

Farm to Table Initiative



1.	Greater Kafue Ecosystem	2
1.1	Background	2
1.2	Priorities & opportunities.....	2
2.	Design of program	2
2.1	Location.....	2
2.2	Target groups.....	3
2.3	Implementation	3
2.4	Program team	4
2.5	Planning	4
3.	Financial plan.....	4
3.1	Investment budget	4
3.2	Funding budget	5
3.3	Revenue	5
3.4	Financial overview	5
3.5	Expected results.....	6



Foreword

This program will be part of Panthera's the 'Greater Kafue's Super Five' project, a five-year project that will secure populations of KAZA's five flagship large carnivores. The 'Farm to Table' Initiative is a collaborative effort of By Life Connected, Ila Safari Lodge, Panthera and Pinnon Lodge, combining expertise on sustainable community development and law enforcement. By Life Connected will be the lead implementing NGO of this initiative. By Life Connected is a not for profit organisation that focusses on empowering communities around the Greater Kafue Ecosystem, and partners with them to create alternative sustainable livelihoods that are supported by a nature conservation wildlife economy. In this way By Life Connected and partners, create an active link between wildlife and communities such that engagement is direct, strong and sustainable over the long term.

Farm to Table Initiative

The 'Farm to Table' Initiative is requesting funding to amplify the role of communities as active conservation and business partners in the nature conservation wildlife economy of the Greater Kafue Ecosystem by developing a management and logistics community driven service that provides the Kafue consumer needs from a locally grown produce market.

1. Greater Kafue Ecosystem

1.1 Background

The Greater Kafue Ecosystem (GKE) comprises nine game management areas (GMA's) surrounding the 22,400 km² Kafue National Park (KNP) and extends over 66,000 km². It is one of the largest contiguous conservation landscapes in Africa protecting many endangered and/or endemic animals.

The GKE faces many threats including widespread poaching and deforestation fuelled by agriculture, charcoal production and unplanned human settlements within the GMA's. These threats are driven by inadequate socio-economic incentives and high poverty levels among communities that are amplified in scale by among others a lack of engagement of communities with the nature conservation wildlife economy.

1.2 Priorities & opportunities

Measures likely to have the most influence on mitigating these threats are the creation of alternative livelihoods for current and potential poachers, empowerment of local communities and increased enforcement of wildlife laws (Overton *et al.*, 2017¹). Current measures to mitigate unsustainable resource use in the GKE have focussed predominantly on strengthening law enforcement. As part of an integrated approach, By Life Connected (BLC) will compliment these efforts and focus on empowering the communities by providing alternative sustainable livelihoods.

Currently, local farmers lack information on the food and produce demand of the GKE and they have limited means to manage logistics and distribution to match consumer demand. Therefore, the majority of lodges, NGOs and government departments operating in the GKE source their products from Lusaka. By Life Connected will develop a management and logistics community driven service through the 'Farm to Table' Initiative. The program will realize a demand market and supply chain for the community to service the Kafue consumer needs from a locally grown produce market. With this 'new' market inside the GKE, production must be increased, subsequently creating more stable and diversified jobs in the community. In this way the program creates an active link between wildlife and communities such that engagement is direct, strong and sustainable over the long term.

2. Design of program

2.1 Location

The program's initial focus will be the central zone of the GKE, including Mumbwa GMA and Nalusanga village. This area has the highest density of tourist hospitality organisations, NGO's and governmental organizations relative to elsewhere in the park and thus the biggest potential demand for provision from local markets. The M9 highway which runs through the GKE from the Nalusanga gate (in the east) through KNP to the Tateyoyo gate (in the west) - provides easy access to the core of the GKE. This enables the logistics service to reach the organizations efficiently. In addition, the M9 is the main road that connects the GKE with Lusaka.

¹ Overton, J., Davies, S., Nguluka, L., Chibeya, D., Nsende, E, Sompa, B., Simukonda, C. & Lindsey, P. (2017). The illegal bushmeat trade in the Greater Kafue Ecosystem, Zambia. Drivers, impacts and solutions. FAO, Zimbabwe 2017.

Lastly, Nalusanga has a huge potential to become *the* gateway for Kafue National Park in the same way as Livingstone or Mfuwe are for respectively Victoria Falls and South Luangwa NP. This program and By Life Connected, will help set this goal for Nalusanga as Kafue NP’s tourist village, in motion.

2.2 Target groups

The clients of the ‘Farm to Table’ Initiative are twelve lodges, four NGO’s and two governmental organizations who are active in the central zone of the GKE. The main community targets are productive local farmer cooperatives that will service the produce demands of these organizations.

