agency banking, Islamic banking, Bancassurance and an amendment to the credit reference bureau requirement. Although the amendments provide the benefit of increasing the scope of financial services available to the refugee and hosts, a few gaps have been identified that have the potential to affect access;

The amended act still doesn't specify whether refugees can utilise their refugee ID and or attestation letters to open an account.

Agents are not permitted to process certain transactions on behalf of the bank e.g. loans and cash transfers. As a result, the client is still required to travel to the nearest branch which is usually far away and costly.

Findings from the field

As few as three groups that were interviewed save with Banks i.e. DFCU, POST Bank, Housing Finance Bank, RUFI and Vision Fund. Two of those have been able to acquire group loans, one from Vision Fund and the other from RUFI. The rest remain in a dilemma on where to acquire financing that is crucial if acquisition of PUE equipment is to happen.

¹⁶⁹ Act 2 Financial Institutions Act 2004 1 - Bank of Uganda

¹⁷⁰ The Financial Institutions (Credit Reference Bureaus) Regulations, 2005

¹⁷¹ The financial Institutions (Amendments) Act of 2016

Access to mobile services

The Uganda Communications Commission's new regulatory order on SIM cards registration for refugees outlines that¹⁷²:

- Mobile SIM cards can be registered in the name of a refugee who holds a valid refugee ID card issued by the OPM.
- In the absence of a refugee ID, a valid attestation letter issued by the OPM suffices.
- However, during SIM registration the personal data appearing on the refugee ID or the attestation letter needs to be accurately captured by the Mobile Network Operator or their agents for either acquiring a new SIM, or swapping or replacing an old one.

The coverage, connectivity, the cost of ownership and usage have been improved¹⁷³ but remain a difficulty¹⁷⁴ especially in link with Africell stopping its operations in Uganda.¹⁷⁵

Availability of BTVET

In Uganda, BTVET is coordinated by the Ministry of Education and Sports. There are at least 110 vocational training centres, schools, institutes and polytechnics in the country. The Ugandan Skills Development Project, a \$100 million investment by the World Bank, is a major source of investment in job training. REF research with new graduates of BTVET programmes study found that 63 % had either found a new job related to their training or had started a new business after finishing their training¹⁷⁶.

172 https://www.gsma.com/mobilefordevelopment/blog/ uganda-a-progressive-regulatory-directive-easesrefugees-access-to-mobile-services/ One of the limitations surrounding the use of skills gained during the training was the inability to afford the initial investment to put the skills to work. Another difficulty reported was in gaining employable skills that are competitive and can help someone earn a job.

Qualification, skill sets and language

Contrary to established findings on the returns to education in employment, the education level and employment rate are inversely related for both refugees and the host community, a phenomenon known as the puzzle of the educated unemployed. Among host community members, those who have secondary education levels and some tertiary education have the highest unemployment rate of 11 % and 17 %, respectively. Like hosts, refugees with secondary and some tertiary education, have the highest unemployment rates, at 43 % and 35 %, respectively. 177 One of the reasons for this phenomenon is that there is limited demand for skilled employment due to the limited number of formal enterprises in Uganda, compared to the high number of skilled personal.

Gender, youth, newly arrived refugees, and other cultural dimensions

Only a small minority of employers (23 %) know that refugees have a right to work in Uganda, limiting job opportunities for refugees even further¹⁷⁸. An interesting research¹⁷⁹ explores the barriers for refugees to access the formal labour market:

- Pervasive discrimination by SMEs (in major urban areas);
- Incomplete or wrong information around the legal status of refugees in the country, and especially their right to work. 39 % think the law shouldn't allow refugees to work because of (i) job competition with nationals (31 %),

¹⁷³ For refugees and locals in Uganda, the internet is changing livesPrivate investment has brought connectivity to north-western Uganda, as well as new opportunities for refugees and locals.

¹⁷⁴ https://www.oecd.org/migration/forum-migrationstatistics/5.Ben-Hounsell.pdf

¹⁷⁵ https://announcements.africell.ug/en/news/news-1

¹⁷⁶ REF (2019). The Impact of Youth Training and Employment on Migration Dynamics in the Horn of Africa, London/Nairobi: EU Trust Fund for Africa (Horn of Africa Window) Research and Evidence Facility.

¹⁷⁷ UNHCR (July 2021), Uganda knowledge brief: using socio-economic data to promote employment solutions for refugees in Uganda

¹⁷⁸ UNHCR (July 2021), Uganda knowledge brief: using socio-economic data to promote employment solutions for refugees in Uganda

¹⁷⁹ Loiacono F. and Mariajose Silva Vargas M. (2029), Improving Access To Labour Markets for Refugees: Evidence from Uganda, the International Growth Center

- (ii) they already receive aid (31 %) and (iii) trust (17 %). Refugees not having enough qualifications comes with only 1 %.
- Few refugees possess the documents requested by firms, and know what firms ask.
- Presence of in-group favouritism among refugees and a general low level of trust towards locals.

Loiacono and Mariajose Silva Vargas also explores factors best explaining variation in job search intensity¹⁸⁰:

- First, refugee women are less likely to look for jobs, due to a higher domestic care burden.
- Refugees that resided in camps prior to fleeing to Uganda and those that arrived more recently are less likely to look for jobs.
- Refugees that state they chose the place where they live (city or settlement) for economic opportunities are also more active in looking for jobs. On the contrary, those that instead moved there to join family members are also less likely to spend time looking for jobs.
- Those that are planning to go back to their country of origin seem less interested in looking for jobs in Uganda.
- Refugees looking more intensively for jobs are also more likely to report a better interaction with locals but seem to be less trusting towards NGOs that deal with refugees' issues.
- Importantly, those refugees that feel that people can easily identify them by the way they look or speak as refugees are also exerting less efforts in looking for jobs.
- Finally, refugees that have access to land spend less time looking for jobs.

For both refugees and Ugandans, younger people face more barriers to employment than older individuals, though refugee youth experience more than three times higher unemployment rates than nationals – 44% of refugee youth versus 14% of national youth are unemployed. Idle unemployed youth can lead to negative societal outcomes such as alcohol and drug abuse, higher rates of teenage pregnancy, and other harmful behaviour including violence. The negative consequences of extended unemployment and inactivity in early careers include financial hardship and lower employment as well as lower long-term earnings prospects.¹⁸¹

UNHCR find the employment outcome gap between hosts and refugees is particularly large upon arrival (62 percentage points for employment and 64 points for unemployment). Over time, the unemployment gap becomes narrower with years of residence in Uganda, though it never achieves equity over time. Studies show that early investment in skills assessment, training and labour market integration activities can help to promote quicker convergence in employment.¹⁸²

The Table below provides a summary of the other factors (than regulation) affecting the creation of livelihoods:

¹⁸⁰ Loiacono F. and Mariajose Silva Vargas M. (2029), Improving Access To Labour Markets for Refugees: Evidence from Uganda, the International Growth Center https://www.theigc.org/wp-content/uploads/2019/10/ Loiacono-and-Vargas-2019-final-paper_revision.pdf

¹⁸¹ UNHCR (July 2021), Uganda knowledge brief: using socio-economic data to promote employment solutions for refugees in Uganda, https://www.unhcr.org/5fe31b2b4. ndf

¹⁸² UNHCR (July 2021), Uganda knowledge brief: using socio-economic data to promote employment solutions for refugees in Uganda, https://www.unhcr.org/5fe31b2b4. pdf

Table 28: Other hindering and enabling factors

Title	Creation of livelihoods	
Access to finance (capital and credit)	Mixed: Uganda's laws do not specify requirements for financial service providers when on-boarding refugees, creating both a barrier and confusion on which rules to apply. Requirements to access bank accounts depend on the bank's own regulations and practices.	
Access to mobile services	Mixed: The Uganda Communications Commission's new regulatory order on SIM cards registration for refugees. Coverage, connectivity and cost of use is still an issue for most refugees.	
Availability of BTVET	Mixed: Important programmes are implemented but important limitations surrounding use of skills gained during the training was the inability to afford the initial investment to put the skills to work.	
Qualifications	Hindering: hosts and refugees having high (secondary and some tertiary) education	
Skill sets	also have the highest unemployment rates.	
Language		
Existing social networks	Refugees who are in Uganda for years are better connected than new refugees.	
Cultural dimensions	Pervasive discrimination by SMEs (in major urban areas), Incomplete or wrong information around the legal status of refugees in the country, and especially their right to work. Few refugees possess the documents requested by firms, and know what firms ask. Presence of in-group favouritism among refugees and a general low level of trust towards locals.	
Gender, youth and newly arrived refugee dimensions	Refugee women are less likely to look for jobs due to their main household activities. For both refugee and Ugandans, younger people face more barriers to employment than older individuals, though refugee youth experience more than three times higher unemployment rates than nationals	

Coordination between hosts and refugees' communities along the value chains

We also hereby:

- Investigate where there is potential for coordination, avoiding conflicts that might arise between the host and refugee communities regarding these identified livelihoods and how energy interventions could address this.
- distinguish between forms of work that are accessible and prevalent in the host community in comparison to within the refugee community, if applicable and analyse potential opportunities for refugees to gain work within the host community, as well as for host communities potentially benefiting from the additional resources and demand refugees provide.

We acknowledge that the labour demand in the Arua district is very limited: the economy is heavily dependent on agriculture with over 81 % of the economically active population being involved in farming of which 79 % is subsistence-based. Most refugees do not choose a destination primarily based on available labour market opportunities. The attention to not disturb a small and fragile labour market is crucial.

