Sustainable use of natural resources and energy in the refugee context in Uganda

Project Title:	Sustainable use of natural resources and energy in the refugee context in Uganda
Implementation Period:	October 2017 – June 2018
Organization name:	Deutsche Gesellschaft für Internationale Zusammenarbeit GmbH (GIZ)
Project Strategy:	As aspects of water, energy and environment are heavily interlinked and dependent on each other (so-called "water-energy-environment nexus"), this project aims at improving the management and use of natural resources and energy in the refugee context through three pillars (Energy, Environment and Water, see below). It is intended to show how relief, rehabilitation and development can work hand in hand to reduce social and environmental pressure in the targeted refugee settlements and host communities and improve the well-being of beneficiary households by creating opportunities for income generation and improving nutrition and water quality and quantity. More precisely, this project seeks to provide sustainable access to cleaner energy solutions, and improved climate resilience for refugee and respective host communities through involvement of, amongst others, private sector actors and appropriate natural resource management. In addition, government agencies and local institutions will be involved to sustainably satisfy the energy and natural resource needs of refugees and host communities to reduce heavy reliance on humanitarian handouts and the current mining of natural resources. As such these interventions will work closely with the Office for the Prime Minister, local government, and NGOs as well as the private sector to build their knowledge and understanding of efficient and effective provision of cleaner energy and natural resources that maximizes efficient and sustainable service delivery, private sector investment and opportunity to both refugee and host communities. **Energy:** Improving energy access through greater private sector actor involvement and demand and awareness creation. This will involve awareness campaigns, design of appropriate stove models for the population under consideration, training of local stove artisans, support of local vendors of energy products/services and piloting of Energy Kiosks. **Environment:** Addressing environmental degradation, particularly through the purposeful use of woody perennials is key to creating a landscape that can sustainably provide refugee and host communities with water and energy and other essential needs such as soil that supports agriculture. Doing this requires social approaches, such as eliciting local knowledge and co-producing consensus for behaviour change with stakeholders

	including communities, agencies dealing with refugees and government. It also requires managing the biophysical environment. This refers to activities such as mapping possible areas for tree-based interventions, protection and regeneration of existing trees, and deliberate planting of trees and shrubs prioritized by refugees and hosts communities. Agroforestry (use of trees within agriculture) will be the driving concept for rehabilitating degraded lands. Tree planting and management will be linked with efficient production and use fire wood and charcoal under the energy component to create sustainability. **Water:** Bottom up approaches to improve water resource availability and management within settlements and surrounding communities – including innovative approaches (both private and public sector-focussed) to ensure better utilisation of available water for both WASH and productive use. In addition, this project is looking at improving the knowledge sharing between different actors that are active in water in and around the settlements. These three themes are, as stated above, interlinked. Tree cutting and environmental degradation for construction and energy purposes is abundant in and around the settlement areas in Uganda – these tendencies in turn severely impact ground water tables by limiting the ability to capture and filter rain water, amongst others. By including actors that are traditionally not active in emergency response, such as GIZ and ICRAF, the project will help to transition the refugee response over to the development sector for longer-term planning. This will contribute to closing the gap between relief, rehabilitation and development. In this regard, it will be of the utmost importance to strengthen and encourage institutional exchange (such as between OPM, UNHCR and the respective line ministries) and to compile a solid (data) base for future interventions and planning. Given the pilot nature of this project, this integrative approach will be tested and, if successful, could be replicated across refugee settlements in Uganda (both old and new caseloads), thus benefitting a wide range of both refugee and host populations. In addition, this project is piloting interventions at the nexus of humanitarian work and development planning, which is highly relevant in the context of piloting the Comprehensive Refugee Response Framework. The learnings from this pilot will be shared widely in order to spread the success and potential failures of the piloted approaches. In addition, the line ministries have already started exchanges about how to transition from emergency response (OPM) to development (line ministries). This pilot would further inform these long-term procedures.
Project: ➢ **Objectives** ➢ **Outcomes**	**Objective:** Piloting an integrated and holistic innovative approach to natural resource management (water, trees/biomass, energy) to sustainably improve access to water, energy and other ecosystem goods and services and create more climate resilient landscapes for refugees and host

