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Policy Brief

# Gender responsive resource recovery and reuse (RRR) in refugee settings in Africa – for food, energy, and climate resilience

## Summary

Sub-Saharan Africa, hosts about a third of the global refugee population. The refugee population is disproportionately women and children. Refugees are hosted in fragile arid ecosystems and increase the pressure on resources resulting in land degradation and conflict. Building knowledge and skills of refugee and host communities can shift the paradigm from 'land degradation' to 'land restoration and resilient livelihoods'.

The Resource Recovery and Reuse (RRR) in Refugee Settlements in Africa project was implemented in 2019-2023 in six refugee camps and settlements and their surrounding host communities in Ethiopia, Kenya and Uganda (Figure 1a.) The aim of the project was to enhance the resilience of these communities by introducing and implementing RRR innovations researched by CGIAR Centers, including the International Water Management Institute (IWMI), the Center for International Forestry Research and World Agroforestry (CIFOR-ICRAF), and the Alliance of Bioversity International and the International Center for Tropical Agriculture (CIAT), and offer innovative solutions for enhanced food and energy security from a circular bioeconomy perspective.

Using a gender-inclusive approach, IWMI and CIFOR-ICRAF, in partnership with the Alliance of Bioversity International and CIAT, Penn State University (PSU) and the Danish Refugee Council (DRC), conducted a series of hands-on capacity building activities in refugee camps and settlements and their surrounding host communities in Kenya (Kakuma Refugee Camp and Kalobeyei Settlement) and Uganda (Rhino and Imvepi Settlements) (Figure 1b). This was implemented in collaboration with UN Refugee Agency (UNHCR), UN Habitat, Food and Agriculture Organization of the UN (FAO), Department of Refugee Services (DRS) and the Office of the Prime Minister in Uganda. This was achieved through the Training of Trainers (ToT), a peer-to-peer capacity development model that reached 3,600 households directly and 200,000 households indirectly through various outreach channels such as radio programes and short messages on phone. Although baseline survey was conducted in Ethiopia, implementation of the innovations was not possible due to conflict.

The innovations improved access to locally grown food mainly vegetables and cleaner cooking energy systems while greening refugee settings through nature based and community driven adaptation. There is need for establishment of local seed and seedlings systems, RRR green jobs and continued community-driven science informed technical extension support.

*Figure 1a Map of RRR project sites*
***Source:*** *Njenga et al.. 2020.*

*Figure 1b. Kakuma and Kalobeye refugee settlements, Kenya. Photo by Takeshi Kuno*

## Context analysis, priority setting and stakeholder engagement

The project was officially launched at the inception workshop held in Nairobi, Kenya, on September 24, 2019, together with partners and stakeholders. Further stakeholder consultations were carried out with key partners at the project sites who included the World Food Programme (WFP); UN-Habitat; GIZ; Netherlands Development Organisation (SNV); Stockholm Environment Institute (SEI); UNHCR; Office of the Prime Minister, Arua, Uganda; Administration for Refugee and Returnee Affairs (ARRA), Gambella, Ethiopia; and the Food and Agriculture Organization of the United Nations (FAO). A survey comprising of 600 households was conducted to provide a context analysis in 2020-2021. The key challenges identified include **cooking energy poverty**, **hunger** and **land degradation** (Njenga et al. 2020).

During the project implementation, several reflective learning sessions were carried out through field studies, stakeholders consultations and follow up consultations with beneficiaries which revealed high levels of enthusiasm for practicing the RRR innovations (Adam-Bradford et al. 2022)

In April 2023, a feedback and dialogue workshop was conducted that brought together 56 in-person participants and another 11- online from UN agencies, non-governmental organizations (NGOs), government, training and research organizations, community based organizations, and the private sector (Figure 2). The discussions were around soil and water management, planting materials, cooking energy, resource mobilization and gender integration for sustainable development in refugee hosting landscapes. This dialogue emphasized that effective agriculture including agroforestry and sustainable cooking energy systems, requires several resource inputs: clean water, fertile soil, plant nutrient enhancements in some cases, and seeds or tree seedlings of appropriate, robust varieties, for sustainable biomass production and processing and efficient utilization for cooking energy. The project team shared lessons at the international Tropentag Conferences in 2020, 2022 and 2023 and other workshops.

