



# ANNUAL REPORT BY LIFE CONNECTED

Community Development Activities in Nalusanga,  
Kafue National Park

## ABSTRACT

This report gives an overview of all the activities that have been performed by the NGO By Life Connected since January 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 landscape restoration through community development.

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## WHAT WE DO

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By Life Connected (BLC) is a not for profit organisation that focusses on empowering communities around the Greater Kafue Ecosystem (GKE) in Zambia. The NGO partners with them to create alternative sustainable livelihoods that are supported by a nature conservation and wildlife economy. In this way By Life Connected and partners create an active link between wildlife and communities such that engagement between nature conservation and the adjacent communities is direct, strong and sustainable over the long term. As a result, communities are empowered to refrain from using the natural resources unsustainably and have the opportunity to actively participate in its preservation and restoration.

### Social: Community & Job Creation

Our projects aim to create sustainable livelihoods. Collaboration with local communities is at the heart of what we do, and we pride ourselves on working with them on projects they identify as necessary. We always strive to give the local community ownership over the projects and for them to become (in time), self-sufficient.

### Environmental: Food Security & Land Restoration

Nature has a solution for everything. With farming being the major activity in rural Zambia, the best way to help land restoration and conservation is by bringing (small-scale) farming back to natural, sustainable methods. Other approaches are through the catchment of water for slower irrigation and reforestation to help battle climate change. We are supporting mother nature's own processes, and making them work for increased food security and sustainability.

### Governance: Education and Training

With projects aimed at being self-sufficient over time, supporting the educational institutions of the communities we work with are a key value for us. Besides starting a Conservation Education Club, we strive to ensure all our projects include career development and training for participants and employees.

***Our mission is to contribute to preserving African wildlife areas in active partnership and collaboration with the communities next to the nature areas. We try to achieve this through inclusive development projects that focus on improving sustainable livelihoods, conservation and education.***





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## A SUMMARY OF 2020

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The NGO By Life Connected Ltd. (BLC) was registered in Zambia in May 2019. From May to November 2019, By Life Connected implemented a stakeholder analysis in the Greater Kafue Ecosystem (GKE). The needs of all stakeholder groups were mapped. 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 collected through the crowdfunding campaign, activities in Nalusanga started in February 2020.

The sudden and vast impact of the Covid-19 pandemic in March 2020 (for Zambia), has influenced our NGO's agenda over the last year. Initially, our key concern was to prepare 'our' community in Nalusanga region in terms of information, protection and health safety; all vital to prevent a humanitarian crisis.

Additionally, the sudden closure of tourism inevitably caused a widespread loss of jobs and livelihood, which forced more communities to turn to illegal activities in the wildlife areas like poaching and charcoal burning. Furthermore, the absence of park-fees generated by international visitors, resulted in lesser means available for monitoring and protecting wildlife.

This pandemic reinforces the importance of implementing projects that create a diversity of alternative livelihoods, and contribute to conservation, landscape restoration and community development.

The goal of the NGO is to create permaculture hubs in the communities we operate. 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 wide spectrum of permaculture, there is a large variety in the implemented projects: These projects are designed to address some of the biggest challenges faced by rural communities: health and safety, food security, education, deforestation and conservation.

- Nalusanga Permaculture Hub
  - Organic Demonstration Farm
  - Clean, sustainable cooking stoves - Greenway
  - Social enterprises
- Collaborative efforts
  - Covid-19 sensitization
  - Conservation education
  - Building a secondary school



## Looking Ahead

In the final months of 2020 we embarked on the largest expansion of our projects since we started, namely the introduction of projects in Livingstone in collaboration with Green Safaris Conservation Foundation. This includes the creation of the Mukuni community farm on 12.74 ha land. Looking ahead, ensuring the smooth running of projects across the Greater Kafue Ecosystem and the Livingstone area is a main focus to ensure the integrity of our work and quality of the results, while simultaneously expanding and developing new livelihood development projects.

