



## QUARTER 2 REPORT



Empowered lives.  
Resilient nations.

**Implementing Agency/Agencies):**

**Project Title: Promoting Climate Resilient Community-based regeneration of indigenous forests in Zambia's Central Province**

**Project No(s):00093441**

**Project Start Date:**

**Original: June 2015**

**Actual: June 2015**

**Project End Date:**

**Original: June 2020**

**New: N/A**

**Fiscal Year: 2017**

**Reporting Period: April to June**

**Project Budget (US\$) for the Reporting Period (Use annual budgets in quarterly reports):**

	Original Budget (US\$)	Latest Signed Revision (US\$)
Core/Trac Resources (UNDP):	40,000	40,000
LCDF GEF	1,115,915	1,115,915
<b>Total Budget (US\$):</b>	<b>1,158,115</b>	<b>1,158,115</b>

**Submission Date: 30<sup>th</sup> July, 2017**

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## 1. Executive Summary

Zambia's forests play a significant role in terms of contribution to GDP and poverty reduction, as well as potential for climate change adaptation and carbon management. However the increased frequency of fires and accelerated forest retreat in Zambia's *Miombo* woodlands caused by climate change and exacerbated by deforestation has been estimated to cost Zambia. A total loss of GDP of US \$14 million per annum is estimated. While in the past *Miombo* woodlands have been a resilient and balanced ecosystem, unsustainable anthropogenic land use and energy practices – combined with climate-induced impacts – are severely inhibiting the natural regeneration capacity of this ecosystem. These pressures are especially pronounced in the country's Central Province, which has the largest number of commercial farming blocks in the country and is one of the major production areas for charcoal.

In an effort to address the problem statement above and its root causes, this project aims to increase the rate of forest regeneration and promote climate-resilient land management and energy practices among local communities in one area – Zambia's Central Province – building on a variety of new national platforms and other province-level initiatives that are being piloted in other parts of the country.

Management of Zambia's forests – both National Forests and those on traditional lands – remains a continuing challenge. As noted in a new study funded by UN-REDD "*Sustainable Forest Management Initiatives of relevance to REDD + in Zambia*" National Forests are relatively protected – at least in theory. The law states that "all land in a National Forest shall be used exclusively for the conservation and development of forests with a view to securing supplies of timber and other forest produce, providing protection against floods, erosion and desiccation and maintaining the flow of rivers" (Forest Act 1973, Part III, para 12). No activities are allowed in the forest without explicit permission – including entering the forest.

The choice of Central Province as the geographic focus of this project was also due to the fact that Finland, USAID and the UNDP/GEF MFA Project are already piloting (or have plans to pilot) SFM activities in several other provinces of the country with major *Miombo* stocks. Central Province is now benefitting from a broader influx of government funds from MLNR to strengthen the forestry sector across the Country and has benefitted from a variety of local-level initiatives on SFM approaches piloted by organizations like the Conservation Farming Unit of Zambia. This project will use the new USAID activities in the Province and UN-REDD as a foundational base to develop and massively scale-up a suite of interventions. The UN-REDD Stakeholder Analysis undertaken in Central Province highlighted a number of specific factors that contribute to deforestation and forest degradation in the Province. There was a general agreement that poverty, illegal forest resource utilization (in particular, charcoal and timber production were singled out), unsustainable land use practices and commercial farming are key drivers of deforestation in Central Province. Lack of fire monitoring and fire management practices were separately confirmed as having a major negative impact on *Miombo's* natural regeneration capacity. All of these core threats will be addressed as part of the project intervention.

The Project will be addressing the direct and indirect consequences of climate change in Miombo forest, which lead to an increased frequency of forest fires and reduced regeneration capacities of Miombo forest on the one hand, and to enhanced encroachment of commercial farming into the forest and degradation through fuel wood production on the other. This imposes high costs and pressures on the economy by reducing the contribution of Miombo forests on the National GDP estimated to range around \$5.5 billion. The role of the forests on poverty reduction and climate change mitigation, accompanied by a loss of resilience of the whole human-ecological forest system, particularly pronounced in Zambia's Central Province is reduced.