The lessons were incorporated in the Kakuma Regenerative Strategy (2023) by UN Habitat and Turkana County Government, Intergovernmental Authority on Development (IGAD) Climate Adaptation Strategy 2023-2030 and UNHCR Climate Action Plan for the East and Horn of Africa and Great Lakes Region 2023-2028.

*Figure 2. Participants at feedback workshop helad at ICRAF 20.4.2023. Photo by Edwin Okoth/CIFOR-ICRAF*

## RRR innovations from a circular bioeconomy perspective

There is need to encourage and synergise the activities of crop cultivation, tree growing and the use of improved stoves and alternative fuels to enhance household food security, nutritional diversity, and cooking energy security, while minimizing anthropogenic footprints on the immediate environment (Figure 3). To achieve this the innovations implemented in the RRR cycle include: cultivation of small home gardens irrigated with greywater and growing vegetables, fruits and other multipurpose trees in the compounds; making briquettes from organic residues and soil; and building more efficient stoves from local clay. The innovations were sensitive to women's multiple chores in these harsh conditions.

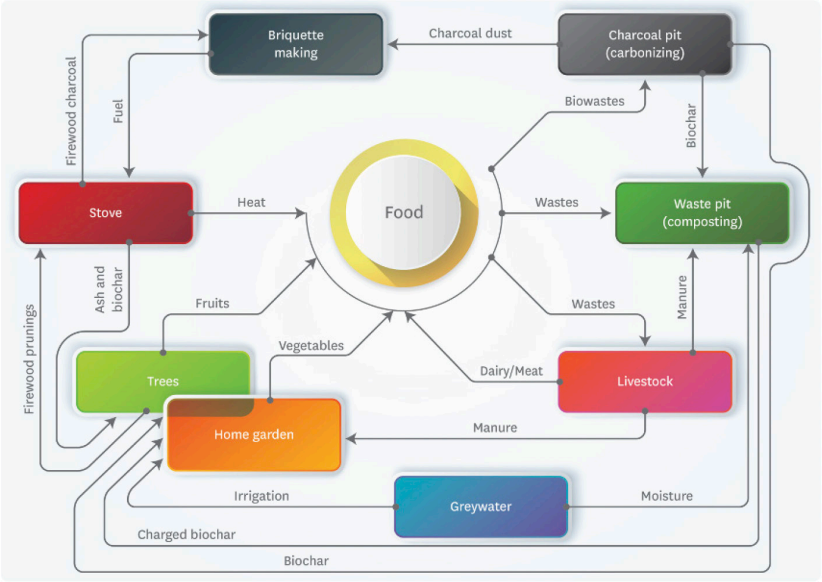


*Figure 3. Synergies of carbon, nutrients and water flows between regenerative activities at the household level Author: Adam-Bradford et al. 2022*

## Capacity building of refugee and host communities in RRR innovations

These capacity building activities were achieved through the Training of Trainers (ToT), applying a peer-to-peer capacity development model (Figure 4). Working with ToTs or community facilitators, ensures the equitable participation of men, women and youth in project implementation as well as in enhancing capacity and the transfer of knowledge and skills at local level. NGO partners supported the local extension system by following up and answering questions. They consulted the project technical team if required. This arrangement was also as a response to the Covid pandemic that inhibited international travel but in fact, it proved highly effective and should be included in future projects. As there is a need to reach multiple households for enhanced impact at the landscape level, the success of this project was measured by the number of households trained and benefiting and those indirectly reached, rather than by the area cultivated or the kilograms of vegetables produced. Over 3,600 households (approximately over 18,000 people) implemented the home gardening, agroforestry and cooking energy innovations and over 200,000 people were reached indirectly.