➢ **Outputs**	communities. **Outcome (overall):** • Demonstrate ("proof of concept") sustainable measures for natural resource management (water, tree/biomass and energy) in refugee and host communities in Uganda with the potential for at least 15,000 beneficiaries. Through this demonstration and dissemination of learnings facilitate a transformational change in the status quo in this sector. **Outputs:** • Baseline assessment outlining and mapping urgent areas and opportunities for intervention. • Establishment of publicly accessible database recording studies and assessments completed with regards to water (such as hydrological baselines, Catchment Management Plans, groundwater maps, and similar). • Establishment of preliminary natural resource management structures (such as Water User Associations, Catchment Management Committees and/or environment management committees). • Improved watershed management planning and options for sustainable provision of water evaluated and piloted. • Initiating market-based delivery system for production and promotion of improved cook stoves and other cleaner energy options developed and piloted. • Agroforestry and other tree-based sustainable land management interventions (such as distribution of tree seedlings and increased knowledge) developed and piloted with at least 250 households; • Joint and separate trainings on water, energy and environment, including training existing NGO staff/ community workers in integrated natural resource management practices, using existing structures to add sensitization measures about natural resource issues • Capacity and involvement of partners, such as relevant Ministries and local governments, to address similar challenges evaluated and enhanced. • Compilation and dissemination of learnings from pilot to inform future interventions and policies.
Total number of beneficiaries (disaggregated by age, gender):	It is expected that this pilot will facilitate initial activities surrounding natural resources and energy, as well as starting to address the humanitarian and development nexus that would lead up to 15,000 beneficiaries experiencing improved climate change resilience and/or cleaner energy access as a result. Simultaneously, these and other more indirect beneficiaries will experience improvements in catchment planning and vegetation cover. This number of beneficiaries represents a small

	percentage (roughly 8%) of the population of both settlement areas (this project will adhere to the 70%/30% rule that was established by the CRRF), which will be identified during the baseline assessments in order to depict a representative sample for future up scaling of activities. It is expected that within these beneficiaries there should be a higher proportion of female beneficiaries – (due to a combination of over 80% of refugees being women and children, but also the main beneficiaries from water and energy improvements being women). The approach of the pilot will ensure that indirect beneficiaries will be significantly higher as it seeks to leverage in additional interest and resources through the strong emphasis of sharing learnings that will inform future interventions.
Area of Operations:	The intervention will focus on one newer refugee settlement area (high recent influx), as well as one long-standing refugee settlement area in order to evaluate the effectiveness of different interventions in the two contexts. Specifically, the interventions will be implemented in Imvepi and Rhino Camp refugee settlement, which are both situated in the Arua district Camp. These two settlements currently host approximately 110,000 and 93,000 refugees, respectively. The exact geographical area within Imvepi and Rhino Camp of intervention will be determined during the baseline and in coordination with OPM (settlement management) as well as, where applicable, the line ministries and/or the District Local Government or Arua.
Implementing Arrangements:	GIZ Reform of Urban Water and Sanitation Sector Programme (RUWASS), GIZ Energizing Development (EnDev) and the International Centre for Research in Agroforestry (branded as World Agroforestry Centre ICRAF). All the activities will be implemented in close coordination with relevant Government Agencies, such as the Ministry of Water and Environment, the Ministry of Energy and Mineral Development and other line ministries and agencies. Furthermore, all interventions will be coordinated with UNHCR and OPM given their respective mandate for refugees in Uganda.
Organization Contact Person	Jacqueline Lehmann, Technical Advisor, GIZ RUWASS Contact: jacqueline.lehmann@giz.de, 00256 77 671 87 37

Intervention Rationale

Context & Background

Uganda is among the top ten refugee receiving countries in the world, hosting refugees from Burundi, the Democratic Republic of the Congo (DRC), Rwanda, Somalia and South Sudan. Latest statistics estimate that Uganda is now hosting more than 1.25 million refugees, of which more than 900,000 have crossed the border from South Sudan

The high influx of refugees has resulted in exceptional constraints on capacities to deliver effective Water, Sanitation, and Hygiene (WASH) services to the refugee populations, as well as the host populations. Despite considerable efforts of humanitarian agencies, current demand in the settlements still far exceeds supply. WASH coordination at settlement level is done based on the cluster-lead model and under the auspices of OPM and UNHCR, but coordination of WASH intervention at a broader level (with MWE) is insufficient. A WASH gap analysis conducted by UNHCR revealed a 51% gap in the water supply as of June 2017[1]. In addition, day-to-day challenges include: long queues of refugees at water points sometimes leading to conflicts; long walking distances to find alternative water sources in case a source has failed; women and girls spending many hours waiting for water. Efforts have been focused on saving lives in an emergency context at the expense of catchment-based planning for long term water infrastructure. Implementing partners respond largely by drilling boreholes and tapping into rivers and streams. If this is not planned and implemented properly, this can severely affect the available water resources, not only in the settlements, but in the entire region. Because of a current lack of alternatives, WASH partners also continue to engage in costly and unsustainable water trucking. As of June 2017, water trucking accounted for approximately 35% of the water supplied in the settlements overall (representing a cost of about 2.5 M USD/month[2]), but as much as 61% in West Nile region.