The program will involve existing community farming cooperatives and stimulate the formation of new ones, including vulnerable groups like widowers and orphans. Cooperatives are democratically organised, managed and run by the communities themselves for a collective benefit. By using cooperatives, this initiative reaches not just individual business owners, but multiple families. Furthermore, farmer cooperatives are more flexible, reliable and cost-effective in supplying a certain demand in comparison with individual farmers. Business development, management and accounting training courses will be provided whenever possible to local cooperative participants with an emphasis on upskilling women in influential roles. Lastly, the program will work in close collaboration with Ila Community Farm and another demonstration site in providing workshops that will enable farmer cooperatives to start diversifying (e.g. cauliflower, strawberry, etc) in what they offer.

To stimulate equality and transparency and discourage unsustainable resource use, the program requires a few preconditions of the cooperatives before integrating them in the program, being:

- More than 25% of the members of the cooperatives are female, promoting gender equity.
- As part of participating in the program, every program farmer and cooperative signs an agreement that recognizes their commitment to abide by a set of conservation principles. These principles will be established in cooperation with the Community Resource Board and the chieftains and will be enforced in close collaboration with Panthera and the DNPW.
- Every participating cooperative is obliged to submit a management plan – including vision statement, ethical structure, management system, a set wage, price, and profit structure, together with a bookkeeping system.

2.3 Implementation

To sustain the program and generate revenue for ongoing needs and development, By Life Connected will set up and coordinate a logistical supply and waste collection service in active partnership with the local community (see Figure 1). This will include sourcing unavailable items in Nalusanga from beyond as needed. Providing this service for the organizations will ensure self-sustainability (see chapter 3).

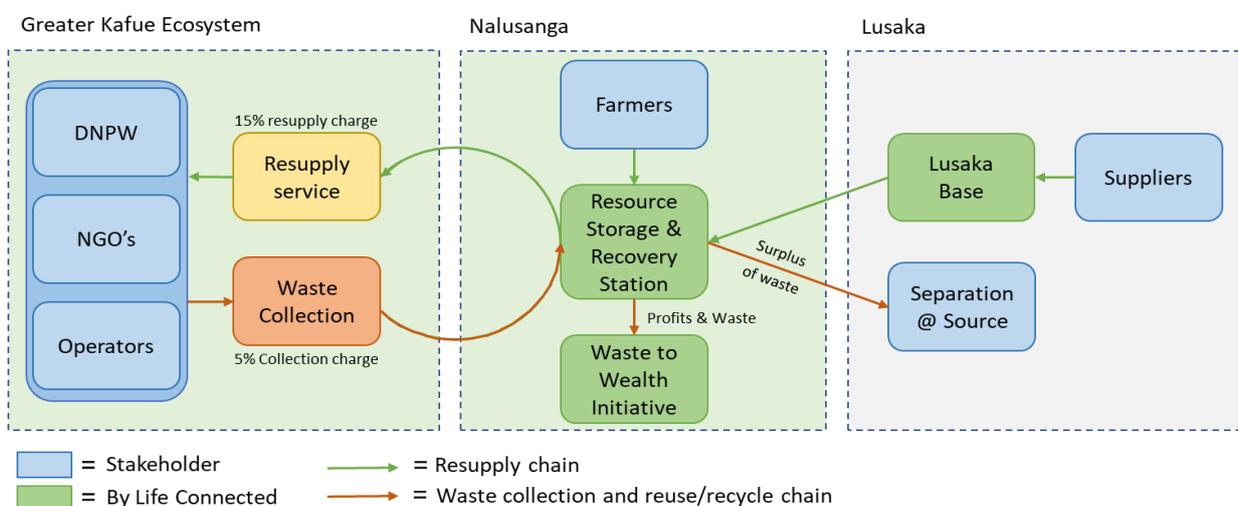


Figure 1. Implementation model of the services that By Life Connected will provide for in active partnership with Nalusanga community.

The waste collected from the organizations in the GKE will be transported to Nalusanga. Once established, a follow-up second phase will include waste storage and recycling (done by recycling partner Separation@Source), creating a circular system. In this phase two, the linked ‘Waste to Wealth’ Initiative will add value to waste by making new products in active partnership with community cooperatives. Find more information about phase two on the website, www.bylifeconnected.com.

This model can be replicated in other sectors of the GKE or even in other National Parks of the world.

2.4 Program team

The ‘Farm to Table’ Initiative will consist of two operational teams. In Lusaka there will be a part-time coordinator and driver. In Nalusanga there will be a full-time coordinator and an assistant. During the first year these coordinators will be supported by two program coordinators of By Life Connected.