MULYOKELA KALALUKA

*Chairman*

KELLIE BOCXE

*Secretary*

LARS VERMEER

*Treasurer*

ROY MUTELELE

*Board member*







# FINANCIAL SUMMARY

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## STATEMENT OF CHANGES IN EQUITY

### Budget 2020

Greenway Stoves project	€ 20,760
Crowdfunding	€ 11,913
GSCF	€ 18,688
Photography sales	€936
Third Party Donations	€ 5,408
<b>Total Budget 2020</b>	<b>€57,705</b>

### 2020 Per Category

Environmental	€ 16,509
Social	€7,390
Governance	€10,004
Overhead	€ 24,109
<b>Total</b>	<b>€58,013</b>

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**Balance 2020** € -308



# 1. INTRODUCTION TO THE HUB

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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 focusing 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 cooking 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.

By Life Connected has two requirements for collaborating with individual 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 members to be affiliated with unsustainable resource use (poaching/charcoal burning).

The vision is to bring all this together in the 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.





## 2. BEING CONNECTED

One of our most important core values is to collaborate and connect. We can accomplish more when we work together. So since By Life Connected's origin, we have been focusing on establishing solid formal and informal relationships with all stakeholder groups in and around Kafue National Park.

***“If you want to go fast, go alone. If you want to go far, go together”***

***- African Proverb -***

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.

### 2.1 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 Green Safaris, 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. In 2020, five projects were implemented by BLC under the funding and vision of 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.



### 2.2 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.

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.







## 3. ENVIRONMENTAL

### 3.1 Greenway Sustainable cooking stoves

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.

All these stoves were 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, are reinvested in social enterprises like the garage and the restaurant.

In 2020 BLC has distributed a total of 5426 stoves in chiefdom Kabulwebulwe, Mulendema and Chibuluma. The goal is to distribute stoves in chiefdoms all around Kafue NP. The collaboration with Greenway continues in 2021 to keep the program going.



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

### 3.2 Nalusanga - Organic Demonstration Farm

At the demonstration farm the goal is to involve the 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 Chikonde 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 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 farm. The poultry 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 than with bricks and cement. Plastering is done with a mixture of termite mound soil and sand, based on traditional knowledge.







Vegetable nursery



Companion planting



Deep pipe irrigation



Chicken house from sandbags



Mulching



Tree nursery



Organic pesticide





### 3.3 GSCF - Ila Community Farm

Besides the newly established demonstration farm near the Nalusanga centre, we've also joined forces with Green Safaris Conservation Foundation. They had the established Ila community farm since 2015. By Life Connected was asked to help the farm become truly organic and self-sustaining following the same concepts as the BLC garden.

We've been harvesting many types of vegetables and fruits: red/green pepper, tomatoes, zucchini, eggplant, herbs, lettuce, spinach, broccoli, cauliflower, pumpkin, butternut, beetroot, onion, rocket, carrots, impwa, rape, green beans, strawberries and cucumber.



### 3.4 GSCF - Bamboo Landscape Restoration Program

One of the major issues with the current way small-scale farmers in Zambia are farming, is that after about 4-10 years their land is degraded and unusable for agriculture. This is due to the high use of artificial fertilizer, pesticides and burning techniques. The land (1.8 ha) next to Ila Community farm has seen the same degradation. With this project, we aim to have land restoration as a rural sustainable livelihood. Besides re-nourishing the land, this bamboo landscape restoration program can be an alternative to charcoal burning and unsustainable logging. The project entails implementing a permaculture bamboo design, consisting of:

- I. Soil regenerative bamboo and tree species
- II. A water catchment system and
- III. Holistic economic activities.

The end stage of the regenerative process in 5-10 years, is the formation of a highly productive and low maintenance food forest.





## 4. SOCIAL

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 clay jumbo stoves and
  - d. connect the restaurant to a biogas system.
2. Set up **social enterprises** in collaboration with community members.

### 4.1 Covid-19 sensitization program chiefdom Kabulwebulwe

At the start of the pandemic, there was a necessity to spread information about Covid-19 virus among the communities. We have done this in the form of a sensitization program that was fully sponsored by Green Safaris Conservation Foundation. We started with a meeting with all 87 headmen outside the Chieftainess palace. Over 2,500 soap bars were distributed through these headmen to each village family. We also provided the Department of National Parks and Wildlife (DNPW) officers at Nalusanga gate a temperature gun, to measure all the incoming bus passengers for increased temperatures. Flyers and posters were designed and written in Tonga, Nyanja and English and distributed in public areas like churches, schools and markets. A Covid-19 sensitisation radio programme, recorded by Game Rangers International, was delivered







to both Kaoma and Mumbwa radio stations in local languages. Since then, this radio program has aired more than once a day in both areas. Finally, we have provided three health clinics and five primary schools with face masks, so they can safely interact with patients and within the classrooms.