Similarly, energy delivery in Ugandan refugee settlements and host communities remains a challenge. Despite ambitious plans through the UNHCR Safe Access to Firewood and Alternative Energy (SAFE) Strategy for Uganda, limited energy-related budgets are available. Furthermore, there is a lack of structures that facilitate self-regulative solutions independent of external support. Evidence suggests that the short-term approach applied by humanitarian organizations perpetuates a 'procure and provide' model for energy equipment distribution among displaced populations[3], with little follow up and success in terms of uptake. This means that often, the provided equipment goes either unused and/or is not fixed due to lack of sense of ownership – therefore not representing the most (financially) efficient solutions to address the problem. It is crucial to create solutions that satisfy demand and thus create self-sustaining productivity opportunities for cleaner energy options, agencies frequently rely on equipment donations with little consideration of local context and end user preferences. Market-based approaches carry the potential to effectively establish these structures and to change the local energy situation sustainably.

Finally, destruction of natural vegetation in and around the refugee settlements results from the need for land to settle and cultivate on and the need for biomass for cooking and poles for building. Loss of tree cover, some of it from critical riparian forest, leads not only to further exacerbation of climate change effects, but also influences groundwater by reducing infiltration and percolation. Further, it causes the loss of trees that are key to nutrition and incomes, such as Shea, and leads to soil degradation, undermining

[1] Total need across all refugee areas is 21,997 m3 at 20l/person/day, current supply is at 11,388 m3, current per capita water supply is at 16.7l/person/day.
[2] The exact cost of the water trucking are unclear, declared cost range from 2.5 M USD/month (UNHCR) to 5 M USD/month (USAID)
[3] Lahn, G.; Grafham, O. (2015): Heat, light and power for refugees. Savings lives, reducing costs. Chatham House Report for the Moving Energy Initiative.

the ability of refugees and host communities to produce some portion of their food requirements. A field mission revealed a strong need for seedlings. Natural vegetation can help improve livelihoods and productivity and reduce longer-term negative impacts. This could represent a sustainable solution which integrates with RHC needs, as well as creating local skills and productive opportunities.

Aspects of water, energy, forestry and environment are heavily interlinked and dependent on each other. The large influx of refugees in Northern Uganda is occurring in environments that are already experiencing soil degradation, loss of vegetative cover and water scarcity. The current solutions are expensive (e.g. water trucking) and not sustainable (e.g. high rate of deforestation for firewood, provision of free goods) in the medium to long-term. There is an urgent need for restoration and integrated management of natural resources as host-community relations, currently largely positive, depend upon there being enough natural resources to share.

This project aims to provide a holistic approach by bringing together development organisations with specialist experience in specific issues, such as forestry, cook stoves, solar products and water resource management. Most development organisations are not yet active in the refugee context which puts GIZ and ICRAF in an ideal position to reflect on current practices and pilot and then scale-up effective and sustainable development-oriented interventions around the water-energy-environment nexus at different phases of refugee operations (emergency, care and maintenance, and durable solutions). In the refugee realm in Uganda, other donors are starting to evaluate the nexus of humanitarian and development interventions, especially given the piloting of the Comprehensive Refugee Response Framework in Uganda. The project will ensure the dissemination of the learnings in relevant donor groups and with relevant ministries and authorities. In Uganda, certain line ministries (such as the Ministry of Water and Environment) have already started to evaluate the processes of transition from emergency response to development (as evidenced by a high level meeting between MWE, OPM, DLGs and development partners in August). In addition, other development partners have started to evaluate how to work in this space as well (as evidenced by a one-week field mission by USAID and subsequent meetings). In addition, several humanitarian actors (such as UNHCR and ECHO) have expressed their strong support for an initiative like this. All actors are keenly waiting on the learnings of this pilot.