It is expected that the activities to be implemented under the Project will contribute to the New UNDP Strategic Plan Area of Work 1: Sustainable development pathways that can eradicate extreme poverty and reduce social and economic inequality and exclusion focusing on development planning and policy reforms to build productive capacities that can generate sustainable livelihoods. It is further expected that the project will contribute to the achievement of the Zambia-UN Sustainable Development Partnership Framework 2016-2021 Output 2.1.4: Government, private sector and non-state actors have increased capacity to sustainably manage natural resources and land leading to diversified, decent and sustainable livelihoods and the Country Programme Document (CPD) Output 1.2: Ministry of Lands and Natural Resources and its partners have developed policies, systems and measures at national and sub-national levels for sustainable management of natural resources, ecosystem services, chemicals and waste.

**Component 1: Piloting of Community-Based, Climate Adaptive Agro-Forestry and Assisted Natural Regeneration (ANR) Techniques.**

This component is focused on capacitating foresters and communities in Central Province to implement appropriate climate-resilient agro-forestry and natural regeneration practices in designated zones.

**Component 2: Integrated climate-resilient fire management**

This component will address the second major climate-induced threat to *Miombo's* natural regeneration capacity: fire. The component is focused on putting in place robust fire monitoring and management protection plans and measures in all districts in Central Province to maintain the desired regeneration targets and reduce fire frequency.

**Component 3: Increased knowledge about and uptake of appropriate supply-side, biomass energy production technologies to reduce**

This component involves the deployment of wood-saving charcoal kiln technologies and the development of sustainable charcoal schemes in 20 village action groups (VAGs) with (i) charcoal producer groups formed and trained to operate kilns; (ii) Charcoal retort kiln pilots introduced (120 improved kilns to replace earth kilns); (iii) Monitoring, tracking and licensing system established for all improved kilns piloted. The Component will also pilot 50 charcoal or sawdust briquetting machines or presses piloted across 20 VAGs

### 3. Progress against Planned Results/Implementation

3. Progress against Planned Results/Implementation						
Programme/Project output	Output Indicator(s)	Baseline	Target	Progress Attained	Reasons if progress is below target	Remedial measures/ Action
1.1. Participatory resource mapping and zoning (identification of suitable areas for AF and ANR measures) taking alternative climate change scenarios into account completed in all six districts of Central Province.	15,000 Ha for regeneration selected in a participatory manner, equipment procured to facilitate implementation of the project	0	1.1.1.1 Regeneration of the selected 27,000 of land in Serenje and Chitambo	A reconnaissance survey was conducted in the 5 pilot sites (covering 15,560ha) of musangashi, musola, teta, nakatambo and mweshe butelele to establish the vegetation cover and available labour. This was in preparation of opening boundaries for the sites.		
<b>Baseline Resource mapping not conducted in target areas.</b>				Maps for the pilot		
<b>Target; Capacity of foresters and communities built through trainings,</b>						

<p>15,000 ha to pilot ANR selected <b>Indicator</b>; 15,000 ha for regeneration selected in a participatory manner, equipment procured to facilitate implementation of the project</p>				<p>sites were shared with the chiefs (Chitambo, Kabamba and Muchinka). The Serenje and Chitambo Town Councils also received the maps</p>		
			<p>1.1.1.2. Validate integrated resource and land use maps</p>	<p>The District Implementation team that was trained to develop the Land Use and Resource maps have not gone out in the field to develop the maps.</p>	<p>The district implementation team was involved in the formation of VAGs.</p>	<p>A training has been planned for the Planners and DFOs from all the districts to be trained on resource mapping by the consultants for GIS that have been recruited. These will in turn develop resource maps for their respective districts.</p>
			<p>1.1.1.4 Support to implementation process including Project Manager (PM) and Administrative</p>	<p>The support to PIU has been provided as planned with all staff costs being</p>		

<p>1.2. Between 30-40 VAGs formally constituted and recognized in Serenje and Chitambo Districts respectively by year 2 with clear resource rights and delineation of legally recognized VAG boundaries and use zones <b>Baseline:</b> 0 VAGs in place <b>Target:</b> 5 community members meetings, 5 community structures strengthened/formed . The process of registration of community structures commenced. <b>Indicator:</b> Community Structures</p>	<p>Community structures formed and registered</p>	<p>No VAGs in place</p>	<p>Assistant (AA), driver costs and PIU operations 1.2.1.1. 30-40 community member meetings, 30-40 community structures formed/strengthened. Process of registration of the community structures commenced.</p>	<p>met. Registration of 8 VAGs finalised. The VAGs were registered as associations. Training needs assessment for the 8 VAGs done Formation of additional 22 VAGs is underway</p>		
<p>1.5 Wood fuel collection</p>		<p>No woodfuel</p>	<p>1.2.1.2. Facilitate sensitisation and registration of VAGs 1.5.1.1. Conduct</p>	<p>The VAGs that were formed were sensitised on their roles and responsibilities and constitutions were developed.</p>	<p>The community</p>	<p>The activity will</p>