Table 29: Coordination and cross-fertilisation between host and refugee communities

Value Chain	Coordination (avoiding conflicts)	Refugees work with hosts	Host work with refugees
Energy	Mixed: yes, for solar energy (unlimited resource), questionable for charcoal, firewood (Limited resource).	Yes, especially on solar energy solutions and refugees are more distributors (they could provide maintenance services)	No: refugees are highly dependent on Ugandan Solar Energy Service Providers and (should) produce their own improved stoves
Food & Beverage Trading	Traders are from Uganda (65%) or South Sudan (35%)*	Yes, quite a number of Ugandans are wholesaling	No: very few refugees are wholesalers
ICT	Yes	Yes, as ICT providers are Ugandan big companies, refugees are distributors (agents)	No, they mainly serve the refugee settlement
Hospitality and services	There are limited inter- actions between refugees and hosts	Hosts serve their own market	No, refugees serve their own market
Cereal Crops	There are limited inter-	Labour market offer from	Labour market offer from
Fruits and Vegetable	actions between refugees and hosts	hosts largely covers the little demand	refugees largely covers the little demand
Livestock Poultry Fishing	There are limited inter- actions between refugees and hosts	Labour market offer from hosts largely covers the little demand	Labour market offer from refugees largely covers the little demand
Summary	Coordination is good or non-existent except for limited resource exploitation like charcoal, firewood	There are opportunities for refugees to work in energy, ICT and trade to better serve settlements	There is currently no opportunity for hosts to benefit from refugees' economic activity (except in the humanitarian sector)

^{*} REACH and UNHCR (Nov 2019) Vulnerability and Essential Needs Assessment (VENA), Market Factsheets: Imvepi and Rhino Settlements

The table below provides a summary of the elements identified in the previous chapters on three specific and important aspects:

- In line with a Do-No-Harm approach, we hereby assess if existing jobs might become redundant or less profitable through improved energy access (e.g. access to improved cook stoves decreases margins for firewood vendors).
- from a gender lens, we assess to what extent women engage in entrepreneurship, paid work, and short-term income generating activities in comparison to men.
- how market-based energy interventions can target women specifically and encourage the uptake of livelihoods which generate higher incomes.

Table 30: Do not harm and gender analysis

Value Chain	Losses among hosts	Involvement of Women	Potential for interventions
Energy	Potentially on charcoal and firewood (limited resource).	Yes, on charcoal firewood, improved cookstove production	Yes, promoting distribution of solar energy solutions by women (in VSLA)
Food & Beverage Trading	No, improvements in small trading (through solar energy) should not significantly affect.	Yes, more than 50% of the traders are women*	Yes, promoting solar energy solutions by women traders
ICT	No, there is a large unmet demand in settlements	Yes, women traders are involved.	Yes, they could benefit from improved business and technical skills (and funds)
Hospitality and services	No, they are independent markets	Certainly, a priority value chain for women	An important opportunity on improved cookstoves, solar electricity and refrigeration
Cereal Crops	No as there are limited	More dominated by males	Limited
Fruits and Vegetable	interactions between refugees and hosts (and demand is high)	Yes at (very) small scale	important opportunity to improve productivity, pro- cessing & marketing
Livestock Poultry Fishing	Limited as hosts are not actively in these value chains	Yes, at small scale	a dessing a marketing
Summary	Losses would be limit- ed except for charcoal, firewood	Women involvement is strong except for cereal crops	There are a lot of potential interventions to improve women livelihoods along the main value chains (except cereal crops)

^{*} REACH and UNHCR (Nov 2019) Vulnerability and Essential Needs Assessment (VENA), Market Factsheets: Imvepi and Rhino Settlements

5 Recommendations for ESDE/GIZ, UNHCR and other Stakeholders

This Chapter outlines a set of actionable recommendations for the ESDS project, UNHCR, and other relevant stakeholders, by drawing on the report findings. The recommendations aim to provide guidance to enhance the creation of jobs in value chains for energy products and services, and to promote PUE for other livelihoods.

First, the chapter gathers a set of country-specific recommendations, including:

- Recommendations for advocacy for adjustments to the regulatory conditions for livelihoods in the energy domain and/or for enforcement in the regional (local) laws.
- Recommendations for capacity building in the energy sector and other complementary topics to increase employability, such as financial literacy and business skills, amongst others.
- Recommendations for adopting conflict-sensitive approaches to promote energy related livelihoods.
- Recommendations for adopting gender transformative measures to promote energy related livelihoods.
- Recommendations for tackling financing needs to promote PUE.

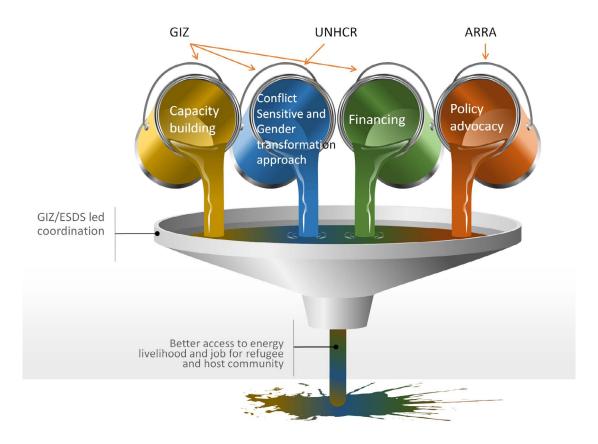
To conclude, the Chapter finishes with some **global recommendations**. This does not represent a comprehensive review, as it only includes some of the recommendations the consulting team believed were worth summarising.

5.1 Gambella Region in Ethiopia

In Gambella region, GIZ/ESDS should play an overall coordinator role to bring stakeholders onboard and to follow up implementation of recommendations given to different actors.

- for refugees, which is one of the nine pledges made by the Government.
- In the short to medium term, it should put in place a pro-refugee entrepreneurship process that won't treat them as foreign investors. This requires more than USD 200,000 start-up capital.

Figure 23: Recommended actions for stakeholders.



Recommendations for policy intervention and advocacy for regulatory improvements for ARRA with support and lobbying from GIZ/ESDS and UNHCR

Land allocation and refugee friendly entrepreneurship policies would enable refugees and the host communities to engage in business activities. ARRA, in addition to the services offered to refugees, is a refugee policy advocacy wing of the GoE. GIZ and UNHCR need to bring awareness to ARRA regarding the following issues:

 An immediate action would be to implement Gambella's share of 10,000 hectares of land Recommendations for capacity building and stakeholder on-boarding in the energy sector for GIZ/ESDS

The development of energy- related livelihoods requires substantial capacity building. The types of activities that GIZ/ESDS could undertake are:

 Supporting the development of last mile supply chains for energy product and services.
 This can be done through a series of business networking and regular regional energy livelihood development consultation workshops, which would bring all actors together.

- Raising the awareness of local authorities to use energy for enhancing existing and new businesses, as well as end-users to stimulate the market for the private sector.
- Providing equipment, technical and management skills development and business training to energy enterprises.
- On boarding humanitarian, energy, TVET, financial and private stakeholders in Gambella, so as to have a common vision and avoid fragmented and repetitive efforts.

Given these needs, potential arrangements and partnerships with GIZ/Qualification for Employment Perspective (QEP) and local training institutions like TVETs, providers should be considered in order to ensure the supply of continued training to both refugee and host communities. It is recommended that GIZ/ESDS support the selection and equipment of training centres (both in hardware and soft skills, like the COC certification), which can be used to train refugees and hosts.

Recommendations for a conflict sensitive approach for GIZ/ESDS and UNHCR

Competition over natural resources, such as firewood, can drive conflict. Therefore, conflict sensitive approaches and mitigation measures need to be in place. Recommendations for this include:

- Designing projects that will reduce the use of natural resources. For instance, having energy efficient stoves that can use briquettes, will reduce the need and competition for firewood.
- Designing interventions where hosts and refugees can complement each other and work together, rather than compete against each other. In briquette charcoal production, for example, hosts would be given the role of feedstock supply and refugees can produce the charcoal itself.
- Ensuring no one is being harmed from changing to new technologies and value chains, which should include mitigation measures in the design of new interventions. For instance, those who have been selling electricity using diesel generators might assume they will be negatively impacted if people switch to mini-grid operators or solar equipment providers.

Recommendations for gender transformative measures to promote energy related livelihoods for GIZ/ESDS and UNHCR

There are productive activities where the involvement of women is higher than other areas. These include the use of energy in hospitality, energy products retailing, cooking technologies, fuel production and retailing. Building the capacity of women in technical, fund-raising, managerial and financial aspects will significantly contribute to increased women's participation in energy-related livelihoods. It is recommended that GIZ/ESDS provides capacity building for women in the following areas:

- Technical training to produce energy efficient cookstoves and cooking fuels.
- Managerial training on how to lead an enterprise.
- Financial management training.
- Fund-raising trainings, which includes business plan preparation and proposal writing for funding.

Work also needs to be done by GIZ/ESDS to give counter guarantees to financial institutions to encourage greater women's involvement in energy-related livelihoods. To aid this, pro-women and more flexible financing requirements, such as low or no collateral requests, or longer repayment periods could be arranged by the financial institution.