Needs assessment (*please give your assessment of the humanitarian situation and how it is likely to develop over the funding period). Please limit to max 1 page)*

Overall, there is a need for a more consolidated approach to energy, water and environment issues in refugee-hosting districts. While issues of energy access and natural resource depletion impact all parts of Uganda, the rate of progression in and around areas with high influx of refugee populations is unparalleled. In addition, there is an even bigger need for improved climate resilience to changing weather patterns and greater economic productivity in rural areas in Northern Uganda, such as the areas of concern of this project.

Energy: The UN/ OPM Safe Access to Fuels and Energy (SAFE) strategy 2016-2020 has faced patchy implementation limited by a lack of funding and leadership/buy-in. Results from rapid Energy and Environment Community assessments conducted by UNHCR Uganda in August 2015 revealed that 97 % of refugees use firewood for cooking, this accounts for 60 % of household needs and people have to walk four to ten kilometres to access firewood. The situation has been exacerbated by the use of inefficient open fires and three-stone stoves by 65 % of refugee households. Wood consumption in and around the settlements surpasses natural replenishment and has consequently led to deforestation and forest

degradation and is contributing to conflict over firewood between refugees and the host communities. Results from FAO's Rapid Woodfuel Assessment 2017[4] (Baseline for Bidibidi Settlement) found an estimated average daily fuel wood consumption for cooking/heating of 3.5 kg per person. Given the climate variability and pressures on land in the corridor in which Imvepi and Rhino Camp settlements lie, this amount of fuel wood cannot be sustainably provided by the environment. The assessment also suggests mitigation measures, which has informed this proposal.

Water: A recent study about Water Resources Management in the refugee context in Northern Uganda[5] identified a number of challenges. The lack of involvement of the district local government staff as well as the deconcentrated structures of the Ministry of Water leads to uncoordinated water investments, which produce insufficient water supply. The accessibility of data remains a challenge for IPs, especially with regard to groundwater. As a result, IPs resort to water trucking, which is economically and ecologically unsustainable. Therefore, there is an urgent need to start medium to long-term planning procedures, encourage data sharing between all actors, and evaluate alternative means of service provision. Finally, the transfer of the established supply systems into long-term management structures needs to be planned and developed. At the same time, restoration efforts need to be kick started to ensure sustainable supply of freshwater for all users.

Agroforestry: So far, environment has been a low priority for refugee agencies and implementing partners because of the emergency context. However, actions to safeguard environment can be undertaken concurrently with emergency interventions and be intensified when the pressure of the influx abates and settlements close to new arrivals. In terms of environment, there is lack of joint planning between the water and natural resources sectors with, for example no visible existing or planed protection of the vegetation around the motorized boreholes. Tree-based interventions such as agroforestry have been demonstrated as a viable option for resilience and sustainability in landscapes with increasing human pressure. Agroforestry options that prevent sedimentation and support infiltration and percolation of water are essential, but have not been fully considered as yet. At settlement level, there is a need to map which areas are fit for providing a supply of wood and determine appropriate tree species to be planted. There are also huge opportunities for tree growing among host communities which if natured can potentially off-set wood requirements in refugee settlements and moreover provide income to households. A recent visit to Rhino Camp and Imvepi settlements revealed that already existing structures like tree nurseries are semi-abandoned. The suggested intervention will rehabilitate and upgrade the existing tree nursery currently managed by Arua District Local Government and located mid-way between the two settlements into a simple community learning center to facilitate information dissemination and adoption of tree-based interventions by both refugees and host communities.

Specific Objectives and Targets

The overall objectives and targets of this project is to pilot interventions around the so-called "water-energy-environment nexus" in the refugee context in Uganda. The specific targets outlined below have been informed by a mission to the Rhino Camp and Imvepi settlements in July/August 2017 and may be adjusted after a comprehensive baseline assessment.

The activities have been budgeted based on previous experiences by both GIZ and ICRAF in similar contexts. More detail on the budgets can be found in the separate budget sheet.

[4] UNHCR/FAO 2017. Rapid Woodfuel Assessment 2017 Baseline for Bidibidi Settlement, Uganda: Woodfuel supply/demand and screening of scenarios to improve energy access and reduce environmental degradation, 43p.
[5] IWMI 2017, funded by DFID under the ERKP, publication anticipated for August 2017.

The comprehensive baseline assessment will inform the exact area of intervention. In addition, this assessment will deliver a tailor-made intervention design that suits a demand-driven approach to market based interventions, where applicable, while focusing on income generating opportunities as well as sustainability of all interventions.