zones established in all VAGs and coppicing practices promoted		collection zones	community meetings in all the VAGs to establish wood fuel collection zones	meetings were not done as this activity was awaiting the recruitment of the consultant for ANR. The recruitment process is underway	consultants to facilitate the process were not recruited in time	be done as soon as the ANR consultants are recruited. The activity will be done in quarter 3.
1.6. Climate resilient AF and ANR practices are piloted over 15,000 Ha under management in Serenje and Chitambo	ANR plans and guidelines for each VAG	No ANR plans in place	1.6.1.1. Community members to develop ANR plans and guidelines	ANR plans and guidelines not developed. These await the recruitment of the ANR consultant	The consultants for ANR were not recruited	Terms of Reference for the recruitment of the ANR consultant have been developed. Recruitment processes are underway
			1.6.2.1. Provide seedlings, cash and other inputs to support implementation of ANR.	The seedlings and cash not provided	The ANR consultants who are supposed to guide the process are not recruited	Terms of Reference for the recruitment of the ANR consultant have been developed. Recruitment processes are underway
			1.6.2.2. Audio, visual	Printing of ANR		

<p>2.1. Geospatial fire occurrence dataset developed for central province based on satellite data and GIS mapping to ascertain burn severity classifications and climate change vulnerability of Miombo woodlands</p> <p><b>Baseline;</b> no database on fire occurrence</p> <p><b>Target;</b> 1 dataset developed for fire occurrence</p> <p><b>Indicators:</b> Community members trained</p>	<p>Geospatial fire occurrence data set</p>	<p>No database on fire occurrence</p>	<p>2.1.1.1. Establish and maintain a fire occurrence database for central province</p> <p>2.1.1.2. Map historical trends of fire incidence and burn severity for Central Province</p>	<p>A fire occurrence database was established at FD HQ by ZEMA though this was not completed by the end of the quarter</p> <p>The mapping of historical trends of fire was completed</p>	<p>The Officer from ZEMA is responsible for this process has been transferred to the copperbelt.</p>	<p>The Officer has been requested to allocate time to finalize the task</p>	
<p>3.1. Deployment of technologies and development of sustainable charcoal schemes in 20 VAGs with (i) charcoal producer</p>	<p>Energy efficient technologies developed</p>	<p>NO energy efficient technologies in place</p>	<p>3.1.1.1 Facilitate formation of 2 charcoal producer groups of 10 members each</p>	<p>3 charcoal producer groups formed.</p>			



<p>groups formed and trained to operate kilns (ii) charcoal retort kilns introduced (120 improved kilns to replace earth kilns) (iii) monitoring, tracking and licensing system established for all improved kilns piloted</p>			<p>3.1.1.2. Training of members of charcoal producer groups making efficient kilns</p>	<p>Training of charcoal producer groups not done</p>	<p>The types of kilns to be introduced await validation</p>	<p>The consultants for efficient kilns are still modifying the kilns and once the results and models are verified the kilns will be introduced in the VAGs</p>
			<p>3.1.1.3. Identify briquetting machines- eg. Presses, extruders, - that are suitable for the production of briquettes from the identified feedstocks</p>	<p>The identification of briquetting machines still in process</p>	<p>The consultant working on the identification of briquetting machine is yet to submit the findings</p>	<p>The report is being awaited.</p>

Main Activity	Target	Progress against planned activities and targets	Planned Completion Date	Implementation Status (Completed, Ongoing-On Track, Ongoing-Off Track & Cancelled)	Reason (s) for slippage (if progress is not on track) and remedial measures taken	Budget & Expenditure Monitoring Framework			
						Budget annual(US \$)	Expenditure quarterly (US\$)	Delivery (%)	
				3.1.1.4 Provide training to members of the charcoal producer groups on the operation of the briquetting machines	Training not done	Training awaits the report on the type of machines to be introduced.	The consultants have been requested to speed up the process		
				3.1.1.5 Introduce 50 briquetting machines and 120 efficient kilns for the charcoal producers.	Briquetting machines and efficient kilns not introduced	The report on the machines and kilns being awaited	Once the report is in the machines and kilns that will be accepted by the community will be introduced.		
<b>Progress on Implementation of Activities (Quarterly based on agreed quarterly workplan)</b>									
Main Activity	Target	Progress against planned activities and targets	Planned Completion Date	Implementation Status (Completed, Ongoing-On Track, Ongoing-Off Track & Cancelled)	Reason (s) for slippage (if progress is not on track) and remedial measures taken	Budget annual(US \$)	Expenditure quarterly (US\$)	Delivery (%)	
15,000 Ha for regeneration selected in a participatory manner, equipment procured to facilitate implementation of the project	1.1.1.1. Regeneration of 27,000 ha of land in Chitambo and Serenje	A reconnaissance survey was conducted in 5 pilot sites covering	June	Completed		287,500	78,323.95	31	