## 4.2 Social Enterprise

By Life Connected's headquarters are based on the Rural Development Network (RDN) land where several years back, this organization invested in the community by providing several 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.

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.

### Garage & Welding Workshop

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.

### Travellers Restaurant

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 passerby'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. She also received training from Kellie, moving slowly towards becoming an independent restaurant holder.





### 4.3 Speeding and littering signs along M9

The M9 is a highway running straight through Kafue National Park for approximately 140 km, dividing the Northern side from the South. Consequently, there are many road kills, including big cats and wild dogs. For this, action had been undertaken last year through a collaboration with the Zambian Carnivore Program (ZCP) and Game Rangers International. 11 speed and 8 litter-themed signposts were designed by ZCP and sponsored by GSCF. Through a collaborative effort of different Kafue National Park stakeholders, the instalments of the signposts were implemented this year.

A positive outcome from the instalment of the signs, is the formation of an M9 focus group that has brought many different Kafue stakeholders (like DNPW, ZCP, Panthera and several lodge owners) together to try and tackle the different challenges the M9 faces, such as wildlife roadkill and littering.

### 4.4 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 had to be cancelled until further notice. A volleyball field is created at the RDN plot, for when activities can be resumed.

Furthermore, a so-called cold room was built 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, which is reinforced by the usage of the earth bag method and a grass roof. 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, BLC also wants sell a range of artisan products like jams, chutneys, pesto's, cheeses, meats, etcetera, made by local farmers. In 2020 we started this goal with jam made by local ladies, and taught Margret and Brenda from the restaurant, how to make pesto.







## 5. GOVERNANCE

### 5.1 GSCF - Building of Lukanga Secondary School

The need for a secondary school in Lukanga village was high as getting to the nearest secondary school, many students have to walk for several hours. This can be discouraging and tiring, robbing them of their focus from actual learning and can lead to many of them dropping out of school. Lukanga Primary School's first batch of secondary school students are ready next June. The headteacher has earned the school a good reputation and the construction of a secondary school will help many students get the education they deserve.

With the help of our local team, we have implemented the Green Safaris sustainable building methods (earthbag building) for the construction of the school, thus saving money and lowering our carbon footprint. Using earthbags also helps climate-control in the classrooms; during hot summer days it will remain cool, helping students to remain focused. It has been a great way of getting the community involved, as they could easily help with filling the bags with the soil. By end of 2020, the construction nears finalisation, and we expect the project to be finished on time, in June 2021.

The sustainable and affordable model for school construction will likely be replicated in other areas all over Zambia in collaboration with the Zambian Ministry for Education.



### 5.2 GSCF - Conservation Education Club

In 2020 Green Safaris Conservation Foundation has helped start a Conservation Education Club at Lukanga Primary School. The students learn about a variety of subjects all connected to nature conservation, and so far 68 pupils have received lessons from field professionals, including safari guides from Ila Safari Lodge, researchers from the Zambian Carnivore Program, Panthera and officers from the DNPW.

Part of the Conservation Club is the opportunity for students to experience the bush. Ila staff have welcomed 30 students and 4 teachers and given them the full tourist experience! From a game drive to a boat tour and a well prepared 'tourist lunch'. The children had an amazing time and will not soon forget this experience. Most of these students have never seen wildlife, despite living on the borders of the national park. Connecting



them with the nature and wildlife around them, helps these children realize the importance of protecting nature for themselves and future generations. It is the hope that this program will continue in 2021 and will be extended over other schools in Kabulwebulwe chiefdom.







## 6. GSCF - LIVINGSTONE

At the end of 2020 Green Safaris Conservation Foundation reached out to see if By Life Connected could help them start several community development projects in Livingstone. After close collaboration in Kafue NP, it was decided that a joint expansion to the Livingstone area would increase our impact as an NGO. We have launched three new projects to create both alternative employment opportunities and actively contribute to conservation and community development.

### 6.1 Mukuni Farm

In Q3 of 2020, Green Safaris Conservation Foundation and By Life Connected initiated the establishment of a new organic community farm in the Livingstone area in collaboration with Chief Mukuni. The 12.74 ha of land on the hillside of Mukuni, lay open for public grazing and was degraded by previous farming. The land consists of sweetveld, which means that the plants are highly palatable, but also very sensitive for overgrazing.