The rationale for the awareness activities is to highlight challenges, trends and build on existing community knowledge and fill gaps to enable households to make informed and more sustainable decisions about natural resource use in the long run. These awareness creation activities, which will disseminate knowledge in communities through discussions and other methods, is expected to promote attitude change and improve habits. Instead of building entirely new sensitization structures, this project will make use of already existing procedures (such as community health sensitization workers) and add messages with regards to the protection of natural resources, for example. The awareness activities will mainly target village heads, opining leaders, households and individual beneficiaries, and in the case of income generating activities, local market vendors, as well as potential beneficiaries and other energy product users within the settlements, host communities and private entrepreneurs' from outside with interest to do business in refugee settings.

All interventions have been planned with long-term development in mind – such as the support to the Catchment Management (e.g. Water User Associations) Structures that will ensure the kick starting of the long-term planning process of water use in the settlement area. In addition, this project will evaluate and include/build private sector wherever possible, such as by implementing the stove artisan training model to build local capacities in constructing low cost and affordable improved cook stoves for sustainable livelihoods.

Overall, this project will create learning pieces that should guide future interventions in the realm of water, energy and agroforestry at the nexus of development and humanitarian emergencies.

Sector	Specific objectives	Targets
Water Resources Management	• Integrated Water Resources Management structures and processes introduced	• Ensure involvement of Local District Governments by forming and supporting Sub-Catchment Management Committees, benefitting all water users across the Sub-Catchment • Support the establishment of Water User Associations • Development of publicly accessible database compiling existing studies/assessments in order to create a common knowledge base, benefitting and informing medium and long-term planning in the district and of humanitarian actors • Kick-start process of restoration of at least 20 ha in the most urgent areas in need of intervention (e.g. River Enyau), benefitting populations in both settlements
	• Aspects of sustainability in water service delivery, such as transition into government	• Rapid assessment of resource needs (both in terms of natural and financial resources) and governance structures

	structures and private sector involvement evaluated	completed, benefitting future district spending planning
Energy	• Improve potential access to modern energy services in refugee settings to enable households to make informed decisions about the purchase of an improved cook stove, solar product and/or other energy services/products • Local energy market structures for low-cost improved cook stoves and entry level Pico PV products established and/or strengthened • Local distribution chains for quality energy services/products improved	• At least 10 awareness activities conducted, benefitting at least 1,000 households with improved information about benefits of solar lamps and energy efficient stoves • Training of stove artisans, benefitting at least 50 individuals • Support to local vendors, benefitting at least eight individuals, and/or one to two Energy Kiosks piloted in each settlement (depending on the outcome of the market analysis) • Appropriate information on energy situation put in place for relevant actors to build upon to help create durable mid/longer-term solutions
Forestry and Agroforestry	• Assess current practices on tree growing among refugees and host communities • Map intervention sites and design and promote farm and landscape level tree-based interventions • Enhance capacity of implementing partners (use of already existing structures) and lead beneficiaries to facilitate adoption of tree-based interventions	• Household and farm surveys • Maps showing potential intervention sites • Designs for tree-based interventions in refugee and host community settings • At least 250 households selected and trained to pilot tree-based interventions • Training guides for tree-based interventions and raining of at least 50 implanting partners staff and 50 community facilitators and local entrepreneurs • One community learning center established and operationalized, benefitting both refugee and host populations • At least 100,000 preferred tree seedlings produced and distributed • Awareness materials created

Activities, Outputs and Impact

Long-term planning: This project aims primarily at bridging the gap between humanitarian and development programming. As this is a pilot, the activities do not aim at improving the mid to long-term situation with regard to natural resources management and energy. However, it seeks to develop

appropriate information and put in place relevant procedures which could be built upon to help create mid to longer-term solutions.