	<p>5,000 ha to pilot ANR selected</p>	<p>15,560 ha of Musangahsi, musola, teta, nakatambo and mweshe butelele. To establish the vegetation cover and available labour. This was in preparation of opening boundaries for the sites.</p>	<p>June</p>	<p>Completed</p>				
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								50	
								18,350	
								40,000	
							The District team was involved in the formation of VAGs		
							On-going		
							June		
		Chitambo and with the Councils (Serenje and Chitambo)					The district implementation team was trained to produce resource and land use maps. The team has not gone to the VAGs to produce the maps.		
				1.1.1.2. Vali date integrated resource and land use maps			Support to PIU has been		
							1.1.1.4 Support to implement		
							On-going	250,000	39172.88
							June		20

	<p>ation process including Project Manager (PM) and Administrative Assistant (AA), driver costs and PIU operations</p>	<p>provided as planned with all staff costs being met.</p>								
<p>1.2. Between 30-40 VAGs constituted and recognised in Serenje and Chitambo Districts respectively by year 2 with clear resource rights and delineation of legally recognised VAG boundaries and use zones. <b>Baseline. 0 VAGs in place</b></p>	<p>1.2.1.1. 30-40 community meetings, 30-40 community structures formed/strengthened Process of registration of</p>	<p>Registration of 8 VAGs finalised. VAGs were registered as Associations. Training needs assessment for the 8 VAGs done. Formation of</p>	<p>June</p>	<p>on-going</p>						<p>100</p>

<p><b>Target; 5</b> community meeting members meetings , 5 community structures strengthened /formed. <b>Indicator:</b> Community structures.</p>	community structures commenced	additional 22 VAGs underway										
	1.2.1.2 Facilitate sensitisation and registration of VAGs	The VAGs that were formed were sensitised on their roles and responsibilities and constitution were developed.	June	Completed		15,000	15,000	15,000				100
1.5. Woodfuel collection zones established in all VAGs and coppicing practices promoted	1.5.1.1 Conduct community meetings to establish woodfuel collection zones	The community meetings not done	June	On going on track		80,000	80,000	80,000	The activity was awaiting the recruitment of the ANR consultants who were not recruited at the end of the quarter.		00	0
1.6. Climate resilient AF and ANR practices are piloted over 15,000 ha under management in Serenje and Chitambo	1.6.1.1 Community members to develop ANR plans and guidelines	ANR and AF Plans and guidelines not developed.	June	Ongoing on-track		80,000	80,000	80,000	Development of ANR and AF plans and guidelines await the recruitment of the ANR consultants.		00	0

	1.6.2.1. Provide seedlings, cash and other inputs to support implementation of ANR	Seedling, cash and other inputs not provided	June	On-going	The ANR consultants who were supposed to guide the process were not recruited at the end of the quarter	80,000	00	0
	1.6.2.2. Audio, visual printing production costs	Maps and other materials were printed and shared with stakeholders	June	Completed		19,500	5059.17	26

**Outcome 2: Robust Fire Monitoring and Management Protection plans and measures in place in all districts of Central province**

2.2. Geospatial fire occurrence dataset developed for central province based on satellite data and GIS mapping to ascertain burn severity classifications and climate change vulnerability of Miombo woodlands	2.1.1.1 Establish and maintain a fire occurrence database for central province	Fire occurrence database was established at FD HQ by ZEMA though this was not completed by the end of the quarter	June	Ongoing		16,000	00	0
	2.1.1.2 Map historical trends of fire incidence and burn severity	Mapping of historical trends of fire was completed	May	Completed		15,500	15,500	100