2.5 Planning

- **First six months – trial period.** By Life Connected starts supplying five already committed relatively small organizations inside the GKE (Pinnon lodge, Panthera, Musekese Conservation & lodge, DNPW Chunga headquarters). Three existing community farming cooperatives from Nalusanga area (Ila community farm, Chabu Mechanised Vegi Growing Group and Chiyanda Vegetable Group) will be engaged to supply their demand. Depending on supply and demand, other farming cooperatives will be involved.
- **After six months – expand.** By proving credibility, punctuality and reliability, several other organizations within the GKE have agreed to join the program. These organizations will be added until finally in January 2021 a total of ten organizations will be supplied by at least 75 farmers. Further expansion of the client list will be evaluated after January 2021.

3. Financial plan

3.1 Investment budget

The total investments required for the first year of the program are estimated to be \$54,000, of which \$27,000 will be start-up costs and \$27,000 will be operational costs. See Table 1 for details.

Table 1. Investments during first year of the ‘Farm to Table’ Initiative.

Investments of 1 st year	Details	USD (\$)
Start-up costs	Transport (5-ton truck)	18,500
	Construction of storage facility Nalusanga	2,000
	Power, freezers, coolers & crates	4,500
	Computer & 2 smart phones	2,000
Total start-up costs		27,000
Operational costs	BLC program coordinators cost	12,000
	Program accommodation	2,000
	Local coordinators & assistant costs	5,000
	Fuel & maintenance of truck (transport costs)	7,000
	Communication	1,000
Total operational costs		27,000
Total costs		\$54,000

To be able to provide this service for more organizations in the second year and onwards, an additional investment in the form of 5-ton truck and materials is needed (\$20,000). This increases the operational costs of the second year with \$8,500 to a total of \$35,500 (Table 2). It is expected that no further major

investments are needed after the second the year. Subsequent years will therefore only maintain the operational costs of \$35,500 per year.

Table 2. Investments during second year of the 'Farm to Table' Initiative.

Investments of 2 nd year	Details	USD (\$)
Investments	Transport (additional 5-ton truck)	18,500
	Freezers, coolers & crates	1,500
Total investment costs		20,000
Operational costs	BLC program coordinators cost	12,000
	Program accommodation	2,000
	Local coordinators & assistant costs	6,250
	Fuel & maintenance of truck (transport costs)	14,000
	Communication	1,250
Total operational costs		35,500
Total costs		\$55,500

3.2 Funding budget

Funding support of the start-up expenses and the first year of operational costs will enable the 'Farm to Table' Initiative to develop the program from initial stages to a self-sustaining system. This will result in a lasting flow of resources coming from organizations active in the GKE to the community of Nalusanga, where it will contribute to empowerment of its people and fuel sustainable community development. The \$54,000 required to realize this, will be budgeted according to Table 1.

3.3 Revenue

All participating organisations will be charged 15% on top of the cost-price of the products for supplying and 5% of orders for collecting the waste. For every small and large organization of which the program supplies and collects the waste off, the program earns respectively \$3,200 and \$38,000 a year. This is based on a calculated estimate that a small and large organization require respectively \$16,000 and \$190,000 worth of supplies per year.

During the first six months the program will be tested and refined with five relatively small organizations. The client list will increase until finally in January 2021 all seven small and three large organizations in the area are participating. The corresponding revenue per quarter is shown in Table 3.

After the 1st quarter of the second year, the revenue is expected to stabilize at \$34,100 per quarter.

Table 3. Total revenue of 'Farm to Table' initiative per quarter, showing an increasing client list over the first year until the first quarter of the second year.

Revenue	1 st Qr 2020	2 nd Qr 2020	3 rd Qr 2020	4 th Qr 2020	1 st Qr 2021
5 small org.	\$4,000	\$4,000	\$4,000	\$4,000	\$4,000
2 small and 2 large org.	-	-	\$20,600	\$20,600	\$20,600
1 large org.	-	-	-	-	\$9,500
Total revenue per quarter	\$4,000	\$4,000	\$24,600	\$24,600	\$34,100
Accumulated revenue	\$4,000	\$8,000	\$32,600	\$57,200	\$91,300

3.4 Financial overview

With the initial investment of \$54,000 the program will achieve self-sustenance from the moment that the program begins. The total earnings expected in the first and second year is respectively \$57,200 and \$138,100 (Table 4). The total earnings after five years is expected to be \$440,800 (Figure 2).

Table 4. Cash flow of 'Farm to Table' initiative.

