

# Quarterly Project Progress Report

## China-Zambia South-South Cooperation on Renewable Energy Technology Transfer

October 2015



Empowered lives.  
Resilient nations.



### Basic Project Information

#### China-Zambia South-South Cooperation on Renewable Energy Technology Transfer

UNDP Award ID	00091276
UNDP Project ID	00082283
Project Duration	September, 2014 - August, 2018
Reporting Period	July 1 2015 – September 30 2015
Implementing Partners National collaborating agencies	Department of Energy, University of Zambia, Kafue Gorge Regional Training Centre, Rural Electrification Centre
UNDP Project Manager	Lloyd Ngo
UNDP Project Assistant	

### 1. Executive Summary

- The major activity of Q3 was the Chinese mission to Zambia from 6-10<sup>th</sup> September 2015. Two workshops were held to support the establishment of the two centres of excellence at UNZA Department of Physics and Kafue Gorge Regional Training Centre. A Key stakeholders meeting was also held where experiences of the two countries were shared. Business brunch was held for private sector which was an opportunity for the private sector actors to interact with Chinese expert.
- A number of key activities still delayed in the third quarter and some activities have been moved forward to Q4.
- Working session was held with UNDP China Program Manager during the mission and some activities were proposed to be moved to the Q1 and Q2 of 2016.
- The consultancy on review of barriers to electricity access have been published on the UNDP website and shared on the project Facebook. In addition, TORs for Project Technical Committee have been developed and await approval by the Department of Energy.
- To kick start the Centre of excellence at UNZA department of Physics, it was agreed that three containers be procured to be used for demonstration for the following applications
  - Home system
  - Clinic e.g. refrigeration for vaccines
  - Productive use such as barbershop, saloon etc.

- Regarding, the Project Management Unit (PMU) the Project Assistant's recruitment process has been concluded and the candidate will report for work in September 2015. The Project Manager has moved to the Department of Energy.

## 2. Project Implementation Status and Key Results

- The major activity of Q3 was the Chinese mission to Zambia. The mission focused on activities to support the establishment of centres of excellence (i.e. UNZA-Department of Physics and Kafue Gorge Regional Training Centre), a key activity of the project. The following outcomes were achieved during the mission that took 4 days in country.
  - Action plans were drafted for the establishment of the centres of excellence for solar and mini hydro in Zambia. This also led to improved understanding of constraints such as lack of capacity to conduct feasibility studies and opportunities for the establishment of the Centres of Excellence.
  - Active and functional networking to make Kafue Gorge Regional Training Centre a sub-regional hub southern Africa for the International Centre for Small Hydro Power with a possibility of signing an MoU. The partnership will help KGRTC gain capacity in conducting feasibility studies and consultancy in mini hydro whilst ICSHP would benefit by having a presence in Southern Africa.
  - A Stakeholders meeting was also held during the mission. Important highlights that were synthesised during stakeholder meeting reflected the following issues;
    - China 's experiences in using renewable energy such mini hydro and solar to provide electricity to rural communities
    - Zambia's current energy scenario and current energy deficit due to high dependence on large hydro.
    - Need for cost reflective tariff to stimulate renewable energy uptake
  - Business brunch was held for private sector and it provided opportunity that interfaced with private sector actors with a view of building not only understanding of the project but importantly business opportunities offered through South to South cooperation.
  - A field trip to Kasama was conducted by the PMU in Zambia, UNDP China as well as the Ministry of Energy Zambia. The main objective of the trip was to gather information on how an impact assessment may be carried out. The information that was gathered shows that it will not be possible to measure impact from this project in terms of increased access to energy for rural households in Zambia. The trip also highlighted widespread scepticism of the applicability, reliability and quality of solar power for use in especially households and small businesses. However, there is more trust in the use of solar in schools, clinics and government institutions.
- The expression of interest for the short term consultancy on the review of the policies was published online and the deadline was set for 30<sup>th</sup> September 2015. It is expected that the consultant will appointed in the fourth quarter.
- To kick start the centres of excellence computers were procured for both UNZA and KGRTC (3 for UNZA and 1 for KGRTC). These were procured under the budget for outcome

