



ACTIVITIES REPORT BY LIFE CONNECTED

Half-yearly report - Community Development
Activities in Nalusanga, Kafue National Park

July, 2020

ABSTRACT

This report gives an overview of all the activities that have been performed by the NGO By Life Connected since February 2020. By Life Connected is based in Nalusanga, Mumbwa district next to the gate into Kafue National Park. Focus of the activities implemented by the NGO is community development in harmony with nature conservation.

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We cannot express enough thanks to all the stakeholders inside the Kafue National Park. Operators like Mukambi Safari Lodge, Pinnon Lodges, Ila Safari lodge, Kasabushi Camp, Musekese Camp, Saba Safaris and all the other operators that have made us feel very welcome. If it wasn't for their support, friendship, enthusiasm and hosting us every now and then, we would have had a much harder time adapting to rural African village life.

Besides the operators, we are also very grateful for the passion and support of the NGO's in the area: Zambian Carnivore Program, Panthera, Game Rangers International and Musekese Conservation. Collaboration with these partners has been very rewarding and has given us much incentive to push our community development projects forwards.

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3. Activities

The NGO By Life Connected Ltd. was registered in Zambia in May 2019. From May to November 2019, By Life Connected implemented a stakeholder analysis. The needs of all stakeholder groups were mapped and based on this information, a strategy was established. During this time, the headquarters of By Life Connected was established in Nalusanga, the entrance of Kafue National Park, at the Rural Development Network (RDN) plot.

In December 2019 a crowdfunding campaign was initiated. With the money from the crowdfunding campaign, activities could start in February 2020. Below is a short overview of all the projects that By Life Connected implemented solely and in collaboration with other Greater Kafue National Park stakeholders. The focus of this NGO is to create a so-called permaculture. Permaculture is a set of design principles centred on 'whole systems thinking', simulating, or directly utilizing the patterns and resilient features observed in natural ecosystems. It uses these principles in a growing number of fields from regenerative agriculture, rewilding, and community resilience. Because of the broad spectrum of permaculture, there is a large diversity in the sustainable projects implemented by By Life Connected:

- Nalusanga Permaculture Hub
 - Organic Demonstration Farm
 - Greenway Stoves
 - Social enterprises
- Supply and waste collection service
- Collaborative efforts

This report will go into more detail about the activities and the take-aways. It will also give an idea of the projects that will be implemented by the NGO in the near future.





4. Nalusanga Permaculture Hub

Permaculture stands for Permanent Culture. It is a movement that focusses on the transition of communities to a sustainable and resilient state. Permaculture realizes this by concentrating on three important aspects of society: agriculture, people and homes. By Life Connected is focussing on the following essentials of permaculture:

- **Regenerative agriculture**, which are techniques and strategies that continuously improve the land, production and environment over time;
- **Diversification** of sustainable (agricultural) livelihoods, like mushroom and fish farming, but also a restaurant or garage;
- Access to **affordable sustainable energy**, like sustainable stoves, a biogas system and solar;
- **Sustainable waste management** by collecting, storing, recycling and upcycling waste;
- And above all, **support**. By providing workshops for livelihood creation, business development, management and accounting, interest free loans and a connection to a market, rural Zambians are set up for success.

In return for these services, By Life Connected has two requirements for working with community members. The first requirement is that all businesses started with our support, will become social enterprises. This means that profits (after a maximum agreed upon salary and reinvestments in the business) will be invested in a community development project of their choice. Secondly, each community member By Life Connected works with has to sign a conservation agreement, prohibiting them or any family member to be affiliated with unsustainable resource use (especially poaching).

The vision is to bring all this together in Nalusanga Permaculture Hub. Next to being a place for inspiration, it is also a place where people from different stakeholder groups, can come together, socialize, build trust and make plans for a sustainable future. Nalusanga Permaculture Hub is set up in collaboration with the Rural Development Network (RDN). The Nalusanga Permaculture Hub currently consists of two areas: the organic demonstration farm and the social-business centre, including By Life Connected's Headquarters.