<p><b>Baseline;</b> No database on fire occurrence  <b>Target;</b> 1 database developed for fire occurrence  <b>Indicators;</b> Community members trained</p>	<p>for central province</p>							
<p>Outcome 3: Increased Knowledge about and uptake of appropriate supply side biomass energy productions technologies</p>								
<p>3.1. Deployment of technologies and development of sustainable charcoal schemes in 20 VAGs with (i) charcoal producer groups formed and trained to operate kilns (ii) and charcoal retort kilns introduced.  Monitoring, tracking and licensing system established for all improved kilns piloted.</p>	<p>3.1.1.1 Facilitate formation of 2 charcoal producer groups of 10 members each</p>	<p>3 charcoal groups formed.</p>	<p>June</p>	<p>Completed</p>		<p>54,600</p>	<p>14,000</p>	<p>25</p>
	<p>3.1.1.2 Training members of</p>	<p>Training not done</p>	<p>June</p>	<p>On-going</p>	<p>Report from the consultant being awaited</p>	<p>15,000</p>	<p>00</p>	<p>00</p>



charcoal producer groups on efficient kilns										
3.1.1.3 Identify briquetting machines, - e.g presses, - extruders – that are suitable for the production of briquettes from identified feedstock	June	On-going	Report from the consultant being awaited	5,000	00	00				
3.1.1.4 Provide training to members of the charcoal producer groups on operation of briquetting machines	June	On-going	Report being awaited	15,000	00	00				
3.1.1.5	June	On-going	Identification	137,500	00	00				

	Introduce 50 briquetting machines and 120 kilns for charcoal producer groups.	introduced			process still going on			
<b>Total expenditure</b>						<b>1,158,115</b>	<b>227,370</b>	<b>20</b>

**Notes on Country Programme Outputs:**

- Country Programme Outputs and specific programme/project outputs need to be stated with their indicators and baselines (as indicated in AWP, in quarterly reports) to allow for linkages of stated activities to planned results. Updating the progress on performance on these outputs will be done in APR, Annual and End of programme/project reports. The End of programme/project reports should report cumulative results.
- **In quarterly reports**, the comparison is between the beginning and the end of the quarter in relation to annual targets. Baseline is at beginning of year.
- **In annual reports**, the comparison is between the beginning and end of the year in relation to the Life of Activity (programme life) targets. Baseline is at beginning of year.
- **In end of programme/project reports**, the comparison is between the beginning and the end of the programme/project. Baseline is at beginning of programme, project and CPAP cycle.

**Progress towards achievement of results**

**Component 1: Piloting of community-based, climate adaptive agro-forestry and assisted natural regeneration techniques.**

A reconnaissance survey was done to determine the vegetation density along the ANR boundaries. This was a pre-requisite to mobilizing resources towards opening of the boundaries. Registration of the 8 VAGs was completed and formation additional 22 VAGs was in progress. A training needs assessment of the 8 VAGs was also done. Sensitization of the VAGs on their roles and responsibilities and constitutional

formation was done. The maps for the ANR areas were shared with the chiefs and the councils. In addition 3 consultants (1 GIS international, 1 GIS national and 1 sustainable livelihoods international) were recruited during the quarter.

### ***Establishment of PIU***

Support to PIU (Project Manager, Administrative Assistant and Project Driver ) was provided as planned. In addition, an ablution block was constructed at the Chitambo resource centre.

### **Component 2: Integrated climate-resilient fire management**

A fire occurrence database was established at the Forestry Office HQ by ZEMA. The process was not completed by the end of the quarter. The mapping of historical trends of fire was completed.

### **Component 3**

A visit was also undertaken to the manganese factory by FD and ZEMA to check on the use of charcoal in the processing of manganese.

### **Project Management.**

Two monitoring visits were undertaken to Serenje and Chitambo. Details of the recommendations are in the back to office reports.

### **Challenges.**

- Unresolved energy source for the Manganese factory is exerting pressure on the forest resources. The Permanent Secretary of the Ministry of Lands and Natural Resources and Zambia Environmental Management Agency (ZEMA) following recommendations from the Project Steering Committee has now taken up the issue.
- Security continues to be an issue at Serenje district office. The PS (MLNR) who has written to the PS (Central Province) requesting for the recruitment of two Watch Men for both Serenje and Chitambo respectively has taken up the issue.

**Planned activities for quarter 3.**

During quarter , the planned activities will be as follows:

- Regeneration of the 15,000 ha of land in Serenje and Chitambo. Opening boundaries for ANR areas
- Support to the PIU
- Conduct field work for the GIS and sustainable livelihood consultants
- Formation and registration of additional VAGs
- Training of district and VAG team members in the development of fire management plans
- Hold steering committee meeting
- Hold a Technical committee meeting

Signed by IP Project coordinator.....

Signed by Assistant Resident Representative (UNDP).....