1. It was agreed that three containers be procured for UNZA to be used for demonstration for the following applications
  - Home system
  - Clinic e.g. refrigeration for vaccines
  - Productive use such as barbershop, saloon etc.
- A number of key activities were still delayed in the third quarter and the following activities have been moved forward to Q4:
  - Activity 1.1.1 Finalisation of review of policies and legislations for off-grid technologies
  - Activity 2.1.2 Facilities to receive exhibit and demonstration equipment
  - Activity 2.2.2 Support one renewable energy rural electrification project
- Working session was held with UNDP China Program Manager during the mission and some activities were proposed to be moved to Q1 and Q2 of 2016. Below are the activities that have been moved:
  - Activity 1.1.2 Convene working group meetings to review policy gaps – moved to Q2 since this activity is based on activity 1.1.1 which is likely to take place in Q4 of 2015
  - Activity 2.1.1 (Community of Practice operation) – Moved to Q2 of 2016 since not much activity has taken place to support the Community of Practice operations.

### 3. Activities and Outputs

#### **Output 1: Activity 1.1.1: Finalization of review of the implementation of policies and legislation for rural electrification using off-grid technologies.**

The expression of interest for the short term consultancy on the review of the policies has been published on the UNDP website and shared on the project Facebook page. The deadline was set for 30th September 2015 and it is expected that the consultant will be appointed in Q4. The outcome of this consultancy is brief paper / baseline study on RET policy reforms in Zambia.

#### **Output 2.1: Activity 2.1.1: Creation of demonstration testing and training facilities for priority technologies.**

Two workshops were held (at UNZA and KGRTC) during the Chinese mission to Zambia and experiences were shared on the establishment of the centres of excellence. Action plans were drafted on the establishment of the centres of excellence for solar and mini hydro. The workshop also led to improved understanding of constraints such as lack of capacity to conduct feasibility studies and opportunities for the establishment of the Centres of Excellence.

In terms of capacity building the project has facilitated the invitations of 2 members of staff from KGRTC to a Hydro power seminar to be held in China at ICSHP from 15<sup>th</sup>-29<sup>th</sup> October. This is in line with the need to build capacity for staff at KGRTC as identified during the Chinese mission to Zambia.

**Output 2.1: Activity 2.1.2: Facilities to receive exhibit and demonstration equipment and publish performance of results via web**

UNZA and KGRTC both received computers for the interim offices that have been allocated for the centres of excellence. Project posters were provided to both institutions. Both the computers and posters were procured under the budget for outcome 1.

**Output 2: Activity 2.2.2: Support one renewable energy rural electrification project**

Selection criteria have been developed for the selection of the small hydro site. Upon approval by the Project Steering Committee (PSC) the final selection of the site will be done in Q4.

**Output 4: Activity 4.1.1: Set up PMU in Zambia**

Regarding, the Project Management Unit (PMU) the Project Assistant's recruitment process has been concluded and the candidate will report for work in October 2015. The Project Manager has moved to the Department of Energy where an office has been secured.

**Output 4: Activity 4.3: Support project implementation**

Project continues to be visible on the Facebook page and views are increasing. An article on the Chinese mission has been drafted and will go online on the UNDP website and Facebook page.

<b>OUTPUT</b>  <i>In line with AWP</i>	<b>PLANNED ACTIVITIES</b>  <i>List all activities to be undertaken during the period as stated in AWP</i>	<b>Indicators (extract indicators for Outputs being reported on as recorded in AWP)</b>	<b>PROGRESS TO DATE</b>  <i>Give detailed explanation of the status. Provide justification if delayed and new schedule planned</i>	<b>RESULTS ACHIEVED</b>  <i>Describe concrete, key results (policy, publication, key event etc.) achieved so far, vis-à-vis the specific targets set in the AWP</i>	<b>BENEFICIARY</b>  <i>Approximate number of beneficiaries reached by project activities (disaggregated by sex/age), etc.</i>
<b>Output 1.1</b> <b>Improved policies, legislation and standards for the transfer and use of project technologies for rural electrification</b>	Activity 1.1.1: Finalization of review of the implementation of policies and legislation for rural electrification using off-grid technologies	Final review report on review of the implementation of policies and legislation for rural electrification using off-grid technologies.	<input type="checkbox"/> <i>Completed</i> <input checked="" type="checkbox"/> <i>In progress</i> <input type="checkbox"/> <i>Delayed</i> <i>Reason: Lengthy procedure</i> <i>New Schedule: ___ Q4 ___</i> <input type="checkbox"/> <i>Other changes _____</i>	The expression of interest for the short term consultancy on the review of the policies has been published on the UNDP website and shared on the project Facebook page. The deadline was set for 30th September 2015 and it is expected that the consultant will be appointed in Q4.	-
	Activity 1.1.2: Convene working group meetings to review implementation of policies and legislation to address gaps and	# of people trained/participates in workshops	<input type="checkbox"/> <i>Completed</i> <input checked="" type="checkbox"/> <i>In progress</i> <input type="checkbox"/> <i>Delayed</i> <i>Reason: _____</i>	This activity is awaiting report by consultant in Activity 1.1.1. The activity is likely to be implemented in 4 <sup>th</sup>	-