The mission is to achieve a fully sustainable, organic farm that can be self-sufficient by the end of 2021/beginning of 2022. The second goal is to turn Mukuni Organic Farm into a learning centre for the people of the Mukuni Chieftdom and to supply lodges in the area with organic produce. Mukuni Community Farm will be managed in a sustainable way by recovering the natural water and nutrient cycles and implementing holistic grazing to rehabilitate the land and plant life. This involves empowering people with knowledge and practical experience of organic farming, establishing a food forest, raising chickens, rotational grazing areas and mushroom growing.



#### Mukuni Farm employment and learning centre

For Mukuni Farm to succeed and be self-sufficient, it is vital that farmers know how to run the farm as a business, by gaining skills such as financial management, planning, communication, market research, relations, etc. From the start of the project community members will be involved and trained to ensure this, and over the period of the project, farmers showing promise and dedication, will receive further training in value-adding and management. We remain open to the farmers in understanding and identifying which skills they might want or need to develop for the handover of the farm to be a success.

#### The future of Mukuni Farm (Livingstone)

With the productive rains since mid-November, we are anticipating a strong first harvest. We have already been approached by local farmers, asking about our methods as they see our crops grow stronger and healthier due to our organic methods. So spreading the knowledge will be key, once our training centre is



built (sandbag building of course). We aim to host a village BBQ and information evening around harvest time.

For most land use activities on the farm, livestock and wildlife, especially elephants, need be excluded. To ensure this, we will implement an array of measures of which some are proven to be effective, while others are more innovative. The fence around the whole land is the most important exclusion feature. The best option we have found so far is the combination of a wildlife fence for the livestock with two lines of electrical wire for the elephants. The wildlife fence will cover the height of the livestock, while the electrical lines will be in eye height of the elephants. In addition to fencing, innovative soft measures will be implemented that focus on changing the behaviour of elephants.

We will also experiment with an early warning system in combination with chili and tobacco which cover the smell of edible produce for elephants from the farmland. We will plant aromatic and medicinal herbs that, according to research, deter elephants and finally a bamboo fence, which also works as a windbreak for air flowing outwards from the farmland. Overall, these soft measures are quite economical to implement. Especially the herbs and the bamboo can even become a substantial economic incentive.

## 6.2 Reforestation & Smart Stove Project

Q3 also saw a reforestation project launch in the area of Simonga village, close to Tongabezi Lodge. With the population in the area increasing, so does the deforestation, mostly with the purpose of charcoal burning. So far, the project has been developing the tree nursery and the team is being put together.

The project will focus on two methods. One method is to simply plant a mixture of native slow growing and fast growing, stick producing, trees. The second method of reforesting is pruning of trees that were cut down by charcoal burners. After cutting down trees the root network and the stump are often still alive. To help the stump become a tree once more, the shoots need to be pruned. This is a very easy and cost-effective way of reforestation. Both methods are also allegeable for obtaining carbon credits, which is something we are look into implementing.

Parallel to the planting schemes, this project wants to involve the introduction of a smart stove project, to change the demand for energy from an unsustainable to a sustainable source of fuel. We aim to facilitate this by offering a service to the local people, who normally use charcoal. It involves distribution of the same Greenway stoves that are distributed around Kafue NP.

## 6.3 Chicken coop

Finally, another alternative job-creation project has been launched by facilitating the setup of a chicken-cooperation, which we expect to become self-sustainable relatively quickly. The first stage is to build the chicken coop, constructed in an environmentally friendly way using the sandbag building method, hosting approx. 250 chickens. This construction started at the end of 2020 and is underway, estimated completion March 2021. The project will sell the meat chickens back to Heartland. The plan is to focus, until self-sustenance, predominantly on this collaboration.



## 7. CHALLENGES OF THE YEAR

One of the issues faced this year the farm, was the challenge to change the mindset of the workers on the Ila Community Farm. Until now, the farmers have received set salaries, however the objective was for them to become self-sustaining on the proceeds of their commercially sold produce, after a limited wage-sponsorship for the initial years. This would remove dependency of external funding, currently from GSCF.

