



# Chitungulu Foundation

community outreach - nature conservation

Newsletter # 13

October 2024

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Dear Friends of Chitungulu,

Welcome to our 2024 Newsletter with the latest on life and development in Chitungulu, our remote, extended village located in a wilderness area teeming with African wildlife. Our stay in Chitungulu was a bit short this year, due to circumstances beyond our control. However, as you'll see from this newsletter we've made the most of it, and there are certainly exciting developments to brief you on.

However, let's start with the call to action by the UN's World Food Program that, in a statement of 5 June 2024, highlighted the plight of more than 30 million people across southern Africa affected by a severe and historic El Niño drought which can push millions into acute hunger. We quote: 'The unfolding impact of this El Niño phenomenon, which started globally in July 2023, has led to a severe rainfall deficit across the Southern African region, with temperatures five degrees above average. The region experienced its driest February in 100 years, receiving 20 per cent of the usual rainfall expected for this period'. Zambia, among the hardest hit countries along with Namibia, Malawi and Zimbabwe, has declared a state of emergency. Prices of maize, one of the worst affected crops (and the basis of the regional staple food), have been skyrocketing. The impact of this drought is also evident in Chitungulu.



*At our invitation, PUM trainer Willem Pennings conducted a series of beekeeping workshops attended by 46 people, including many women, who were trained in beekeeping skills. The projects' overall goals are to empower the beekeepers, protect the forests and create local sources of income.*



Food security for many people in Chitungulu was already, prior to the start of the 2023-2024 rainy season, in a precarious state due to very low cotton prices for the farmers in 2023 (see page 3). Earlier this year we were receiving pictures of maize fields that didn't bode well for the rest of the year. Farmers have been telling us that the rainfall patterns are extremely erratic and localized: nothing more upsetting for a farmer than seeing clouds of rain suddenly halting before your village, or even before your neighborhood... When taking into account that almost the entire community of Chitungulu is engaged in farming for their livelihoods (as goes for almost all communities in these rural areas), then the full-scale impact becomes clear.

To make matters worse, this food crisis is exacerbated by a complication more peculiar to this area: human-wildlife conflict, specifically elephants raiding the villages, which this year occurred on quite an unprecedented scale. Every neighborhood in Chitungulu has been affected by these raids, meaning the animals come from many directions, and as we could witness ourselves, the elephants no longer limit their visits to the nights, but have started coming in by early evenings and even late afternoons...

No doubt elephants are attracted to the village by the smells of food: flowering mango trees above all, but these days there are also many vegetable gardens to pick from...

Sadly, we have seen households limiting the cultivation of the second food crop, cassava, as elephants love this crop and therefore regularly uproot the cassava fields.

Dealing with these double-impact challenges to food security is a daunting task. Still, as a small nonprofit we do feel we can play a role

in promoting long-term climate resilience. To mitigate the effects of climate change we believe in a multipronged approach: encouraging people to protect their woodlands, to cultivate a variety of more drought-tolerant crops and cultivars, to look for profitable sources of income that would enable people to buy maize from shops, to cultivate nutritious food year-round, and by nurturing the soils that play such crucial roles in healthy plant life, water retention, and CO2 sequestration. In this newsletter you'll find how our approach translates into the various activities we've taken on this year.



*Organic gardener Whyson making 'cowbells' of cans filled with pebbles as one of several elephant deterrent methods.*

A same multipronged approach is adopted in our efforts to protect food and food crops against elephants. Elephants, with their great learning capacity, can figure out how to negotiate barriers, which is why we believe a multitude of barriers, rather than one type only, will probably be more effective to deter them. So, while we continue to look for sponsors willing to help us funding electric solar fences to protect vegetable gardens and maize fields, we also use and continue to experiment with an array of other protective measures, such as solar lights, planting sisal corridors, beehive and chili fences, and locally made 'cowbells'. To our sponsors we would



say: all support in whatever form remains very welcome!

### 1.1 Education: support to primary schools

We have continued our assistance with school lunches for Chilubezi primary school until August 2024. As from September, Chilubezi, as the last school in Chitungulu, has joined the Mary's Meal school lunch program.