4.1 Organic Demonstration Farm

At the demonstration farm the goal is to involve community members from the start. They learn about organic agriculture and diversification, and apply that knowledge on their own land. We have hired a caretaker, named Margret and involved some of the most vulnerable people in the area: six orphaned young-adults and their caretakers. They helped set up the demonstration farm and in return receive the funds from selling the farm products. They also receive a free education in organic agriculture and By Life Connected is paying the school fees for the orphaned young adults until graduation.

Currently, a 40m by 40m piece of agriculturally abused land has been converted to an organic demonstration farm including a vegetable garden and a poultry/rabbit farm. The following principles of regenerative agriculture are used:

- I) Making **organic fertilizer** with a composting worm farm, composting and organic liquid fertilizer:



- II) Making **organic pesticides** based on local ecological knowledge.
- III) Water saving through mulching and deep pipe irrigation:
 - **Mulching** is the concept of adding a layer of material applied to the surface of soil. Reasons for applying mulch include conservation of soil moisture, improving fertility and health of the soil and reducing weed growth.
 - **Deep pipe irrigation** is a very effective, yet little known, irrigation system that uses an open vertical or near vertical pipe to deliver irrigation water to the deep root zone. In the demonstration garden these pipes are re-used plastic bottles with holes in them.
- IV) **Companion planting** is the planting of different crops in proximity for any of a number of different reasons, including pest control, pollination, providing habitat for beneficial insects, maximizing use of space, and to otherwise increase crop productivity.
- V) **Diversification**. Besides an organic vegetable garden, there is also a beehive, mushrooms growing, (fruit) tree nursery and a poultry/rabbit farm. The poultry and rabbit house has been made of earth bags (polypropylene bags filled a 30/70 ration clay and sand), which is a cheaper and more environmental friendly way of building. Plastering is done with a mixture of termite mound soil and sand, based on traditional knowledge.



4.1.1 Take-aways

The establishment of the organic farm so far has been moderately successful. The predominant learning moment was that ensuring a continuous influx of high quality, locally produced organic fertilizer requires more time than originally thought. As a result, the crops currently show a lack of nutrients. This emphasizes the abused state of the land due to past use of chemicals and burning. Consequently, crops are less resistant to pests and diseases, and the yield hasn't met our expectations.



4.2 Social Business Centre

The goal of Nalusanga hub is to also have a social business centre where people and products can connect. The current focus points at the hub are in the beginning stages of development:

1. Demonstrating ways to use energy sustainably: a) distribution of sustainable stoves, b) set up a monitoring program to evaluate the use of the stoves, c) build the Frasier stove and d) connect the restaurant to a biogas system.
2. Set up social enterprises in collaboration with community members.
3. Provide community services and activities.

4.2.1 Greenway Stoves

In terms of green energy we are handing out a sustainable alternative to wood -and charcoal stoves: the portable [Greenway Stoves](#). The goal of the Greenway project is to reduce deforestation. One of the biggest threats to the Zambian nature is the vast consumption of wood and charcoal for cooking. These alternative stoves are 2/3 more effective than traditional charcoal stoves. This means two litres of water boils between 5 to 7 minutes. They produce 70% less smoke and, most importantly, you can only put small pieces of dead wood in it. There is no need to cut entire trees for firewood, so these stoves prevent deforestation.

By Life Connected has now distributed 5426 stoves in chiefdom Kabulwebulwe, chiefdom Mulendema and chiefdom Chibuluma in collaboration with Greenway. All these stoves are donated by Greenway to the Zambian people. By Life Connected functions as a local distributing partner of Greenway. By Life Connected was able to charge only 25 kwacha per stove, so that even the poorest families in the community have the possibility to buy this stove. Any profits that have been made, were reinvested in social enterprises like the garage and the restaurant.



“I use the stove for everything! Cooking nshima, warming water for bathing. It’s quick and easy.”