Perhaps the change from salary to profit-driving has not been successful due to lack of motivation, agreement or a hesitation to release a guaranteed salary. Political and cultural aspects play in, but we are working closely with the local community and chieftainess to resolve and develop the best solution for all. A distribution network has been implemented, and a vehicle purchased, to distribute the produce over more lodges and other stakeholders such as Zambian Carnivore Program and Panthera in and around Kafue National Park.

Covid-19 of course posed a challenge as the funding normally accessible through tourism, will become hard to replace for 2021/2022.







## 8. GOING INTO 2021

### 8.1 Overview

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 for 2021.

Expanding existing projects:		
Demonstration farm	Social Business Centre	Supply & waste collection service
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.	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	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
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.	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.



## 8.2 Supply and waste collection service

As part of By Life Connected's mission to preserve African wildlife areas through inclusive development projects, BLC 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. BLC 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.

*Providing a waste sorting systems in public areas, setting up a sensitization program for the impact of waste and sorting waste, organizing a half-yearly clean-up day, picking litter along the M9, collecting all the sorted waste and storing it, reusing and upcycling waste to high-quality products of which more than 50% of the profits go to the community.*

With the Covid-19 situation in 2020, the organizations in Kafue National Park were 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 was also not responsible under the Covid-19 circumstances to organize workshops with the farmers, which is why this part of the project has developed slowly in 2020.

However, in response to the economic burden for the organizations in park, BLC 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 2021, By Life Connected will experiment further with upcycling waste and selling it, forming more business opportunities for local community members.










## 9. 2020 ILLUSTRATED








### 9.1 Project Progress Carbon Offset Overview

Activity	Carbon offset contribution?	
	yes	no
Covid-19 Sensitization Program		x
Lukanga Secondary School	x	
Conservation Education Club – Lukanga School	x	
Ila Community Farm	x	
Bamboo Landscape Restoration Program	x	
Water catchment system (part of Bamboo Landscape Restoration Program)	x	
Speeding and littering sign along M9		x
Mukuni Farm	x	
Reforestation & Smart Stove project	x	
Chicken Coop	x	
Mukuni Farm Employment and Learning Centre		x

### 9.2 The Sustainable Development Goals and GSCF projects

	We will create job and trade opportunities for local communities, and we are committed to reducing poverty in game management areas and areas surrounding the National Parks where we operate
	Creation of jobs is the creation of an income. Additionally, we are committed to making eco-organic farming a widespread practice, ensuring food safety for years to come.
	We eliminate the use of pesticides in farming and providing sanitisation stations during the pandemic, we contribute towards the a good health in the communities.
	We support the building of schools and providing job and career development trainings is at the heart of GSCF projects
	We will never create jobs are exclusively available to one gender and all training and job creation is available to all. We encourage women to partake in the projects and to bring ideas forward and we monitor employee and trainee ratios to ensure as close to 50/50 as possible.
	We teach farming without the use of any chemicals or pesticides and the effect of burning plastic on the ground water, which eliminates contamination. All areas of work have sanitisation facilities.
	We promise to create a safe and open working environment for all to thrive and develop their careers. By producing or trading only environmentally sustainable products, we ensure the longevity of the jobs and growth of the project.



	We do not destroy nature for our own needs. We work with nature to create safe and eco-friendly buildings and structures, namely via our sandbag building technique.
	We will offer equal employment and career development opportunities and equal and fair pay or prices.
	We work with local chiefdoms and government to ensure any or all impact on the communities we operate within, has a minimal, net zero or negative carbon footprint.
	We will only produce crops or farm in a way that works with nature's own cycles and defence mechanisms, and only as much as is viable for the earth, and viable to be consumed. We will endeavour to recycle or upcycle any element of any production to ensure a circular production.
	We will ensure that to the best of our ability, our projects are all carbon neutral or negative, using renewable energy where possible and reducing any activity that might contribute to climate change.
	We are actively designing our projects to improve the habitat for all animals and plants, taking lifecycles, food chains and biodiversity into account.
	We will work with community leaders and international organisations to benefit from a wide range of ideas and opportunities. We will share our progress in annual reports, on traditional and non-traditional media as well as to the local communities. We will collaborate with public or private sector to reach our goals.