Recommendations for financial arrangements and support for GIZ/ESDS and other actors

Energy technologies used for productive purposes often require up-front investment, which the target group often lack. In addition to this, due to the low and irregular income of the target group, private companies perceive refugee settings as a high investment risk. The absence of well-established financial institutions networks also exacerbates the issue. However, the opportunity is there: an IFC study showed that PUE devices such as solar pumps, wheat milling, and dairy chilling are associated with relatively short pay-back periods of between 12–24 months and positive Internal Rate of Return (IRRs) for MSMEs, which should

translate into favourable lending economics for investors. 183

Therefore, a financing arrangement that supports and incentivises the PUE inclusion is a key enabler for the realisation of energy related livelihoods. On the basis of the findings from a study conducted by Precise Consult¹⁸⁴, we recommend additional blended finance facilities for PUE technologies. The reason for this is that these situations often combine a lack of access to end-user finance and carry a perception of high risk by the private sector. Consequently, a two-pronged blended Result Based Financing (RBF) scheme, as indicated in the below figure, can be explored. This blended RBF scheme will incentivise the private companies to step out of their comfort zone, and MFIs will allocate lendable funds for end-user financing. Under the scheme proposed, the roles of each actor are specified below.

GIZ and ESDS will be in charge of:

- 1. Mobilising the fund,
- 2. Designing the RBF programme,
- 3. Stakeholder consultation,
- 4. Floating a tender for RBF funding, and
- 5. Allocating funds for counter-guaranteeing MFIs.

Private companies will be in charge of:

- 1. Putting in place channels to provide product(s) and service(s), and
- 2. Selling product(s) and service(s) for eligible customers who get financing from the MFI.

MFIs will be in charge of:

- 1. Allocating lendable loans,
- 2. Approving loan requests for end-users who meet the minimum requirement, and
- 3. Following up on repayment.

Figure 24: Proposed two-pronged blended RBF scheme for stimulating market based energy related livelihoods.



¹⁸³ Lighting Global, IFC, (2019), The market opportunity for productive use leveraging solar energy (PULSE) in Sub-Saharan Africa

¹⁸⁴ Ethiopia – Job creation through off-grid energy access (2021)

Recommendations for increased coordination between GIZ and other stakeholders

To promote market-based energy livelihood opportunities, coordination between GIZ, UNHCR, MFIs, GIZ/QEP, ARRA and other implementing partners in the refugee setting is required to create an interactive platform, to increase market led transactions of energy products and services. A steering committee composed of ARRA, UNHCR and GIZ at federal level needs to be formed to coordinate the following:

- ARRA needs to give permission to identified private sector energy actors to operate in the camp.
- MFIs and UNHCR can take advantage of cash based initiatives for energy loan repayments
- GIZ/QEP can support TVETs to give energy livelihood trainings

Additional recommendations

Certain potential businesses could be enhanced by PUE, such as solar grain mills, which need piloting to research and define a suitable business model that is appropriate for the Ethiopian context. Therefore, it is recommended that GIZ/ESDS launch a pilot project that involves an operator, such as a solar grain mill, to test and define the business model.

Table 31: Summarized recommendations for Ethiopia

Title	Creation of livelihoods
a. Advocacy for adjustments to regulatory conditions	Although Ethiopia ratified pro-refugee legislation, GIZ needs to use its bilateral agreement to engage the GoE in the implementation of the laws and the pledge to which the Government has committed to. ARRA needs to follow up the implementation of Gambella's share of 10,000 Ha land pledge of the government. In addition to this, refugee friendly entrepreneurship policy that requires lower capital investment is needed to foster refugees' participation in entrepreneurial activities.
b. Capacity building to increase employability	Training, awareness creation and capacity building on energy related livelihoods will expedite the job creation of refugees and host communities. This includes raising awareness and training (for local authorities and end-users) on energy technologies, services, business models; providing equipment and management skills development; business training to energy-based cooperatives; and training for stakeholders, including local government authorities. On boarding stakeholders in different sectors like the financial, energy, refugee, private and TVET sectors avoid fragmented and repetitive work. Working with GIZ/QEP to support local TVETs should be considered in order to ensure the supply of continued training to both refugee and host communities.
c. Conflict sensitive approaches	These include: designing projects that will reduce the utilisation of natural resources; designing interventions where hosts and refugees can complement each other; and making sure no one is being harmed from changing to new technologies and value chains.
d. Gender transformative measures	Providing different types of training and pro-women activities, like easier access to finance, to create more opportunities for gender transformative energy related livelihoods.
e. Identification of additional financing needs	Energy related livelihoods require lendable funds for end-users. Therefore, launching an RBF programme will stimulate the market.

6.2 Turkana West Sub-County in Kenya

Recommendation for policy intervention and advocacy for regulatory improvements

From the literature reviewed and the consultations undertaken, it is clear that there is goodwill to improve the regulatory environment for refugees in Kakuma and Kalobeyei. However, debate on the Refugee Act, 2019 in Parliament has not progressed, which would be necessary to anchor the policy recommendations in the laws of Kenya. GIZ should, along with other stakeholders, engage in dialogue with Kenya's policymakers and the Ministry of Interior and Coordination of National Government, under which refugee affairs are anchored, to create impetus in parliamentary discussions on the Refugee Act, 2019. The provisions in the Refugee Act, 2019 are comprehensive and the result of significant stakeholder consultations. Thus, if these changes are passed into law, it would address an array of the regulatory related challenges that are presently faced by refugees.

In addition, GIZ could engage with the Turkana County Government (TCG) and other stakeholders to pursue opportunities for greater engagement of refugees and the host communities in local markets. Although policy documents like the KISEDP pave the way for this integration, in reality, actual integration has not been realised. KISEDP is a core component of Turkana County's CIDP 2018/2022, which was instrumental in the inclusion of refugees in county governance processes. However, there is still fear on the side of host communities that refugees might take away opportunities from them. To counter this, partners under the potential coordination of GIZ should explore wider labour market expansion to increase economic opportunities.

Increasingly, there is evidence of a stronger policy and regulatory framework to promote private sector investments in the county. An example of this is the IFC Investment Climate Programme advisory agreement¹⁸⁵. The one-stop-shop Biashara Huduma Centre, provides:

- Information on regulatory services;
- business development and investment opportunities;
- concerns over access to land, water, energy, and internet;
- documentation and registration of businesses and community-based organisations.

This has been received as a welcome intervention by both refugees and the host communities. However, it is still not operationalised, and this process should be expedited by the National Government for the full benefits to be realised by both refugees and host communities.

Through greater policy dialogue and engagement, the TCG should be encouraged to improve present infrastructure bottlenecks, such as road networks, market infrastructure, boreholes, and the construction of TVETs. Notably, ESDS has been a critical partner of the TCG, particularly during the consultation process and drafting of the TCESP between 2020 and 2021. This engagement should be extended and include further support during implementation of the ESDS, which directly identifies infrastructure improvements as a potential game-changer for economic development in the county.

Recommendation for capacity building in the energy sector

Another opportunity for the ESDS to engage and coordinate with, is the multi-year partnership between the Government of the Netherlands, IFC and World Bank Group (WBG), International Labour Organization (ILO) and UNICEF. This partnership seeks to support inclusive jobs and education to empower refugee communities and host communities through skills transfer, creation of job opportunities and strengthening markets

¹⁸⁵ KISEDP Progress Report, 2018/2019

for youth entrepreneurship. GIZ, through ESDS, is well placed to provide capacity building support in entrepreneurship aimed at business incubation in partnership with these agencies, alongside the TCG. This is an ongoing process and ESDS should seek synergies with other partners to boost job creation.

Notably, Turkana West Sub-County has significant arable land 186. A feasibility study by UNHCR and FAO on agriculture in Turkana West led to greater partner investment in agricultural infrastructure, such as water dams, an earth dam and two water pans at Lotukutan and Nakidoekakumon. These interventions targeted 5,069 hectares of arable land in the Sub-County, for 12,517 farming households¹⁸⁷. Spate irrigation¹⁸⁸ was identified as particularly viable option, especially in areas near Kalobeyei Settlement, where lagga channels are sufficient to allow water collection and movement¹⁸⁹. A gap that remains unplugged in this promising initiative is to provide solar power for water access for agricultural, domestic and livestock use¹⁹⁰. Prioritised high value crop value chains include kale, tomatoes, okra, and traditional leafy vegetables. Other areas of entrepreneurial support for ESDS could include capacity development for community based enterprises and TVETs to support solar irrigation, refrigeration value chain, food processing and packaging. Other priority farming products listed include, beekeeping and honey processing, and poultry incubation. These have a high demand, and if developed to sustainable levels, can create jobs and enhance livelihoods.

Recommendations for support to agribusiness value chains

Community based groups, such as the Natira Self-Help Group, the Turkana Agro-Pastoralists Development Organisation (TADO), that have championed agriculture through irrigation, which requires additional support. Natira's horticulture project, which grows tomatoes, green leafy veg-

etables, onions, pea nuts and peppers, is already serving the local market and hardly meeting the demand, earning as much as USD1,000 in income per season. The group is already receiving support from organisations such as FAO and the Ministry of Agriculture in the form of improved seeds. However, there is the need for capacity enhancement that can be realised through ESDS for the group members to access labour saving technologies. These include solar irrigation pumps and jump planters, which would have a direct and positive impact on gender, given women's labour burden in agricultural production. Skills building in entrepreneurship and value chain strengthening through enhanced access to production inputs, value addition and agricultural processing equipment and skills, and enhanced access to markets were reported to make a significant positive impact for such groups¹⁹¹.

Recommendation for a conflict sensitive approach

There continues to be potential areas of conflict between the refugees and the host community. These are primarily fuelled by the feeling among the host community that the refugees live privileged lives, or receive more support¹⁹². These have led to conflict due to different uses of land. The host communities are largely nomadic, while the refugees practise sedentary agriculture, and have smaller portions of land allotted to them. Conflicts arise as a result of limited natural resources and increasingly reduced grazing areas for the host communities. To contain this situation, there have been significant efforts between the TCG, UNHCR and other actors aimed at increased integration between the refugees and the host community. The KISEDP initiative is a good example of these efforts. ESDS should continue with this approach and partner closely with UNHCR, and continue to simultaneously empower both the refugees and the host communities. A twin approach that targets projects among both sets of communities is critical in addressing the perceived imbalances in the local development approaches, such as those interventions by ESDS.