4.2.2 Social Enterprise

By Life Connected’s headquarters are based on the Rural Development Network (RDN) land where several years back, they’ve invested by putting up some buildings. There used to be a garage and a restaurant. These buildings are still there and with our arrival, we wanted to revive the dream of RDN, but with our own twist. Read more about RDN in Appendix A. Every business that we help - by investing money, support or resources - we want for them to become a social enterprise. Profits of a social



enterprise are principally used to fund social programs. This means that we make an agreement with the business owners that they reinvest the money in community projects of their choice.

Reviving the dream of RDN is the first step to create a web of social enterprises. Firstly, a generator and welding machine were purchased for the workshop. It is now the only workshop in a 40 kilometre radius to offer welding and other repairs. Amon is an already skilled welder and is doing a great job. The only appliance the garage still needs to become a genuine workshop, is a large grinder.

Secondly, after funding a gas oven, kitchen appliances and utensils, the restaurant was reopened officially on the 1st of July. The focus of the restaurant is to cater the lodges, tourists, NGO members and other passer-by's coming in and out of Kafue National Park. With the only clean toilet between Lusaka and the park, a relax atmosphere and fresh food and drinks, the restaurant wants to attract passer-by's for a short break on their journey. Brenda, a woman living in Nalusanga area, has received a two-week training at Mukambi Lodge to gain some skills in how to run a kitchen and restaurant.



4.2.3 Other Hub Activities

There are some other activities at the Hub. In January a volleyball team was created to promote physical activity among young adults. It helps to distract them from the limited possibilities they have living in a rural area. And of course, it's just a lot of fun! During the first tournament that was played with three other teams, the Nalusanga volleyball team came in second. Unfortunately, due to Covid-19, all practices have to be cancelled until further notice. When we can resume, there is a volleyball field created at the RDN plot.

Furthermore, we are building a so-called cold room at the Nalusanga hub. This is a 9m by 3,5m building, placed 1.5 meter into the soil. It uses the natural ability of the soil to remain cool. This building will function as a communal facility where farmers can keep their produce fresh for longer, before selling it. It can also function as a small farmer's market, inviting customers who stop for a (toilet)break at the restaurant to have a look at the variety of fresh local produce that are for sale. In addition to showcasing



vegetables and fruit, By Life Connected also wants sell a range of artisan products like jams, chutneys, pesto's, cheeses, meats, etcetera, made by local farmers.



4.3 Supply and waste collection service

As part of By Life Connected's mission to preserve African wildlife areas through inclusive development projects, By Life Connected is setting up a supply -and waste collection service. This service connects the demand of organizations in the park with a local supply. Currently, organizations source all their demand in Lusaka. This service involves empowering local farmers to grow the produces that these organizations need. By Life Connected wants to facilitate this by providing workshops at the organic demonstration farm, supply small-scale farmers with seeds, and transporting the produce to the organizations.

Currently, with the Covid-19 situation, the organizations in Kafue National Park are either closed or operating at a fraction of their full capacity. The demand is not large enough for small-scale farmers to consider it a market and the supply service is not functioning for economic reasons. It is also not responsible under the current circumstances to organize workshops with the farmers, which is why this part of the project has been put on the backburner.

However, in response to the economic burden for the organizations in park, By Life Connected has been doing supply runs on a voluntary basis for especially Zambian Carnivore Programme, Ila Safari Lodge and Mukambi Lodge. The goal of this is to lower their overhead costs and build trust so that we can continue collaborating after the crisis. It is also an opportunity to buy from the two organic farms, and the local market.

Finally, Musekese Camp has been dropping off waste at the Nalusanga Hub. This has been sorted and stored in the waste storage facility. Currently, we are upcycling wine bottles; cutting the glass to turn them into long drinks. These long drinks can be used at the restaurant or be sold, potentially forming another social enterprise in the future. In the next 6 months, By Life Connected will experiment further with upcycling waste and selling it, forming more business opportunities for local community members.



5. Collaborative efforts

Since By Life Connected's origin, we have been focussing on establishing solid formal and informal relationships with all stakeholder groups in and around Kafue National Park. Being the only NGO based in Nalusanga enables By Life Connected to take on the role of coordinator for community development projects of other organizations who don't have the time or local connections to implement it. It also enables By Life Connected to search for skilled labourers in the area, that can work for the operators. As a whole, By Life Connected's presence in Nalusanga empowers organizations in Kafue National Park to participate more in local community development.