	develop and finalize policies for rural electrification using off-grid technologies		<p><i>New Schedule:</i></p> <p>_____</p> <p><input type="checkbox"/> <i>Other changes</i>_____</p>	Quarter 2015	
<b>Output 2.1 Priority technologies tested and demonstrated at dedicated testing and training center and community of practice established</b>	Activity 2.1.1: Creation of demonstration, testing and training facilities for priority technologies	The demonstration, testing and training facilities established	<p><input type="checkbox"/> <i>Completed</i></p> <p><input checked="" type="checkbox"/> <i>In progress</i></p> <p><input type="checkbox"/> <i>Delayed</i></p> <p><i>Reason:</i>_____</p> <p><i>New Schedule:</i></p> <p>_____</p> <p><input type="checkbox"/> <i>Other changes</i>_____</p>	Two workshops were held (at UNZA and KGRTC) during the Chinese mission to Zambia. Action plans were drafted on the establishment of the centres of excellence for solar and mini hydro.	-
	Activity 2.1.2: Facilities to receive exhibit and demonstrate equipment and publish performance of results via web		<p><input type="checkbox"/> <i>Completed</i></p> <p><input checked="" type="checkbox"/> <i>In progress</i></p> <p><input type="checkbox"/> <i>Delayed</i></p> <p><i>Reason:</i>_____</p> <p><i>New Schedule:</i></p> <p>_____</p> <p><input type="checkbox"/> <i>Other changes</i>_____</p>	UNZA and KGRTC both received computers for the interim offices that have been allocated for the centres of excellence. Project posters were provided to both institutions.	-

<b>Output 2.2 Institutional and technological capacity among stakeholders built</b>	Activity 2.2.2: Support one renewable energy rural electrification project.	1 project successfully selected according to established criteria	<input type="checkbox"/> <i>Completed</i> <input checked="" type="checkbox"/> <i>In progress</i> <input type="checkbox"/> <i>Delayed</i>  <i>Reason:</i> _____ <i>New Schedule:</i> _____ <input type="checkbox"/> <i>Other changes</i> _____	Selection criteria have been developed for the selection of the small hydro site. Upon approval by the Project Steering Committee (PSC) the final selection of the site will be done in Q4	-
<b>Output 4.1: Project Management Structures established</b>	Activity 4.1.1: Set up PMU in Zambia	# of PMUs and PSCs established with guiding principles and detailed work plans	<input type="checkbox"/> <i>Completed</i> <input checked="" type="checkbox"/> <i>In progress</i> <input type="checkbox"/> <i>Delayed</i>  <i>Reason:</i> _____ <i>New Schedule:</i> _____ <input type="checkbox"/> <i>Other changes</i> _____	Regarding, the Project Management Unit (PMU) the Project Assistant's recruitment process has been concluded and the candidate will report for work in October 2015. The Project Manager has moved to the Department of Energy where an office has been secured.	-
	Activity 4.1.3: Set up Project Steering Committees	# of meetings held	<input checked="" type="checkbox"/> <i>Completed</i> <input type="checkbox"/> <i>In progress</i> <input type="checkbox"/> <i>Delayed</i>	Project Steering Committee has been set up and 2 meeting have since taken place. The	-