¹⁸⁶ FAO, 2018

¹⁸⁷ FAO, 2018

¹⁸⁸ Spate irrigation relies on diversion of flood water from the main river course to a farming area

¹⁸⁹ FAO, 2018

¹⁹⁰ KISEDP, 2018:6

¹⁹¹ Source: Field work data collected in October 2021

¹⁹² Source: Field work data collected in October 2021

Recommendation for gender transformative measures to promote energy related livelihoods

Traditionally, the means used to improve livelihoods for refugees often focused on improving the employability, skill sets and know-how of the refugees. If not properly planned, similar interventions in the past led to several people starting up the same income generating activities, leading to an oversupply of similar products and reducing the competitiveness of respective business offerings. Instead, the focus should be on pushing interventions that are targeted, whilst also teaching skills based on the product and skills gap in the market¹⁹³. ESDS could partner with the Don Bosco and St. Francis of Assissi TVETs, to boost energy-related courses on their curriculum. More women should also be enrolled in technical training on energy, a clear area where women relative to men, have a skills gap¹⁹⁴. Female entrepreneurs particularly require building skills in the following areas;

- Preparation of bankable business plans;
- Assistance in packaging their business plans for presentation to local financial institutions;
- Entrepreneurial skills, including basic record keeping and tracking credit repayments;
- Provision of an interface with financial institutions to develop innovative loan products for women and youth¹⁹⁵.

There is a need for TVETs to design entrepreneurship programmes that target female entrepreneurs. Such programmes should include (i) flexible repayment schemes to suit the daily wages associated with the majority of female-owned small businesses, (ii) innovative financing, (iii) consideration for gender preferences for PUE appliances and (iv) technology preferences for women-led enterprises.

Table 32: Summarized recommendations for Kenya

Title	Creation of livelihoods
a. Advocacy for adjustments to regulatory conditions	Clearly, the Kenyan regulatory environment is constraining refugees. GIZ is well placed to support a coordinated approach along with UNHCR and other agencies to lobby the Government of Kenya to establish a more refugee friendly environment. Particularly with regards to accessing work permits, identity cards, the full set of mobile money functions and easing restrictions on movement.
b. Capacity building to increase employability	Through support to TVET, ESDS could boost skills building for youth in various areas including ICT, and sales and maintenance of off-grid solar products to ease youth and women's entry into energy supply chains.
c. Conflict sensitive approach to promote livelihoods	Given sensitivities and potential conflict between the refugees and the host community, often arising as a result of limited natural resources and increasingly reduced grazing areas for the host community, ESDS' planning must be attentive to this situation. A twin project approach that targets both sets of communities is critical in addressing any perceived imbalances in local development processes.
d. Gender transformative measures	These measures include boosting women's skills, access to financing that is affordable, innovative financing for women owned businesses to boost their utilisation of PUE appliances and support to women's associations. These have the potential to alter women's livelihoods through group based entrepreneurial support, financing and engagement in higher levels of agribusiness, energy and other value chains.
e. Identification of additional financing need	Access to financing remains a core contributor to limited participation in business for both the refugees and host community. At the core of this gap is limitations in access to mobile money, permits and movement restrictions. Once these enablers are unlocked, financing will be easier to access.

¹⁹³ Nuts, 2017

¹⁹⁴ Schneider, 2018

5.3 Terego and Madi Okollo Districts in Northern Uganda

Recommendation for policy intervention and advocacy for regulatory improvements

GIZ and UNHCR could add value by clarifying whether refugees need **work permits** or not, and especially the best way for refugee business owners and organisations to register as mobile money, **banking**, and solar solutions agents. Potentially they could advocate to influence the required regulatory adaptations and/or implementations.

It is recommended that GIZ works with the Ministry of Education, Ministry of East African Community (EAC) Affairs and the Inter-University Council for East Africa (IUCEA) and other stakeholders to speed up implementation of the EAC Single Education Area. This would include the domains relevant to the energy sector and livelihoods (energy, ICT, agriculture, business administration) and to support refugees to undertake remedial courses required to attain recognition of their professional qualifications attained outside of Uganda in these domains.

Recommendations for capacity building in the energy sector and other complementary topics

We strongly recommend capacity building of the humanitarian and development organisations, as well as of the consultants working with refugee populations in the domains of livelihood and market development. This should focus on the potential of PUE in the various value chains and the way to address those following good practices identified. Through on-site research and interviews, several areas requiring capacity development have been identified:

- A mix of five critical skills, attitudes, behaviours, personal qualities and mindsets that individuals use to be successful across different situations in work and life 196, including: positive self-concept, self-control, communication, social skills and higher-order thinking (which includes problem-solving, critical thinking and decision-making). From experience working with refugees, a sixth one should be added; which is the improvement of livelihoods.
- Business, financial and digital literacy, ensuring that participants:
 - Have basic financial skills to manage their money, such as record keeping, budgeting and setting goals;
 - Encouraging basic knowledge of the importance of saving to help weather dayto-day shocks or assist participants with bigger saving goals;
 - Enabling refugees to become entrepreneurs, so they can build, run and grow sustainable businesses;
 - Taking participants along a path to setting up savings groups (for example VSLAs) or engage with a SACCO; and
 - Accessing and managing credit through microfinance initiatives, including managing their financial services through mobile phones.
- Vocational training and market linkages along agricultural value chains: provide market system facilitation, coordination, and a package of enterprise development solutions tailored to the needs, capacities, and opportunities available to different target groups. For the different value chains and segments, technical and business cases will be developed to link the

¹⁹⁶ What Works in Soft Skills Development for Youth Employment? Published by the Youth Employment Funders Group (YEFG) in partnership with the Mastercard Foundation, https://mastercardfdn.org/wp-content/uploads/2018/08/soft-skills-youth-employment-accessible? ndf

Lippman, L., Ryberg, R., Carney, R., and Moore. K., Key "Soft Skills" that Foster Youth Workforce Success: Toward a Consensus across Fields (Washington, DC, USAID/Child Trends/FHI360, 2015). This study included not only youth's success in obtaining a job, but also promotion on the job, wages/income, and entrepreneurship success. https://www.usaid.gov/sites/default/files/documents/1865/KeySoftSkills.pdf

private sector to youth and women (emerging entrepreneurs, households and SMEs) and other system players (local government). These can demonstrate cost-sharing opportunities to reduce private sector risk and create incentives that foster inclusive and sustainable business models. To implement those business cases along the selected value chains, deals with on and off-farm private sector actors will be signed, the capacity of the project staff and government will be built, and coordination between stakeholders will be provided.

Building partnerships and organisational capacity to sustain energy and natural resource management programmes. Thus, mainstreaming energy and environmental issues into all activities to build community resilience. Key training areas envisaged include: community environmental action planning; PUE for livelihoods and agricultural diversification; development of woodlot and forest management plans; stove construction and repair; establishment and management of community structures; participatory monitoring and evaluation; management of energy systems such as solar powered facilities; the production and use of mud bricks and/or inter-locking stabilised soil blocks; community forestry in relation to carbon financing; and beekeeping.

We strongly recommend developing the local competencies to sustainably provide these capacity building efforts, so as not to depend on international funding. Then instead, they can become sustainable incubators and accelerators for social enterprises along value chains, via capacity building, financial education, small business incubation and financing, market linkages and access to finance.

ORecommendation for conflict sensitive approach

The report has highlighted several potential conflict sources between refugees and host communities, mainly related to land, firewood resources and assaults on refugee women looking for firewood. We must also keep in mind multifaceted potential conflicts between refugees' clans (mainly South-Sudanese), also linked to Ugandan clans and tribes. We recommend integrating this dimension into different stages of the projects¹⁹⁷, as outlined below:

- A conflict analysis of the relevant sub-region, district, sub-county, parish, or village must be included in needs assessment, development, implementation, and monitoring and evaluation.
- The more participatory the conflict analysis, the more relevant it will be. So sufficient time and resources for the analysis must be allocated, while ensuring the participation of key stakeholders and beneficiaries.
- Conflict responsiveness must be mainstreamed into activities by linking the conflict analysis findings to key parameters. For instance: what the programme or project will do; who will implement it; who the beneficiaries or participants will be; where, when, and how it will be implemented. This would allow flexibility and adaptability to potential changes in context and relationships.
- Activities must target beneficiaries in a conflict sensitive way by identifying the impact of the activities and outcomes on key relationships. For example: like those between direct and indirect beneficiaries; between beneficiaries and surrounding communities; between local government and communities; and between different communities in the target area.
- Activities must favour inclusive partnership-building interventions.
- Implementers must consult and communicate frequently and openly with relevant stakeholders and ensure transparency by sharing information about activities proactively and

¹⁹⁷ Northern Uganda Conflict Analysis, Advisory Consortium on Conflict Sensitivity (ACCS)

in locally relevant ways. This could include, local radio or leaflets in local languages instead of posting information on a website.

Recommendations for all stakeholders to take transformative measures for women, youth, and newly arrived refugees to promote energy-related livelihoods

Evidence has suggested that reducing barriers for women in the workplace significantly boosts welfare and growth. Programmatic recommendations for UNHCR, development partners and Energy Service Providers (ESP) to support enterprises and employment opportunities for women should address these barriers. It can take the form of ESP shops, a small business owner becoming an agent and VLSAs / SACCOs developing a role of (master) agents. Special attention to the last mile delivery for energy and other essential goods and services (communication, finances, etc.) through for example super and master agents ¹⁹⁸ can open important opportunities.