5.1 Green Safaris Conservation Foundation

By far the biggest impact on community development in the area has been the collaboration between By Life Connected and Green Safaris Conservation Foundation (GSCF). This foundation is part of a safari operator with several ecolodges in Zambia and Malawi, including Ila Safari Lodge in Kafue National Park. GSCF has a strong commitment to actively support a variety of conservation organizations and community development projects. By Life Connected has functioned as their local coordinating partner for the community development projects. Currently, four projects are being implemented by GSCF:

- I) The construction of Lukanga Secondary School;
- II) Making the already established Ila Community Farm self-sustaining and organic;
- III) Implementing several Covid-19 measures in Chiefdom Kabulwebulwe;
- IV) Initiating a Conservation Education Program at Lukanga Primary School;
- V) Putting up extra speeding signs along the M9 to contribute to the prevention of road kills.



Ila Community Farm



Lukanga Secondary School



Covid-19 preventative measures





5.2 Other organizations

From the collaboration with Green Safaris, some other initiatives have started. Firstly, from the donation of the speeding signs and the linked ceremony (see right), an M9 focus group has formed. This group consists of several stakeholders including Department of National Parks and Wildlife (DNPW), Road Development Agency (RDA), ZCP, Panthera, Game Rangers International (GRI) and several committed operators. The goal of this group is to find solutions to issues that arise along the M9 inside Kafue NP. For example, the amount of wildlife road kills through speeding vehicles, littering, bashing of the gates at Nalusanga market etc.

Another collaboration has started from an initiative of Green Safaris: the Conservation Education Club. Besides Ila lodge, a team of local conservationists is involved, including ZCP, DNPW and Chipembele. This Conservation Club will be a pilot project and when successful, can be expanded to other schools in the area. There are already other operators willing to support this project and provide game drives for students (see bottom).



Other organizations By Life Connected collaborated with is Musekese Camp and Saba Safaris, both lodges in Kafue National Park. Musekese Camp has asked to find skilled local staff for several jobs including someone who could construct Tsetse traps. Tsetse's are large biting flies that are abundant in the park and can form a disturbance for tourists during game or self-drives. By Life Connected facilitated Saba Safaris with determining suitable and – according to the community - desired locations for the construction of two boreholes.



6. Future projects

Some future plans have been mentioned in the described projects. However, here is a short overview of the overall future projects that are on the agenda.

Expanding existing projects:		
Demonstration farm	Social Business Centre	Supply & waste collection service
<ul style="list-style-type: none"> - Farmers workshops – organic farming & diversification - Communal herding in collaboration with Grassroots Fund - Introducing AgriPredict app - Create a fishpond - Start a bamboo plantation and fruit orchard - Make solar dryers - Create a seed bank with local/strong seeds - Value addition: making pesto's, tomato sauce, jam etc. 	<ul style="list-style-type: none"> - Create a database of locals with skills that can be used by lodge operators - Restaurant: introduce a pizza night - Restaurant: create a biogas system for cooking - Workshop: find a good mechanic to manage a garage 	<ul style="list-style-type: none"> - Include a Lusaka supply for products that can't be found locally - Expand waste storage facility with sandbag building technique - Get machinery to process recyclable waste - Make designs and find market for upcycled waste

New projects:	
Kafue Connected	Rabies vaccination program
<p>Start an organization that represents and includes all the stakeholders of Kafue National Park. This organization will promote collaboration on larger (conservation) issues, therefore creating a bigger impact compared to working individually.</p>	<p>Domestic dogs can carry rabies. When they become aggressive they can bite people and transfer the rabies to humans, which is deadly without treatment. It is also transferred to Wild Dogs. With one Wild Dog getting rabies, the entire pack of this endangered species will die from the disease. By creating a buffer zone of vaccinated dogs around Kafue National Park, we can keep both wildlife and humans safe.</p>





7. Finances

The tables below show the half-yearly overview of By Life Connected's finances. The overview is divided into two categories: By Life Connected (green) and Green Safaris Conservation Foundation (blue), in which By Life Connected functions as a local implementing partner.