### 1.2 Education: sponsorship program

In 2024 we have been sponsoring one student general agriculture (2 years' training) at the Chikowa Youth Development Centre. This student came out on top during our 2023 Conservation Training program.

Earlier this year we've also started sponsoring the first two BSc students under our sponsorships program: one student MBchB (Bachelor of Medicine & Bachelor of Surgery) and one student Business and Project Management. Our second student Clinical Medical Sciences (university diploma) is now in his second year.

As per November 2024 we will be sponsoring two new BSc students Sustainable Natural Resources Management. These students were selected after their participation in our Conservation Training in July-August this year.

Finally we've been sponsoring three students taking field guiding courses. By year-end they will write their exams Driving Guide (1) and Transfer Guide (2).<sup>\*</sup> We expect the Driving Guide student to become our first fully licensed Zambian field guide coming from Chitungulu, which would be a great milestone!

### 2.1 Food security & nutrition: general

As sketched in our Introduction, food security in Chitungulu has reached an all-time low, due

to the combined challenges of low prices for cash crops taking up fields for food crops, the effects of the El Niño-induced drought and the increased levels of human-wildlife conflict experienced this year. In April this year we delivered food packages shared by over 100 households in the area closest to the Luambe National Park entrance. The support packages consisted of soy pieces and mung beans (green gram). We started introducing the tiny mung beans in 2021, or perhaps we rather re-introduced them, as elderly people still remember a black mung bean variety locally called 'kankhoma'. Mung beans are one of the most nutritious legumes. They are also fast growing, deep-rooted, drought tolerant and, as a legume, they fix nitrogen. We are therefore happy to see that people have started to take a liking to these beans. Various farmers have reported multiple harvests in one season, which no doubt has contributed to their popularity.

Later in the season we found four gardeners eager to join our experiment with the drought-tolerant Tepary bean (*Phaseolus acutifolius*), which is another highly nutritious bean originating from desert-like areas in the United States.

### 2.2 Food security & nutrition: vegetable gardens (organic)

This year we have taken two new organic vegetable gardens under our wings, bringing the total number of chemical-free vegetable gardens supported by us to 11. Unfortunately, we also still come across gardens where cotton pesticides are being sprayed, which we report to Chief Chitungulu. Whenever the opportunity arises, we sensitize people on the health hazards associated with chemicals not meant for food crops.





Our readers will perhaps remember the vermicompost experiment we undertook in 2022. This year, Ecobiz Farms, a leading producer of vermicompost in Zambia, kindly donated twenty worm bins on stands. This has enabled us to scale up our vermicompost project. We found two neighboring gardeners keen on taking on this new project, whom we trained in the basics of vermicomposting. Worm castings as plant food have multiple benefits: as an organic fertilizer it supports plant growth in a natural way, increases a plant's yield, protects both soil and plants from diseases, and keeps the soil moist and alive with beneficial (micro)organisms. We are quite excited about this project as organic worm castings may potentially become an interesting, low-cost soil amendment for gardeners and farmers.



*Organic vegetable gardeners preparing the worm bins*

This year we have provided one rope borehole to a new organic garden, which brings the total number of rope boreholes provided to organic gardeners to 7. In addition, we provided two rope boreholes in 2024 for general water consumption for several households in two different neighborhoods.

The problems experienced last year with the rope borehole in our pulses garden have been fixed and the borehole is upgraded to a solar-powered system. The garden now produces mung beans, cabbage, rape and tomatoes and is one of the gardens experimenting with the Tepary beans.



As usual, we provided a selection of (mostly) open-pollinated, herb and vegetable seeds to all our organic vegetable gardeners.



*Evans garden (left) and Laban's garden (right)*

We are pleased to note that Evans' garden, located along a well-traveled tourist road, is receiving tourists on a very regular basis and Evans takes much delight in showing his foreign guests around his lush green food-paradise.

### **2.3 Food security & nutrition: the Four Sisters farming method**

Like last year, we have provided organic liquid fertilizers to a selected group of farmers in two different neighborhoods. Unfortunately, due to erratic rainfall, last year's experiment with the liquid fertilizer yielded different results. Farmers who had been fortunate to receive enough rainfall were able to make efficient use of the liquid fertilizer and they reported an increase in crop yields. These results are for us promising enough to extend the experiment.