More attention should be given to linking youth to the labour market. As many young people leave school early and have no qualifications, second-chance programmes can help individuals increase their formal education, obtain recognised certification and improve their chances of finding a job. Additionally, the expansion and strengthening of BTVET programmes and accreditation to include refugees should be explored.

In addition, assessing refugees' skills early and providing up skilling training can help refugees get better jobs and wages right from the start. Studies show that early investment in skills assessment, training and labour market integration activities can help to promote quicker transition in employment. Using a standardised approach to measure skills upon registration of refugees can help limit the time needed to match labour market skills requirements.¹⁹⁹

Identification of financial needs

Limited access to capital, as well as appropriate financing schemes, are key constraints to the growth of energy related livelihoods. The refugees and hosts communities currently address them mainly through VSLAs and SACCOs. They would greatly benefit from linkages with formal financial institutions, which would provide security to savings and adapted credit to develop activities.

Presenting options for Ugandan financial institutions to incorporate refugees into their clientele is an important way to increase refugees' access to microfinance. For example, through roving and fixed agents, as well as service points.

As an intermediary step for including refugees as a banked population, organisations serving refugees could act as financial guarantors for refugee entrepreneurs. Partnerships with banks or MFIs could be formed, and money pools that currently exist in organisations, such as JRS and InterAid, for loans could be used instead as a guarantee for loan repayment.²⁰⁰

^{198 &}quot;Super Agents" are companies to recruit agents for the purpose of agency banking (i.e. provision of financial services within communities on behalf of banks) of mobile money issuers or energy service providers.

"Master agent" is a (agency banking, mobile money or energy provider) agent who controls the operation. of other sub-agents.

¹⁹⁹ UNHCR (July 2021), Uganda knowledge brief: using socio-economic data to promote employment solutions for refugees in Uganda

²⁰⁰ Easton-Calabria, E (2016). Refugees asked to fish for themselves: The Role of Livelihoods Trainings for Kampala's Urban Refugees, University of Oxford

Table 33: Summarised recommendations for Uganda

Title	Creation of livelihoods
a. Advocacy for adjustments to regulatory conditions	Clarification on whether refugees need work permits or not, and especially the best way for refugee business owners and organisations to register as mobile money, banking, and solar solutions agents. It also reiterates the importance of the Ministry of Education, Ministry of East African Community (EAC) Affairs and the Inter-University Council for East Africa (IUCEA) and other stakeholders to speed up implementation of the EAC Single Education Area in the domains relevant to the energy sector and livelihoods.
b. Capacity building to increase employability	Building the capacities of the humanitarian and development organisations, on energy-related livelihoods along value chains. It would include business and vocational training and support, market linkages to the private sector and other system players, like local government. Finally, it's important to build local partnerships and organisational capacity to sustain energy and natural resource management programmes, as well as mainstreaming energy and environmental issues into all activities to build community resilience.
c. Conflict sensitive approach to promote livelihoods	Carry out a conflict analysis of the relevant area and make the conflict analysis participatory. Conflict responsiveness must be mainstreamed into activities by linking the conflict analysis findings to key parameters. Activities must target beneficiaries in a conflict sensitive way by identifying the impact of the activities and outcomes on key relationships. Activities must favour inclusive partnership building interventions. Implementers must consult and communicate frequently and openly with relevant stakeholders and ensure transparency.
d. Gender transformative measures	Transformative measures for women and youth are especially crucial, as reducing barriers for women in the workplace significantly boosts welfare and growth. Second chance programmes can help women and especially female youth increase their formal education, obtain recognised certification, and improve their chances of finding or creating a job. In addition, assessing refugees' skills early and providing up skilling training can help refugees get better jobs and wages right from the start.
e. Identification of additional financing needs	Limited access to capital, as well as appropriate financing schemes, are key constraints to the growth of energy related livelihoods. The refugees and host communities currently address them mainly through VSLAs and SACCOs. They would greatly benefit from linkages with formal financial institutions that would provide security to the saving and adapted credit to develop activities.

5.4 Global recommendations

The most certain and efficient measures ESDS and UNHCR can take are at system level, and related to implementing good practices established by previous energy related livelihood projects. This should lead to:

- Scaling the already proven models and interventions,
- Continuing to test new models and interventions.
- Improving the sharing and creation of learnings,
- Collectively triggering more impact, by exploring partnerships and joining efforts.

Following the good practices identified and captured in recent publications, as well as the country specific recommendations highlighted above, there are a few global recommendations that we would like to summarise here:

GIZ and UNHCR can advocate for governments, national and local as appropriate, to improve regulatory frameworks (or for enforcement in the regional local laws) that are conducive to the creation of livelihoods in the energy domain. Examples range from implementation of land allocation policies in Kenya, operationalisation of the one-stop-shop Biashara Huduma Centre in Kenya and clarity regarding business registrations in Uganda.

GIZ and other humanitarian and development organisations should promote and support locally-led development. This can be carried out by engaging with refugees and host communities, local organisations and governments to understand their main challenges, solutions and priorities. Thus, they can take a lead role in the design, prototyping, piloting, and evaluation of interventions. Success stories can be looked at and supported, such as the examples highlighted in this report, including the Raphael recycling plant in Kenya and the businesses that have been started thanks to MIT – Lab CCB Training.

Figure 25: Process towards locally led development (adapted from USAID).

Informed	Consulted	In partnership	Delegated power	Local leadership
Local actors receive information regarding the projects and may share their views which may or may not be considerd of acted on.	Local actors share their views and they receive feedbacks on how their inputs have been integrated.	Local actors are part of a formal system to share information, discuss important issues and make decisions.	Local actors take the lead in designing, making decisions and taking action within jointly agreed parameters.	Local actors design and manage the initiative with external support.

GIZ and other actors should strengthen local innovators' capacity by equipping local innovators with the skills, tools, and funds needed to mature their entrepreneurial ideas, which will lead to the most relevant and radically different solutions. This may require a rethink of the current investment strategy for a long-term optimised outcome²⁰¹. Develop skills for entrepreneurs so that they progressively participate in the decision-making, become partners and potentially lead the market interventions. Specific examples of capacity building measures and topics have been highlighted above for the three target countries of this report.

Adopt a market system approach, by shifting the final aim of the energy product or service, and instead having a focus on end markets and the changes needed at the systemic level. This will imply understanding the role of value chain governance, recognising the importance of relationships and participatory processes. As well as, facilitating changes in stakeholders' behaviour and relationships, targeting leverage points, and empowering the different actors involved, including the private sector to facilitate market-based initiatives.

Carefully consider the length of interventions in the design phase so it is sufficient to build structural and sustainable improvements. Short project timelines and changes in funding priorities affect the project results and the progress towards laying market foundations. ²⁰² This is the first recommendation, for example, from assessing the scalability of the pilot performed by Mercy Corps in Bidibidi, to tackle the reliance of energy access on the provision of a subsidy, with a model that connects the contract length to the availability of a subsidy. ²⁰³ The grant implementation period being too short is also identified as a challenge by

two grantees of the USAID (2020) De-Risking Pay-As-You-Go Solar Home Systems in Uganda Refugee Settlements Project²⁰⁴.

Strengthen coordination between humanitarian, development and private stakeholders. GIZ can advocate to avoid market distortions, due to giveaways, and ensure price alignment across suppliers. As highlighted in the ESDS commissioned End User finance Report, UNHCR can also strengthen coordination among these actors as programmes are designed and proposed to avoid duplication and foster sustainable approaches from the ideas and conception stage. Concrete examples have been provided in the country-specific recommendations.

GIZ can work together with the private sector to demystify perceived regulatory restrictions for FDPs. This includes issues like their right to work, free movement, land ownership, businesses permit, and challenges for companies to enter the market, such as obtaining a license to operate in these settings and hiring local people as sale agents. Support can be put in place to collectively analyse results (vs objectives) and define corrective actions to be put in place, and understand and tackle persistent barriers.

Collectively address the most challenging factors for local communities to develop livelihoods using sustainable energy solutions. For instance: (i) regulatory constraints and the enforcement of laws and regulations on the ground, whilst understanding from communities what barriers persist; (ii) putting in place end-user finance mechanisms that facilitate and promote the integration of PUE; (iii) support the development of the last-mile distribution network with solutions for refugees to be agents, diverting funds to support companies to reach the last mile, while creating job opportunities for hosts and refugees.

^{201 3} lessons learned on integrating innovation into the Uganda refugee response by Charlene Cabot, Emma Pfister (10 February 2021)

²⁰² EnDev (2020) Humanitarian Energy: Energy for microenterprises in displacement settings

²⁰³ Bansal A., Bertagnini IV A., Das S., Haq F., Thargay T. (2020) EmPower Bidibidi, assessing the scalability of the Pay-As-You-Go model in refugee settlements, University of Columbia

²⁰⁴ USAID (2020) De-Risking Pay-As-You-Go Solar Home Systems in Uganda Refugee Settlements Project, final report

6 Conclusions

Access to energy has multiple benefits that can improve peoples' livelihoods. In the long term, increased energy access stimulates economic activity in communities, which in turn increases income. With higher income comes the potential to spend more on energy access, which can then boost revenue further, thus producing a continuous advantageous cycle. However, creating the conditions for refugees to access the labour market and enacting laws that recognise their right to work are also necessary, as well as enforcing those laws. This consecutively aims to foster local integration and increase self-reliance for displaced populations and host communities.

The main outcomes from the study show how the three countries of intervention vary in terms of energy-related entrepreneurial activities and opportunities. The market maturity for energy products and services, as well as regulation, within ESDS settings in Kenya and Uganda is more mature than in Ethiopia.