Sector	Outputs	Activities
Water Resources Management	• 2 Sub-Catchment Management Committees established • 4 Water User Associations established and different models piloted (e.g. incentives through linkage to "Village Savings and Loan Association" model) • At least 20 ha of crucial wetlands/riverbank and other ecosystem elements restored • Central database regarding natural resources management (studies, assessments, data) created and popularised • Potential for private sector involvement along the water and sanitation chain (including water supply, faecal sludge management) assessed • Capacity of key actors, such as the local units of the Ministry of Water and Environment and the Water Officers of the District Local Governments strengthened	• Support meetings and elections of Committees and information of communities, sensitization for Integrated Water Resources Management • Identify adequate communities to pilot linkage to VSLA model, amongst other, for Water User Associations • Conduct a rapid assessment to create an overview of environmental degradation areas in the Catchment and in and around the refugee settlements (such as river banks) • In accordance with the corresponding Sub-Catchment Management Committees, identify and restore crucial wetlands/riverbanks for restoration • Obtain already existing reports to upload into data base and identify crucial data gaps • Report on potential for private and public sector involvement along the water and sanitation chain (including water supply, faecal sludge management) • Rapid Assessment on roles and responsibilities with regards to water and sanitation provision in the refugee context in Uganda
Energy	• At least 10 awareness activities conducted, materials produced and disseminated, and at least 1,000 HHs reached with information on benefits of solar lamps and energy efficient stoves • Appropriate stove model designed and at least 50 stove artisans trained • 8 local vendors of energy products supported and/or 1 to 2 Energy Kiosks piloted in each settlement depending on the outcome of the market analysis	• Baseline assessment, including general settlement assessment survey; household energy needs assessment and market analysis. • Design & pilot appropriate stove model for target population • Establish selection criteria for stove artisans (trainees). The selection criteria for the stove artisans will be based on the ability to communicate (read and write; at least to P.3-4 level), interpersonal, community level mobilization and leadership skills with a good social standing among the community. Intensive training of selected trainees • Select local businesses dependent on market and settlement analysis • Support selected local businesses by for example linking them to distributors of quality

		energy products and/or business trainings • support the local businesses dependent on needs assessment • Pilot Energy Kiosks in cooperation with partner organisations
Forestry and Agroforestry	• Current practices, priority tree species and planting niches among refugees and host community identified • Tree-based intervention sites mapped, suitable intervention designs developed and 250 lead beneficiaries trained to pilot interventions. • At least 2 training guides on tree based interventions produced, one community learning center established and 100,000 selected tree seedlings produced • At least 3 information materials produced and disseminated, 8 awareness events conducted, 750 HHs reached with information on tree-based interventions	• Consultations with key partners • Household survey • Farm and landscape surveys • Review of existing information and on-site verification • Develop intervention site maps • Develop farm and landscape intervention designs/portfolios • Expert review/validation • Select and train piloting households • Develop training guides for tree-based interventions • Establish community learning center (tree nursery, training unit, seed store) in collaboration with Arua District Local Government • Train implementing partners and community facilitators and local entrepreneurs • Produce and distribute preferred tree seedlings • Conduct awareness raising events

Expected results of the project?

- Over 15,000 people directly benefiting from improved energy access and climate resilience. In addition, there will be significant indirect beneficiaries as a result of growing businesses, improved soil productivity and vegetation cover and more secure water access.
- Initiating market-based delivery system for production and promotion of improved cook stoves and other clean energy options developed and piloted by conducting at least 10 awareness activities, producing and disseminating materials and reaching at least 1,000 HHs with information on benefits of solar lamps and energy efficient stoves, creating 5 stove construction and vending hubs, training at least 50 stove artisans to build and maintain improved and well-designed mud stoves, supporting 8 local vendors of energy products and/or piloting 1 to 2 Energy Kiosks in each settlement depending on the outcome of the market analysis.
- Tree-based intervention maps and designs suitable for refugees and host communities developed and piloted with at least 250 HHs utilising trees for production and resilience; over 100 individuals including implementing partners and community facilitators trained in appropriate tree-based

interventions. A community learning center established, 350 people trained and 100,000 seedlings produced

- Improved watershed management planning by establishment of at least 2 Sub-Catchment Management Committees and at least 4 Water User Associations and restoring at least 20 ha of critical wetlands/riverbanks, as well as improved knowledge base for future planning through the establishment of a publicly accessible database publishing already completed assessments and reports.

Performance monitoring and evaluation

Since this will be an explorative pilot, this project intends to generate important lessons learnt for the effective management of natural resources (mainly water, forest cover and provision of energy services) in refugee settings in general. Therefore, thorough monitoring processes are crucial to evaluate whether and to what extent market-based energy interventions as well as integrated natural resource management strategies are feasible and effective in refugee settings in Uganda. The common monitoring framework will also allow this project to draw lessons on the nexus approach and whether the assumption of interconnectedness holds true.

By continuous monitoring and evaluation, the project will allow us to draw conclusions on how refugees can best be involved in natural resource management planning and whether and to what extent refugees can be integrated into existing markets or whether creating small and local market structures within the refugee communities might be more successful. In addition, the baseline assessment will further inform the approach to implement activities.