### **3.1 Income-generating projects: Beekeeping**

The Dutch PUM organization (which brings together Dutch experts and small scale enterprises in the Global South) assisted us this year with a visit of a Dutch beekeeping trainer with training experience in several African countries. In the course of five days, 46 participants (21 women and 25 men) were trained in basic beekeeping skills. Topics included knowledge of honey bee colonies and their organization, hive maintenance, bee

forage trees, and the harvesting and processing of hive products. During the course we also trained three assistant-monitors who will be coaching the beekeepers for the next few years.



*Workshops were conducted at several locations and were particularly well attended by women*

The training was very useful and has shed light on various issues the beekeepers are grappling with, such as hives of inferior quality, lack of protective gear and protection against fires and predators.

We are adopting a long-term relationship with the beekeepers, helping them to develop and market high quality hive products, and integrating beekeeping with agroforestry to create multiple win-wins in terms of economic as well as social and ecological benefits. In terms of social benefits, we hope this project also contributes to women empowerment and to increased cooperation between beekeepers and local carpenters making beehives. As a spin-off of this project, we are supporting the local production of beehives. The ultimate aim of our beekeeping project is to give the beekeepers more ownership and financial control over their hive products.

In the span of a few days we noticed that the training has brought about a new sense of engagement and motivation in the beekeepers which we can build further on in the

years ahead. We are very grateful for PUM's assistance to make this happen.

### 3.2 Income-generating: Crafts Shop

Our shopkeeper Elizabeth has married and moved to another town, and the shop is now run by Melody. For next year, we aim to diversify our products for sale.



*Chitungulu's wooden birds have become popular with tourists*

## 4. Conservation Centre

### 4.1 Environmental education

Our six weeks' Conservation Training was this year attended by a record number of fourteen students. Our advert for the training, issued in April, was effectively promoted by our assistant/environmental educator Stephen Nkhata along with the head teacher of Lumimba secondary school and Chief Chitungulu. Recently graduated high school students are our target group in this annual training that enables the students to compete with each other for a sponsored BSc, guide or other skills training.

New in our conservation training program are the sponsorships for a BSc in biology, ecology, or sustainable natural resources management.

Also new is the participation of students from neighboring villages, which is in line with our aim to reach out to other communities in the





area apart from Chitungulu. This year we had two students from the villages Mwanya and Nabwalya, and one from remote Mbuzi gate.

Nthumbe primary school has very kindly lent us a classroom and even a teacher's house, so that we could accommodate all 14 students. We took care of their 3 daily meals during the training, providing them with new foods and spices to try out, and they used our natural history books to study in their free time.

Apart from the usual subjects (which, amongst others, follow field guide curriculums) we also included soil conservation, organic vegetable gardening principles and safe food preparation. This year we offered two trips to Kamukonzo campsite for binoculars training and Luambe Camp assisted us with game drives in Luambe National Park. The students also engaged in a Plastic Clean-Up activity in Chitungulu central.

The students were tested on their newly gained knowledge with three exams and on the basis of their performance we have selected two students (male and female) for a BSc Sustainable Natural Resources Management at Zambia's Copperbelt University.

We are still sourcing funds for a candidate BSc Biology.

Luambe Camp helped us out with a vehicle for game drives in Luambe National Park. This year all the six primary and one secondary school were participating in the game drives.

Chipembere Wildlife Trust assisted us with 200 environmental magazines featuring Owls.

The Dutch branch of BirdLife donated three binoculars through their secondhand binoculars program, which we handed over to our three trainee-guides.



*Happy school children on their first game drive in Luambe NP*

The issue of charcoal production, which we reported about in our last year's newsletter, has been addressed by Chief Chitungulu who has forbidden the production in his chiefdom. We are grateful to the Chief for this important step to protect the woodlands in this area.

We are happy to break exciting news: we have started the construction of our Conservation Centre, our regional environmental knowledge hub. We hope to finish one classroom and a research library before year-end. Fundraising has continued full throttle to finish the centre in 2025. Connect with us on Instagram or our site if you want to keep up on the latest.