Gambella Region in Ethiopia: Taking into consideration lessons learned from energy livelihood projects implemented in various camps in Ethiopia, as well as the existing livelihood potential in Gambella region that can be enhanced by energy access, there are opportunities for creating energy-related livelihoods in the region. Existing projects include, UNHCR-Gaia Clean Energy camp based business associations, SHARPE project of PAYGO SHS distribution and UNHCR-IKEA Foundation energy cooperatives. There is a huge potential for energy-related livelihoods, including the assembly and distribution of energy-efficient stoves and carbonised briquette production and distribution, phone charging, hair cutting, refrigeration and other services that can be enabled and enhanced with access to energy.

However, there are still some regulation frameworks that are seen as a hindrance for refugees to do business, which include a lack of the right to use land, very limited options to move out of camps, being treated as foreigners regarding

entrepreneurship and a lack of access to finance and loans. ARRA need to take the leading role to implement Gambella's share of the 10,000 hectare land for refugees, which was pledged by the GoE. Additionally, ARRA needs to work on reforming policies to enable refugees to engage in more energy-related livelihoods. GIZ's role to stimulate energy-related livelihoods include last mile supply chain development, training and awareness on energy livelihoods, stakeholder on boarding, financing to foster the market, and to strengthen the cooperation across stakeholders to have a conducive environment. For instance, related to the enabling environment, allowing private companies to operate in camps, having MFIs in camps with clear procedures and pro-refugee KYC policies. Overall, GIZ's existing cooperation with UNHCR and ARRA is an advantage for building a better platform to coordinate and implement energy-related livelihood initiatives.

There are many clear opportunities for ESDS to create a lasting impact in Turkana West County in Kenya. Given the present goodwill to improve the regulatory environment for refugees in Kakuma and Kalobeyei, and with the large multi-stakeholder platform for interventions, ESDS has the necessary resources at hand to engage in a transformative way. The Refugee Act, 2019 presently in Parliament, the KISEDP initiative by the Turkana County Government, the multi-year partnership between the Government of the Netherlands, IFC and World Bank Group (WBG), International Labour Organization (ILO) and UNICEF, and numerous other initiatives involving micro-level enterprises that have been discussed in this report, which all present a fertile environment for ESDS work. GIZ, through ESDS, should now seek to complement their engagement through transferring skills, creating job opportunities and strengthening markets for youth entrepreneurship, for refugees and host communities. Projects such as those initiated by refugees including the NURU ICT Centre, Okapi Green Energy, Faulu CBO Chicken project and the Raphael Recycling project, as well as those of the host community

including the Natira Centre agribusiness group, the Don Bosco and St. Claire of Assisi TVET institutions, among others, all illustrate effective initiatives that could achieve more with greater support. They also point to the areas that require greater ESDS attention, due to their potential to significantly impact job creation and improved livelihoods through enhanced energy access.

In Terego and Madi Okollo Districts in Uganda, there are multiple opportunities for creating jobs and more revenue, by building on the early successes and lessons learned. In particular from work by AMPERE, USAID Power Africa, EnDev, and FAO, as well as increasing awareness of national policy level approaches, especially around the freedom of movement. The absence of clear guidance on work permits and the lack of legal documentation are the main constraints that refugees specifically face. Once again, ESDS has the resources that are needed to engage in this sector in a transformative way. The multi-year partnership between the Government of the Netherlands, IFC and World Bank Group (WBG), International Labour Organization (ILO) and UNICEF, and numerous other initiatives from micro-level enterprises discussed in this report, are all viable examples of a productive environment for ESDS to build on.

Lastly, pilot projects are underway with the Smart Community Coalition (SCC) Innovation Fund (with a grant from USAID Power Africa). EleQtra will deploy off-grid workspaces in the Arua and Lamwo settlements to provide access to "payas-you-use" appliances. PHB, Yelekeni Farmers' SACCO and BrightLife will develop a solar powered hatchery and provide individual SHSs for small-scale poultry farming in Kiryandongo. More ambitious projects can create jobs and revenue in the energy and other value chains. For example, mini-grids promoted by international development agencies, but not yet implemented in refugee settings, need to develop productive uses of their electricity to increase their revenue and become sustainable. GIZ, through ESDS, should now seek to complement their engagement through more education, capacity building and the transfer of skills to create job opportunities and strengthen markets for youth entrepreneurship, for refugees and host communities.

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8 Annexes

8.1 Annex I - Interventions conducted by other agencies/NGOs

Ethiopia

Gaia Clean Energy²⁰⁵: This Ethiopian Civic Society Organization (CSO), as an implementing partner to UNHCR up to August 2020, has distributed over 10,000 ethanol clean cookstoves, 3,000 briquette stoves and installed over 600 solar street lights and 500 solar home systems (SHSs)²⁰⁶. Also, with the support of both organisations, in 2018, refugee camp business associations were established by refugees and local host community members. Initially, they were formed in two camps, Sherkole and Tsore in the Benishangul region. Each association has 20 members (12 women and 8 men) with representation from both refugees and host community members (70 % and 30 % respectively). This is a unique effort that integrates the refugee and host communities in productive activities from which they can develop businesses and livelihoods.²⁰⁷ The main business activities of the refugee camp business associations are related to the Energy Value Chain:

- Ethanol stove assembly and sales;
- Ethanol fuel sales;
- Briquette production from waste or low-grade biomass resources (Savannah grass, corn cobs, other agricultural residues);
- 205 https://gaiaethiopia.org/; An Ethiopian Civic Society Organization (CSO) that aims to revolutionise the Ethiopian household energy economy by introducing and promoting clean, safe and affordable cooking and lighting technologies
- 206 https://projectgaia.com/wp-content/uploads/2019/03/ Assosa-Clean-Cooking-Program_Project-Gaiaupdated-3-12-19_for-web.pdf
- 207 https://projectgaia.com/wp-content/uploads/2019/03/ Assosa-Clean-Cooking-Program_Project-Gaiaupdated-3-12-19_for-web.pdf

- Briquette stove manufacturing;
- Briquette fuel sales;
- Account keeping and stoves maintenance.

Previously, UNHCR used to provide in-kind firewood.²⁰⁸ However, UNHCR shifted from in-kind provision of firewood to the distribution of vouchers (equivalent in value to what was previously spent) to refugees to purchase fuel and non-food items. This was based on a successful WFP cash-for-food system already in place, and was intended to stimulate the local camp economy and provide refugees with a greater choice of goods and services. The fuel vouchers are expected to cover most, but not all, of each refugee family's cooking energy needs.

During stakeholder consultations, Gaia Clean Energy highlighted that this change in UNHCR strategy inspired it to shift its approach from a donor-driven model to a market-based one. Gaia Clean Energy indicated that the new Cash Based Intervention of UNHCR has resulted in the creation of refugee and host-community cooperatives in three camps - one in Jijiga (Kebribeyah) and two in Assosa (Sherkole and Tsore). Each cooperative has 20 members, with priority membership afforded to individuals already involved in the fuel sector, primarily in firewood or charcoal sales. In Kebribeyah, where commercial stove sales focus primarily on the host community (with fuel sales also to refugees), 70 % of members of the cooperative comes from the host community and 30% are refugees. It was indicated that the 2019 refugee proclamation encouraged Gaia Clean Energy and UNHCR to form refugee business cooperatives/ associations, but the cash based intervention was the key enabler for the establishment of business cooperatives

²⁰⁸ In-kind firewood refers to the distribution of firewood itself to refugees. https://www.chathamhouse.org/sites/default/files/publications/2019-01-22-PatelGross2.pdf

With a grant from the IKEA Foundation, UNHCR developed livelihoods-based cooperatives in the Dolo Ado refugee camps, within the Somali region. The energy cooperative in the Dollo Ado area, for example, manages the mini-grids and charges its clients a monthly fee for electricity.²⁰⁹ The fee is calculated based on the number and type of appliances that the customer uses. For example, in the market, about 65 shop owners pay 100 Ethiopian Birr (ETB) for one light bulb and one electric socket. The computer centre is currently paying ETB 1,500 for five computers and has agreed to increase the fee to ETB 3,000 once they have doubled the number of computers. In Buramino, the energy cooperative is now installing a new mini-grid to serve the market. Furthermore, the energy cooperative in each camp is responsible for the procurement of spare parts and repairing any malfunctioning solar street lights. The cost of procurement and service is covered by the money that ARRA collects monthly from each household, (ETB 3). The energy cooperative has also set up solar charging shops in each camp.

The Prosopis firewood cooperative, funded by IKEA Foundation, was established with three key aims: (1) to reduce the negative environmental impacts of the invasive Prosopis juliflora tree, (2) to create livelihoods activities for refugees and host communities, and (3) to advance protection efforts for women previously exposed to risks associated with going into the bush to collect firewood. The business model for the cooperative involves sourcing and collecting Prosopis, selling the raw wood, and then transforming it into charcoal briquettes that can be sold for household use.

Market-based energy access project in Gambella, Dolo Ado and Jijiga camps

A UK's Department for International Development, ("DFID") funded project called "Strengthening Host and Refugee Populations (SHARPE)" is designed to strengthen the economies of host and refugee populations. The pilot phase is underway in Jijiga with SHARPE and Hello Solar, an energy technology distribution company that

distributes products through the Pay-As-You-Go (PAYGO) business model. The partnership seeks to increase access to energy and create jobs: Hello Solar distributes solar home systems (SHSs) through PAYGO, and SHARPE de-risks Hello Solar's business expansion by giving 100 % de-risk if a customer repatriates before the instalments have been fully repaid, moves to a third country or defaults on payments. After successful implementation of the pilot, there is a plan to scale up to the Dolo Ado and Gambella regions. Given that the pilot was only recently launched in March 2021, it is still in the beginning phases of implementation. Throughout the project, jobs are created for credit officers, marketing officers, and Hello Solar agents.