			Reason: _____ New Schedule: _____ <input type="checkbox"/> Other changes _____	next PSC meeting is scheduled to take place in the 4th Quarter.	
<b>Output 4.2 Project Coordination Structures established</b>	Activity 4.2.1: Create project coordination and management structure	# and type of project MoUs and agreements signed	<input type="checkbox"/> Completed x In progress <input type="checkbox"/> Delayed Reason: _____ New Schedule: _____ <input type="checkbox"/> Other changes _____	Project document has been signed but no further MoUs have been signed.	-
	Activity 4.2.2: Convene stakeholder group meetings,	# of project management meetings held with Zambia, China and UNDP participation	<input type="checkbox"/> Completed x In progress <input type="checkbox"/> Delayed Reason: _____ New Schedule: _____ <input type="checkbox"/> Other changes _____	A key stakeholders meeting was held on 9 <sup>th</sup> September, 2015 in Lusaka. Zambian, Chinese stakeholders and UNDP (Both Zambia and China) participated. Several online meeting have also been held.	-

## 2. Zambia PMU Expenditure Overview

### Financial Information Summary (USD) Reporting Period: July1 2015 – September 30 2015

Zambia Project ID: 92537	Activity	Budget description	Budget	Expenditure	Explanation for Variance
	1.1.1: Finalization of review of the implementation of policies and legislation for rural electrification using off-grid technologies	Consultancy	3000	0	The consultant has not yet been hired. As soon as the consultant is hired and report submitted in 4 <sup>rd</sup> quarter, an expense on this line will be recorded
	1.1.2: Convene working group meetings to review implementation of policies and legislation to address gaps and develop and finalize policies for rural electrification using off-grid technologies	Training Workshops and Conferences	15000	0	This activity awaits activity 1.1.1 above
	2.1.1: Creation of demonstration, testing and training facilities for priority technologies	Work plan/Workshops	5000	0	Activity is dependent on 1.1.1
	Activity Result 2.1.2: Facilities to receive, exhibit and demonstrate equipment and publish performance results via web	Equipment and Furniture	35000	8288	This activity is ongoing.
	2.2.2: Support one renewable energy rural electrification project.	Desk work by DoE	3000	0	This amount will be allocated to site selection capacity building process for 2016

	4.1.3: Set up Project Steering Committee	Workplan	250	TBA	
	4.2.1: Create project coordination and management structure	Meetings	15000	0	The global steering committee meeting has been rescheduled to future date later in the year 2015
	4.2.2: Convene stakeholder group meetings	Meetings	0	0	
		Human resources	8,416	TBA	Admin Assistant to start work in 3 <sup>rd</sup> Quarter 2015
		Equipment	60,000	TBA	
	<b>TOTAL</b>				

### **3. Project Management and Oversight**

#### **Monitoring and Evaluation**

An evaluation/identification field trip to Kasama was conducted by the PMU in Zambia, UNDP China as well as the Ministry of Energy Zambia. The main objective of the trip was to gather information on how an impact assessment may be carried out. The information that gathered shows that it will not be possible to measure impact from this project in terms of increased access to energy for rural households in Zambia.

#### **Risk management**

The Zambia / China component faces considerable risk of delay, as many activities are still behind schedule. The main reason has been the long and difficult recruitment process to identify appropriate staff for the PMU in Zambia. With the coming on board of the Project Manager it is expected that some activities will catch up and be on track by the mid of Q4, however, some of the activities will have to be deferred to Q1 and Q2 of 2016.

#### **Communication and advocacy**

Project continues to be visible on the Facebook page and views are increasing. An article on the Chinese mission has been drafted and will go online on the UNDP website and Facebook page. The business brunch for the private sector that was held on 10<sup>th</sup> September during the Chinese mission was an important opportunity for the private sector to learn about the project and opportunities available through the South to South cooperation.

### **4. Management recommendations**

- To kick start the Centres of excellence at UNZA department of Physics, it has been agreed that three containers be procured to be used for demonstration for the following applications
  - Home system
  - Clinic e.g. refrigeration for vaccines
  - Productive use such as barbershop, saloon etc.
- 3 computers and project poster were procured for the University of Zambia
- 1 computer and project posters were procured for Kafue Gorge Regional Training Centre

## **5. Annexes**

Annex 1: Mission Report

Annex 2: Kasama Identification mission report