Balance			
By Life Connected	Dollar \$	Green Safaris Programs	Dollar \$
Revenue	30,358.97	Revenue	11,834.76
Expenses	<u>28,368.02</u>	Expenses	<u>12,331.14</u>
	1,990.94		-496.38
Total Balance	\$ 1,494.57		

Revenue			
By Life Connected	Dollar \$	Green Safaris Programs	Dollar \$
First National Bank Starting Balance	55.55	Ila Community Farm	1,216.21
Photography	426.14	Lukanga Secondary School	5,414.76
Go Fund Me Demo Site	12,495.34	Toyota Hilux	3,687.25
Individual Contributions	9,543.80	Covid-19 measures	<u>1,516.53</u>
Stoves	7,278.89		
Corona Contributions	39.77		
Supply Service	<u>519.49</u>		
	30,358.97		11,834.76
Total Revenue	\$ 42,193.73		

Expenses					
By Life Connected Operations	Dollar \$	By Life Connected Programs	Dollar \$	Green Safaris Programs	Dollar \$
Headquarters	1,630.83	Demo Farm	4,169.33	Ila Community Farm	1,268.43
Car & Service	10,495.64	Restaurant	477.09	Lukanga Secondary	5,348.78
Petrol & Toll	4,114.99	Supply Service	717.98	Toyota Hilux	3,632.03
Materials	212.27	Stoves	<u>2,446.35</u>	Covid-19 measures	<u>2,081.89</u>
Bank & Accounting Fees	334.75				
Repairs & Maintenance	167.74				
Internet & Telephone	549.72				
Office Supplies	1,156.01				
Permits	240.45				
Subscriptions	54.80				
Website	96.25				
Piece Work and Lunch	<u>1,503.83</u>				
	20,557.27		7,810.75		12,331.14
Total Expenses	\$ 40,699.16				



8. Appendix A – Rural Development Network

Profile Rural Development Network - Nalusanga

Rural Development Network - Nalusanga (RDNN) is a development initiative birthed from activities done in Nalusanga since 2007. With the explicit aim of assisting in Natural Resource Management (NRM), specifically targeting community 'buy in' and ownership of interventions, RDN borrows heavily from the concepts of Community Based Natural Resource Management (CBNRM).

With the unique positioning of the Nalusanga plot, being at the entrance of the Kafue National Park (KNP), various programs were initiated to eventually link all stakeholders of the KNP natural resources. The wildlife resource, that attracts investment in the tourism/hunting sector, has been a pivotal part of the surrounding community's livelihood. The management of this has, historically, relegated this set of stakeholders to mere spectators and at times villains.

The reality is that the maintenance and increase in wildlife numbers heavily depends on the involvement of these specific communities. Sharing the financial benefits of wildlife and tourism equally with these stakeholders will improve and increase wildlife numbers. Removing hunting (poaching-) stress. From this starting point, RDN has aimed to empower local communities with alternative livelihoods and sustainable use and harvest of their God-given natural resources. Some skeleton interventions previously done are:

- Agricultural interventions: The use of innovative and sustainable ways to improve domestic/village agricultural production, the offshoots of this is improved nutrition (what with the ever-present health issues: primarily HIV/AIDS) and surplus for sale to increase domestic income.
- Collaborations: Including other stakeholders, through community fresh produce supply to lodges and camps within KNP.
- Storage hub and logistical support: Perfectly central and a gateway to KNP and Lusaka. Client transfers, supply storage and community produce sales, to include curios and traditional artifacts.
- Centre of excellence: that can be replicated in other parts of Zambia, and the continent at large, focused on community participation in sustainable natural resource management.

RDN sees collaborations, with like-minded individuals, NGO's and organizations as an integral part of achieving stated goals. As a fully legal and registered company, its Directors, all currently working at various levels of developmental initiatives within Zambia and the continent, see the Nalusanga hub as an exciting centre that is destined to impact not only the KNP natural resource management but the country as a whole.