Supporting The Energy Needs Of Refugees And Host Communities Through The Establishment Of Sustainable Wood Fuel Management Strategies And Plans In Ethiopia

This is a FAO-funded project that was implemented from 2016 to 2019. The overall objective of the project was to provide options for the sustainable management of the supply and demand of fuel wood in the targeted areas to address the energy-related needs of crisis-affected households there. This was done through increasing access to and adopting improved technologies, fostering the rehabilitation of natural resources, including degraded ecosystems, forests and watersheds, and simultaneously providing protection to vulnerable groups of the population, in particular, women. The project was also aimed at addressing the problem of SGBV against women and girls collecting firewood by reducing the demand for wood, the exposure to GBV risks is consequently reduced. In addition, the project worked to address women's concerns for efficient and safe energy access.

²⁰⁹ Building Refugee Economies: An evaluation of the IKEA Foundation's programmes in Dollo Ado

Kenya

Industrialising Turkana West

The AECF and IFC-supported Kakuma Kalobeyei Challenge Fund (KKCF) among other things seeks to industrialise the Kakuma area, by attracting private sector organisations and social enterprises to invest. More importantly, it seeks to also specifically encourage and finance locally owned enterprises. There is an opportunity for GIZ to build synergies with the KKCF, which seeks to finance private sector organisations and social enterprises. The underlying goal of the KKCF is to spur market activation through the establishment of new or expansion of old businesses in Kakuma and Kalobeyei. There is an opportunity for GIZ to build synergies with KKCF and jointly spur market activation, with each applying their comparative edge²¹⁰.KKCF has identified the need to adopt a multi-stakeholder and multi-faceted approach in supporting business development in Kakuma and Kalobeyei, to ensure that all facets of business development (financing, skills-building, enabling environment, enhancing enablers such as energy, security, banking, ICT; are catered for). GIZ's objective to enhance jobs and employment creation for enhanced livelihoods can be strongly anchored within this broader market activation agenda.

Digital Agents for Energy + model

The Digital Agents for Energy + Model is a project of the Smart Communities Coalition (SCC), which is a public-private network that seeks to improve service delivery through innovative solutions that are premised on energy, connectivity and digital tools. The SCC applies a market-based approach to support and build economies in the contexts of displacement. Partners in the DAE+ pilot include the Norwegian Refugee Council, International Trade Centre, SNV, Total Access to Energy, Biolite, PowerAfrica, among a host of many other public and private institutions. These partners have come together to strengthen local businesses and entrepreneurs to play the role of last-mile distributors for clean energy products.

The DAE+ is in the pilot phase and is in place to provide lessons learned for replication once the DAE model is proven effective.

SNV's Market Based Energy Access Project

SNV, Netherlands Development Organization is implementing the Market Based Energy Access (MBEA) project, which seeks to provide clean, safe and affordable cooking and lighting solutions for refugees and the host community in Kakuma and Kalobeyei. The MBEA project seeks to facilitate enhanced access to household lighting, PUE adoption of stand-alone solar systems and cookstoves for entrepreneurship and social institutions, and support access to credit for suppliers and end-users. Consultations with SNV during this study revealed that there is untapped potential for job creation in cooking and lighting energy, particularly for women and the youth. Skills building in clean energy (specifically for cooking and lighting) entrepreneurship targeted at youth and women's empowerment was flagged as an opportune area for GIZ intervention.

Uganda

There is an interesting opportunity to forge on early successes and lessons learned along the energy value chain (especially from AMPERE²¹¹, USAID Power Africa²¹², EnDev²¹³, FAO²¹⁴) and potentially through the Clean Energy Challenge to scale through both Energy and Livelihood related interventions.

For example, AMPERE²¹⁵ built evidence for quality, affordable and reliable market-driven (including a subsidy at the start) energy access solutions in humanitarian response programming, implemented in Bidibidi by Mercy Corps Netherlands and SNV. 3,639 solar products were sold, 3,609 household (HH) lighting systems, 30 productive-use solar systems, in partnerships with D.light, Design Uganda Ltd and Village Power Uganda Ltd. The key highlights of their success have been to recruit female sales agents and targeting female-owned and led VSLAs, building a savings culture among members: up to 20 members had saved and paid for solar products.

The clean energy project spearheaded by the Worldwide Fund for Nature (WWF) has not been very successful, reaching only 50% of its targets because, compared with the rival products in the open market, the communities considered the prices of WWF energy products prohibitive. The private-public partnership initiative applying the civil society organisation model aimed at increasing access to renewable energy products such as

SHSs and energy-saving stoves. However, one of the supported energy kiosks opened its second location without support from the project, two community kilns were constructed at technical institutes to enable the local production of various ceramic products, five new local vendors were on-boarded, and sold more than 2,000 efficient stoves by May 2020. Efficient institutional stoves were constructed at three refugee reception centres and 20 schools to support the feeding of 1,200 pupils and 2,600 refugees.²¹⁶

RICE-West Nile (RICE WN) in partnership with GIZ EnDev and ICRAF has implemented two solar kiosks, in adapted portable containers, distributing solar energy and dual cookstoves. A local NGO manages the kiosk in Imvepi while in Rhino the kiosk is managed by a South Sudanese youth group. This created 8–10 job roles right from the start. GIZ ESDS has also implemented two solar-powered energy kiosks in Rhino Camp which were operationalised in May 2021 and are run by a team of refugee and host community members. Sales and level of activity are significantly higher in the kiosk that is managed by the group and run as a business as their motivation is high to achieve sales. 217

Another Clean Energy project supported by DRA and implemented by Save the Children, Enventure, and Raising Gabdho will set up energy kiosks in Kiryandongo and Yumbe 218.

²¹¹ Bansal A., Bertagnini IV A., Das S., Haq F., Thargay T. (2020) EmPower Bidibidi, assessing the scalability of the Pay-As-You-Go model in refugee settlements, University of Columbia.

²¹² USAID (2020) De-Risking Pay-As-You-Go Solar Home Systems in Uganda Refugee Settlements Project, final report

²¹³ Endev (2021) Humanitarian Energy: Energy for micro-enterprises in displacement settings https://endev.info/ wp-content/uploads/2021/04/EnDev_Learning_and_ Innovation_Humanitarian_Energy.pdf

²¹⁴ FAO and Practical Action. 2020. Key success factors and obstacles for FAO energy projects in humanitarian settings. Rome.

²¹⁵ Bansal A., Bertagnini IV A., Das S., Haq F., Thargay T. (2020) EmPower Bidibidi, assessing the scalability of the Pay-As-You-Go model in refugee settlements, University of Columbia.

²¹⁶ FAO and Practical Action. 2020. Key success factors and obstacles for FAO energy projects in humanitarian settings. Rome. http://www.fao.org/3/ca9913en/CA9913EN. pdf

²¹⁷ Endev (2021) Humanitarian Energy: Energy for micro-enterprises in displacement settings, https://endev.info/wp-content/uploads/2021/04/EnDev_Learning_and_Innovation_Humanitarian_Energy.pdf

²¹⁸ https://www.responseinnovationlab.com/innovationsmarketplace/clean-energy-kiosks

Several development partners and Non-Governmental Organisations are supporting the development of livelihoods for both refugees and hosts in various agriculture value chains:

- The EUTF livelihood programme implemented by ZOA focused on among others, supporting up to 200 groups in the seed oil value chain (ground nuts, simsim). The programme implemented solar irrigation on a pilot basis with 2 groups. From the interviews, farmers cognize that when the crops are sold in their raw state, they attract lower prices compared to when value is added. For example, a cup of ground nuts fetches ugx500 while ground nut paste can fetch up to ugx3,000. Due to the high cost of an energy powered grinder, groups would require access to funding so they can purchase the equipment.
- The Step-Up livelihood programme implemented by Palm Corps supports up to 75 refugee and host community youth to grow and sell tomatoes. Owing to the long dry season, the programme implemented the use of solar irrigation kits on all tomato farms. As a result, farmers can stagger planting and grow tomatoes in the dry season. With financing, they hope to acquire a solar drier so that surplus tomatoes can be dried and stored to be sold during the dry season.
- The GIZ RISE livelihood programme implemented by AFC is supporting 260 farmer groups in 5 districts of West Nile. In Rhino, the focus is on among others, high value crops like groundnuts, tomatoes and staple foods like cassava and sweet potatoes. Although no PUE is currently being used, irrigation pilot sites are in the technical design/procurement stage and the plan is that 15 % will be financed by the groups. The programme is also venturing into local processing of sunflower oil in Obongi. Beneficiaries also voiced the need for an energy powered cassava drier and grater as well as a ground nut shelling and grinding machine.
- The STRENPO livelihood programme implemented by RICE is supporting 40+ groups on different enterprises. Interviews were however conducted with beneficiaries of hibiscus, cassava, soy, plastics recycling, and clean energy cook stoves. Currently PUE technologies are not being utilised in any of the

- value chains. There is however need for a solar irrigation, drier, grater and milling machine for cassava as well as a solar grinder, processor, and refrigeration for hibiscus. For the clean energy cook stove, beneficiaries would like to learn how to build stoves with more than one hole. The same group of artisans is involved in plastics recycling and in great need of a plastic melting machine.
- The Supreme livelihood programme implemented by World Vision is supporting about 2,000 beneficiaries. Several enterprises are being implemented but the research focused on the vegetable value chain. 2 groups were interviewed and although none has implemented any PUE technology along the value chain, the group members voiced their need for solar irrigation considering the length of the dry season which negatively affects their yield.
- The Fresh Fruit Nexus livelihood programme implemented by Dan Church Aid supported 530 refugee and host community farmers to grow and sell ginger, turmeric, and oranges. Although the project ended in 2020, the farmers continue to farm. The interviews were conducted with implementers and the focus was on the sweet potato value chain. During its tenure the programme procured 4 solar irrigation pumps on a pilot basis. A comprehensive energy needs assessment study conducted in 2020, established that solar drying and milling will create efficiencies that will translate into higher prices and improved livelihoods.