	1 st Qr 2020	2 nd Qr 2020	3 rd Qr 2020	4 th Qr 2020	1 st Qr 2021	2 nd Qr 2021	3 rd Qr 2021	4 th Qr 2021
Costs operations	\$6,750	\$6,750	\$6,750	\$6,750	\$8,875	\$8,875	\$8,875	\$8,875
Cost investments	\$27,000	-	-	-	\$20,000	-	-	-
Total costs	\$33,750	\$6,750	\$6,750	\$6,750	\$28,875	\$8,875	\$8,875	\$8,875
Revenue operations	\$4,000	\$4,000	\$24,600	\$24,600	\$34,100	\$34,100	\$34,100	\$34,100
Revenue investments	\$54,000	-	-	-	-	-	-	-
Total revenue	\$58,000	\$4,000	\$24,600	\$24,600	\$34,100	\$34,100	\$34,100	\$34,100
Balance per QR	\$24,250	-\$2,750	\$17,850	\$17,850	\$5,225	\$25,225	\$25,225	\$25,225
Balance	\$24,250	\$21,500	\$39,350	\$57,200	\$62,425	\$87,650	\$112,875	\$138,100

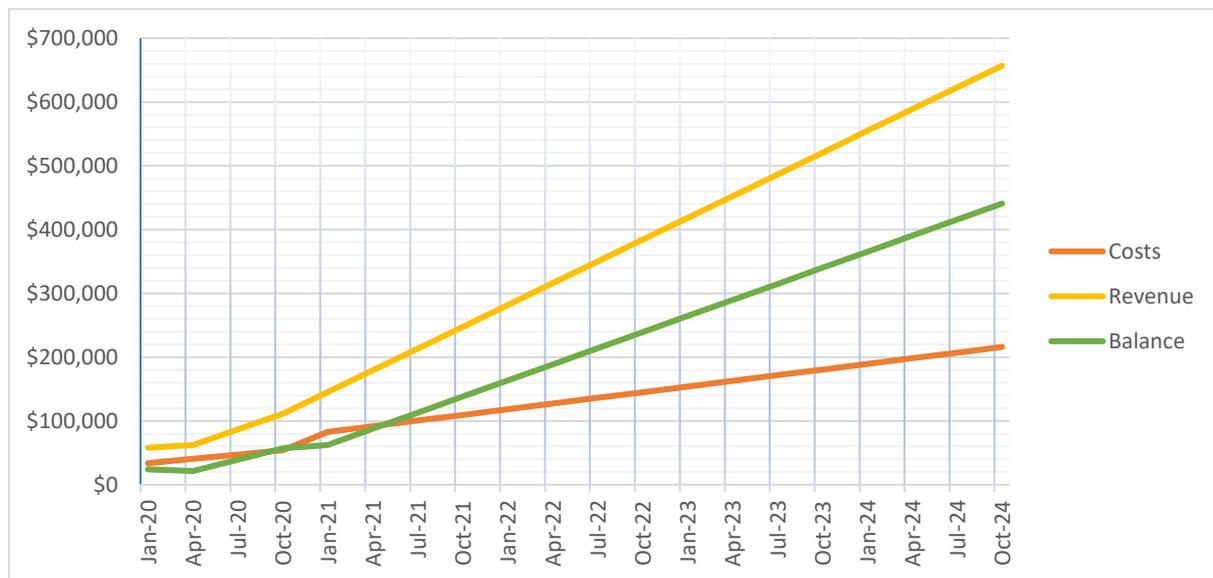


Figure 2. Financial overview until the last quarter of 2024.

Where required, earnings will be reinvested in the 'Farm to Table' Initiative. The rest will be disbursed over community development programs in Nalusanga area, with an initial focus on the second phase; the 'Waste to Wealth' Initiative. A Community Committee will be set up to decide to what community development programs the funds will be disbursed. This will ensure that the community of Nalusanga is an active partner in the decision-making process. The Community Committee will consist of members of the Community Resource Board (representing the farmers, natural resources, etc.) and members of By Life Connected.

3.5 Expected results

After the first year of operating, we expect the following results of the program:

- The program is expected to integrate at least 70 farmers (of which >25% is female) in the supply service, positively affecting around 370 residents through family ties. These 370 residents will no longer be affiliated with unsustainable resource use through the conservation agreement.
- A community committee is created to decide to what community development programs potential funds from the program will be disbursed.
- CO₂ emissions are reduced as only one 5-ton truck (or two based on the demand) will drive, instead of each organization using their own transportation for supplying. With ten expected clients in the first year this results in mitigating 90 trees of CO₂.

- Buying from a community garden with reusable packaging (bins/boxes/ containers) will reduce plastic waste.
- Waste generated by the participating organizations in the GKE is sustainably disposed of instead of it being burned or taken to a landfill. To provide a sense of scale; one large organization produces 26 5-ton trucks of waste in a year. The waste provided by the 'Farm to Table' Initiative can be used in the follow-up 'Waste to Wealth' Initiative (phase 2) as an additional resource in Nalusanga.