### 9.3 GSCF projects and the Sustainable Development Goals

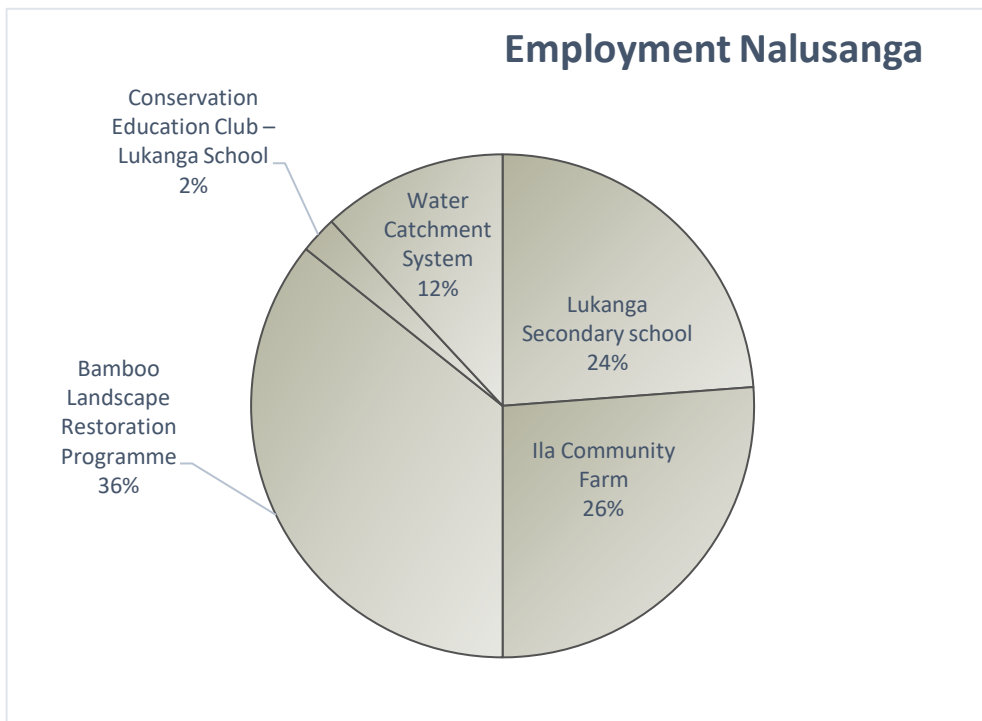
Covid-19 Sensitization and Prevention Programs	 
Lukanga Secondary School	
Conservation Education Club - Lukanga School	 
Ila & Mukuni Community Farm	      
Bamboo Landscape Restoration Program	      
Water catchment system (part of BLRP)	    
Speeding and littering sign along M9	 
Fencing palace	



Reforestation & Smart Stove project					
Chicken Coop					
Mukuni Farm Employment and Learning Centre					

## 9.4 Employment distribution

A total of 54 different local people have been employed in the different projects in 2020. See below for the distribution over the different projects.





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We would also like to acknowledge with much appreciation the crucial role of Green Safaris Conservation Foundation. They gave us the chance to help with the work that they have been doing in the Nalusanga community, while simultaneously developing our own NGO. Without their support, we would have struggled to come as far as we have now.

To the Rural Development Network (RDN) and chieftainess Kabulwebulwe our deepest gratitude for facilitating us on their land. We are especially grateful to RDN for the use of the buildings on this plot. We are also very grateful for the cooperation and collaboration with the Community Resource Board and the Ward Development Committee and their representatives CRB vice-chair Getrude Mwiba and Councillor Joseph Chinyama. Without their support we would not be able to reach out to the community in the same way.

We cannot express enough gratitude 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 welcome. If it wasn't for their support, friendship and enthusiasm, we would have had a harder time adapting to rural African village life.

Besides the operators, we are also 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.

We want to express our sincerest thanks to the Department of National Parks and Wildlife and to Mumbwa Council for their continued support and collaboration. Their guidance has helped us implement our projects in the best way possible. We are grateful that we can always reach out to them for direction and support.

Last but not least, many thanks to our own team. From the board of directors in the Netherlands and Zambia: Mulyokela Kalaluka, Roy Mutelele, Sanne Bocxe, Ivar Kruithof and Ari Bocxe. To our team on the ground: Sapren Manguwa and Margret Chikonde. Thank you very much for all your time and effort to make By Life Connected succesful.