Further pilots are underway with the Smart Community Coalition (SCC) innovation fund (with a grant from USAID/Power Africa: EleQtra will deploy off-grid workspaces in the Arua and Lamwo settlements to provide access to "pay-as-you-use" appliances. PHB, Yelekeni Farmers' SACCO and BrightLife will develop a solar-powered hatchery and individual SHSs for small-scale poultry farming in Kiryandongo' 219

²¹⁹ Smart Communities Coalition Innovation Fund, https://www.usaid.gov/powerafrica/sccif

Livelihood interventions - UGANDA

Livelihood and location	Achievement	Challenges	Success drivers & Solutions
Sustainable use of natural resources & energy in the refugee context[1] Market-based Energy Access in Refugee Settlements and Host Communities via solar-powered energy kiosks In Rhino camp Implemented by GIZ and ICRAF	 Set up of 2 solar-powered energy kiosks that sell quality solar products, improved cook stoves, cold drinks etc. The kiosks management teams were provided with specialised training. One of the kiosks is managed by a South Sudanese youth group, generating income for 8-10 people. The awareness-raising activities proved successful to increase their confidence in these products. 	 Short implementation timelines. Continuous support for kiosk managers. Poor infrastructure i.e. bad roads Lack of formal FSPs to avail credit. Low purchasing power and willingness to pay for energy products. 	 Utilisation of 2 different management modes allowed for a comparative analysis. Energy services (such as internet cafe, printing, photo shops, up-to 400 phones charged per day, etc.), don't need any kind of awareness raising. Conscious selection of refugee settlements.
Livelihood programme-WFP-Safe access to energy [2] Establishment of a green energy market that serves the local energy needs Implemented by WFP and International Lifeline Fund with support of OPM Implemented in West Nile, the southwest and Karamoja	 3 energy kiosks were established and as of 2020, more than 700 efficient stoves were sold by these kiosks. One of the supported energy kiosks opened its second location without support from the project 2 community kilns were constructed at technical institutes to enable the local production of various ceramic products, 5 new local vendors were on boarded and they sold more than 2000 efficient stoves by May 2020. 2,000 households received eco smart wood stoves. Efficient institutional stoves were constructed at 3 refugee reception centres and 20 schools to support feeding of 12,00 pupils & 2,600 refugees 	- Short timelines of projects and changes in funding can impact the project results To leverage the community kilns for the production of ceramic products the required quality, further training and collaboration with technical institutes was needed & last-mile distribution	- Different management models for the energy kiosks - Use of local materials and labour kept it affordable - 72 refugees and community members were employed as SAFE Community Trainers - Consumer awareness campaigns - Refugee policy
Agriculture livelihoods; RICE project Implemented by GIZ Rise in West Nile	 Market oriented agriculture (rice, cassava, horticulture, pigs, goats, bees, groundnuts, poultry, sunflower etc) Supporting 260 farmer groups (6,500 beneficiaries-50% host community and 50% refugees) Supporting 197 VSLAs (4,850 members who saved 892million in the first cycle) 	- Very remotely located meaning limited access to OGS and financing - VSLAs are very informal and lack structures	Train VSLAs members on saving for agricultural investments Assist VSLAs to register with the commercial office of the sub county Provide VSLA kit (stamp, book, etc) Assist with record keeping, share outs, constitution set up

Livelihood and location	Achievement	Challenges	Success drivers & Solutions
Clean Energy project; Setting up energy kiosks in Kiryandongo and Yumbe Implemented by Save the Children, Enventure and Rasing Gabdho	 Targeting 1,000 refugees (70% women, 30% youth) Issue vouchers which are used to acquire energy services and thus improve their welfare VSLAs come together to form coops that run the energy kiosks thereby boosting their income 	- Refugees tend to use clean energy solutions for not more than 3 months - Affordability challenge Failure to provide support and Maintenance services	Social behaviour change strategy to encourage long term usage of solar and cooking solutions Building the capacity of VSLA member through financial Literacy training Maintenance training for kiosk operators
Step up livelihood project-tomato farming by youth for income generation Implemented in Rhino camp by Palm corps	 5 groups comprising 75 youth targeted East and West seed company trained palm corps staff and youth farmers Previously 3 billion worth of tomatoes were imported into Arua. After the youth harvested, they were delivering a truck load of tomatoes every fortnight 	 Project funding was limited, and it lasted for 4 months Market penetration was a challenge High cost of inputs Limited availability of land 	 New funder (Ayuda en Accion) Staggering of tomato growing to ensure constant supply Saving for inputs
Tomato and Sesame seed project in Rhino camp implemented by Palm corps	Added 5 new groups comprising 75 youth targeted East and West seed company trained palm corps staff and youth farmers	- Market penetration - High cost of inputs - Limited availability of land	- Staggering of tomato growing to ensure con- stant supply - Saving for inputs
Agriculture livelihood project; i mplemented in Amudat and Acholi by ZOA and SolarNow	- Solar irrigation for small holders Acholi, Amudat and West Nile	- Lack of awareness of solar products - Lack of finance options	- Creating awareness of the solar solutions and their benefits - Linking groups to MFIs like RUFI and Vision Fund
ABSYR programme; implemented by ZOA in Bidibidi settlement	- Trained 200 village agents who went back and trained group members on how to make Lorena stoves.	- Resistance to use the more efficient energy cook stoves	Behaviour change training and awareness on the benefits of energy effi- cient cook stoves
Briquette making; implemented by ZOA in Arua and Yumbe	- Trained 3 groups in Arua and 2 groups in Yumbe how to make and sell briquettes as a means of earning income	- Lack of start-up capital	- Linking groups to finan- cial service providers
Solar for Agro forestry and energy efficient stoves; implemented in north- ern Uganda by LWF	Preserving the environment by discouraging tree cutting by encouraging purchase of energy efficient stoves. Providing subsidies to encourage uptake	Clean energy is expensive compared to cutting trees Changing attitudes is tough	- Awareness to commu- nicate the long-term benefits of clean energy
Energy efficient stoves; implemented in west Nile Uganda by LWF	- Trained artisans to make and sell stoves - Artisans would then sell to members of the community for cash, barter or instalments	- Affordability - Bad attitude towards clean energy due to lack of awareness	Awareness programmes to communicate benefits of clean energy Invite companies to showcase payment modalities

Livelihood and location	Achievement	Challenges	Success drivers & Solutions
Fresh Fruit Nexus- growing and export- ing oranges, sweet potatoes, Turmeric and Ginger Implemented by DCA in Arua and Terego	 Targeting 530 small holders from refugee and host communities Building strong cooperatives based on organic fruits 	- Farmers income isn't sufficient to purchase organic pesticides and solar irrigation pumps - Saving Groups save to postpone consumption	- Linking farmer cooperatives to MFIs - Training savings groups to transform from saving for consumption to saving for investment
Protection and restoration of the environment; Implemented by DCA in Arua, Terego and Yumbe	 Constructing Lorena stoves for sale @ 10,000 Ugx per stove Growing fruit trees that both conserve the environment/are a source income from fruit selling 	Lack of financing to purchase the stoves due to improper timing of savings cycle which pays out at the end of the year	- Build the capacity of sav- ings groups to transform from saving to postpone consumption to saving to lend and invest
Promotion of sustainable energy and livelihoods of refugees and host communities Implemented by DCA in Arua, Terego and Yumbe	 Briquette production Agro forestry (setting up wood locks and earning cash for work) Lorena stove construction-earn 10k per stove constructed 	- Lack of financing to purchase the stoves due to improper timing of sav- ings cycle which pays out at the end of the year	- Build the capacity of sav- ings groups to transform from saving to postpone consumption to saving to lend and invest
AMPERE[3] Build evidence for quality, affordable and reliable market-driven energy access solutions in humanitarian response programming. Implemented in Bidibidi by Mercy Corps Netherlands and SNV	 3,639 solar products sold - (3,609 HH lighting systems, 30 productive use solar systems Partnerships with D.light Design Uganda Ltd and Village Power Uganda Ltd to introduce their services in Bidibidi, including PAYGO solar products. Recruitment of female sales agents and targeting female-owned and led VSLAs. Building a savings culture among members-up to 20 members had saved and paid for solar products. 	The uncertainty around using refugee IDs versus national IDs during credit check Limited support to enter the camps and carry out market-development activities Taxes make the solar products costly	 Conducive energy policies e.g. Comprehensive Refugee Response Framework (CRRF) and refugee act. Ownership of SIM cards enables mobile payments High energy demand



Deutsche Gesellschaft für Internationale Zusammenarbeit (GIZ) GmbH

Registered offices Bonn and Eschborn

Friedrich-Ebert-Allee 32+36 53113 Bonn, Germany

T +49 228 44 60-0 F +49 228 44 60-17 66

E info@giz.de I www.giz.de Dag-Hammarskjöld-Weg 1-5 65760 Eschborn, Germany

T +49 61 96 79-0 F +49 61 96 79-11 15 On behalf of