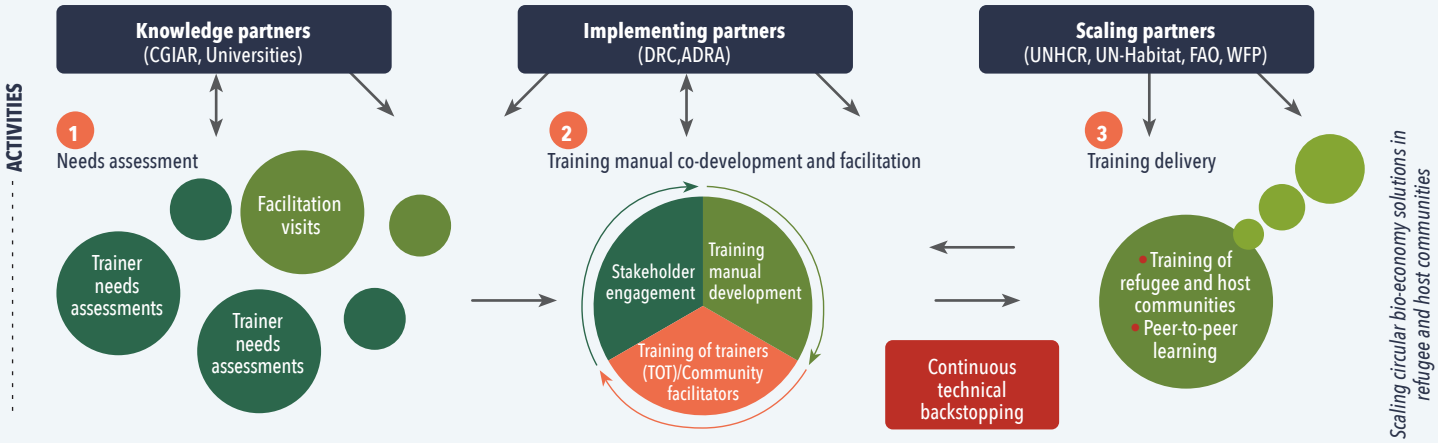


*Figure 4. Capacity building and scaling framework. Author: Gebrezgabher et al. 2024*

## Gender integration in the RRR project cycle

Gender integration and transformation was included from the initial conception of the project to implementation with reflective iterative learning that allowed ongoing self-correcting feedback as actions were modified to suit the needs of participants and the context for those individuals and communities as it became clearer (Figure 5). Training the project team on gender and social inclusion, having a gender researcher, budget and integrative approach throughout the project life and management cycle is critical as it enhances common understanding and approaches and includes target end users' perception to meet their needs and aspirations. This process was guided by a gender integration strategy developed for the project (Mendum et al. 2022).

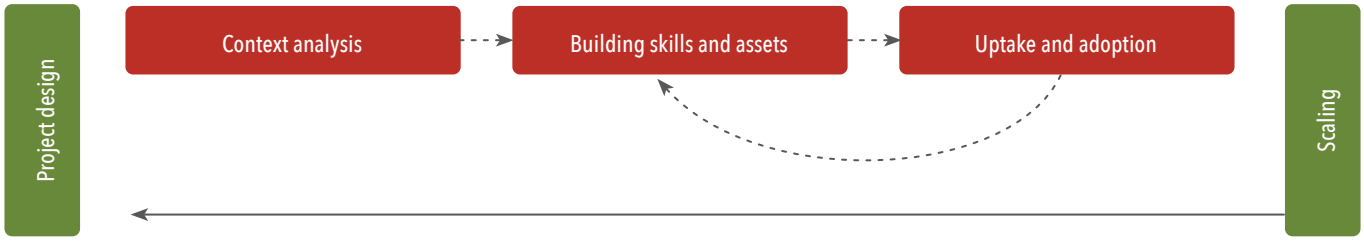


*Figure 5. Gender integration in the co-designing and co-implementation of the RRR innovations*

## Key messages

- Gender integration in the whole project cycle is critical as it enhances common understanding and approaches and includes target end users' perception to meet their needs and aspirations.
- Continuous stakeholder engagement enhances co-learning and is key to successful implementation of the project activities.
- Continuous training and involvement of the Training of Trainers (ToT) and the community facilitators is important to ensure the participation of men, women and youth during project implementation as well as in increasing the transfer of knowledge and skills at the local level.
- Integration of RRR innovations in stakeholders' food and, energy systems, and the immediate environment has the potential to build resilient landscapes and livelihoods in refugee hosting contexts. This combined approach also builds climate resilience.

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**Project websites:** http://rrr-refugee.iwmi.org
https://worldagroforestry.org/project/gender-responsive-innovations-soil-rehabilitation-alternative-fuel-and-agriculture

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