*Construction site Chitungulu Conservation Centre*

## 4.2 Tree conservation

Our local conservation assistant Ackim has, for the third consecutive year, grown several hundreds of tree saplings, mostly Moringa oleifera, baobab and pawpaw trees. We have distributed the moringa trees among various households in the Nthumbe area, so that eventually all households can utilize the highly



nutritious leaves of this tree. We also bought various indigenous tree saplings from Chunyu Nursery in Mfuwe, especially bee forage trees for the beekeepers, including *Acacia nigrescens*, *Piliostigma thonningii* and various fruit trees.

#### 4.3 Solar lamps

This year we provided 17 good quality solar-powered lamps to the community at subsidized prices. We hope to provide more lamps next year. The popular lamps are a clean (battery-free) and cost-effective way to bring lighting to communities without access to the national power grid.

#### Finally...

As always, we like to thank everybody for their ongoing support and do keep following us on Instagram @conservation.chitungulu

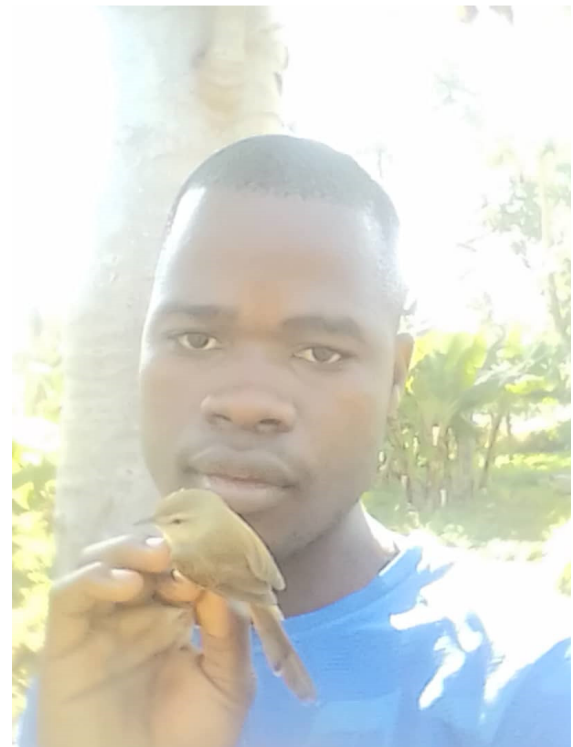
Any questions or comments, do let us know at:

[info@chitungulu.nl](mailto:info@chitungulu.nl)

The Board of Chitungulu Foundation

#### IN MEMORIAM

By end of October we received the terrible news of the sudden death of our trainee-guide Justin Ngulube. A postmortem concluded Justin had been struck by a lightning bolt. Justin was a young, promising conservationist. He loved birds and birding and he was a hardworking student with whom we had the privilege of sharing his career path for many years. Justin will be forever in our hearts.



*Justin Ngulube, 1998-2024*



*Conservation training students practicing birding with binoculars along the Luangwa River*





**Our sincere thanks to:**

- ◆ *Our friends and sponsors in:  
the Netherlands, Zambia, Germany,  
Belgium*
- ◆ *The Elephant Charge Organization Zambia*
- ◆ *Stichting De Paardestal, Netherlands*
- ◆ *Stichting Uden WereldWijd, Netherlands*
- ◆ *Stichting Trap-In, Netherlands*
- ◆ *PUM Netherlands*
- ◆ *Vogelbescherming Nederland (BirdLife NL)*
- ◆ *Ecobiz Farms, Lusaka*
- ◆ *Sunny Money Solar Aid, Lusaka*
- ◆ *Chunyu Nursery, Mfuwe*
- ◆ *Chipembere Wildlife Trust, Mfuwe*
- ◆ *Makolekole Drilling, Mfuwe*
- ◆ *Jacana, Chipata*
- ◆ *Lumimba Parish, Chitungulu*
- ◆ *EMD Eastern Manual Drilling, Lundazi*
- ◆ *Chikowa Youth Dev Centre, Mambwe*



*Evans Garden – popular with self-driving tourists looking to stock up on fresh and organically grown fruits and vegetables*

