

Summary

The political situation in the country remained fragile; nothing has improved in all sectors of industry and agriculture for the past five years. The situation of an ordinary family getting food to eat is now a thing of the past. Inflation alone is well above 200 %. The prevailing rate of the Zimbabwean dollar is now placed at 1 USD = ZWD 10.000. The average salary of people working in industry, agriculture and civil service is 100 USD. A family of 4 needs an average of 350 USD to take them to the next pay day. People living in the more remote areas are most affected, as accessibility is not easy with the bad roads. People simply don't have money; no one can sell anything, as no one can buy anything.

The year 2022/2023 experienced average rain fall and average yield, which translates to disastrous conditions in low rainfall regions of the country. We had a fair share of the rain in our region but it was less than what we got in the 2021/2022 rain period. Record dryness and high temperatures in November and early December 2023 resulted in many farmers delaying planting their fields. There was an acute food insecurity reported in December 2023. Planted areas likely remain below normal despite good rainfall in December. The anticipated El-Nino-induced below-normal rainfall from January to March 2024 is expected to negatively impact seasonal agricultural labor and livestock conditions. Due to relatively lower prices than formal retail shops, the informal retail sector will likely remain the preferred source for basic food and other commodities, especially among poor households, like in our area. This might help us in our shop project. In the fields, we did not do much. We only had a small space for the corn, close to one hectare. We also planted half a hectare of sunflowers, which we converted to animal feed. We excused ourselves from raising the chickens so as not to interfere with the ladies' (Female Livelihood Project/FLP) space and therefore completely separated our own chickens from the woman's project.

We also had challenges with the solar system and the grid power. In November, the power was hit by lightning, which resulted in the malfunction of the whole homestead and two neighboring homesteads. We did not have power from solar or from the grid. The inverter, which was connected to the woman's project, was completely destroyed by lightning and one battery was affected in the process. The transformer which supplies the grid power was completely destroyed and needs to be replaced. The grinding mill is working but the Diala (machine to produce residues for animal feed) needs attention and we are waiting for the engineer to come and fix it. The tree project is going very well; this is ongoing and we keep adding fruit trees year-round. We have added more paw trees and mango trees.

Hibiscus field



Above is another space where we planted hibiscus for tea and cold drinks; I think we have learned a lot about this plant and we have decided to increase the area this year. The markets are also opening up, so we now have hibiscus in a number of these big hyper market shops. We are also focusing on entering into contract farming with companies that are buying the product. Most supermarkets have hibiscus now on the counter for sale, but the farmers are still very few. I actually don't know anyone doing commercial hibiscus farming in Zimbabwe at the moment. I'm still searching to find out who else is growing this plant, but for the moment, I'm pretty sure there are very few, if any.





Chickens

We have slowly moved our chickens for the meantime since they were mixing with the women's project. It was advised not to keep these two varieties close together. So, we cleared space for them. After extensive thought, I realize I should not have gotten removed the chickens, so I am starting the project again, although I have to consider the FLP space. The FLP started on the 13 march 2023 with the purchase of chickens. Cathrine Mubaya and Dorcas Mahiya, he vice-chair, went to Harare to buy 46 chickens, 40 of them were females and 6 cocks. They travelled a long way from Harare to Zvimba. So the chickens got stressed out and one died. The Female group did not let them out for scavenging because the paddock was not yet free from my chickens. We are scared of diseases.

After some days I divided the paddock into two. On the 25th of March the female group drove the chickens out at around 8:30 am to 9am. Around 12pm the guys who worked at the center called the chair. She rushed to the center and saw the chickens struggling for life. They were dying because of the heat wave. They did not run away they just stood by the corner. These chickens are an improved breed which don't need too much sun. Their skin turned red and 18 died. 20 mothers and 6 cocks were left. Some members dropped down from the group during the year (one was going to school, thers had to work, others were impatient and said they wasted their time coming to the meetings).



When Cathrine and Dorcas went to buy the chickens, they asked the seller the type of feed they were using for the chickens. They said they were making their own feed but refused to tell them how they do it and that they didn't have any in stock to sell. So, the women bought millet, sorghum, soya beans and maize. They also bought concentrate and each member brought a bucket of maize to mix with the concentrate. They chickens started laying eggs on the 26th of March. They were laying less than ten eggs for almost ten months. The group was told in September to change the feed. Then the eggs boosted up to around twenty eggs per day. In August 15 new mother hen were bought. One died on the way due to transportation. As a group we admit that we made mistakes when buying the chickens. The company gave us used old chickens because it knew that we know nothing. Secondly, we were giving the chickens the wrong feeds. Third, some of our members were not doing their duties properly. But we are still 10 members and confident to succeed.



Gardens

We have increased the space for the production of green vegetables, but the market for greens is very limited. There are traditional types of green vegetables that people eat and certain type of vegetables, e.g. lettuce, carrots and eggplant to mention but a few, that they don't eat, so the type of vegetables that we will concentrate on is the ones that they eat. We have maintained the production of green vegetables, and people were regularly coming to buy. We need to stop selling from the gardens because we experience a lot of problems from people. Once they are in the gardens, they are asking for more, but if the vegetables are sold at the market, they buy what is there. The shop and market stall still have to be built (stall) or installed (shop).

We have a green **pumpkin** variety over a few years now, it does very well every year she is part of the family now. We also have other pumpkins in different places, it also provides a very nice relish and also live mulch.



One plant of pumpkin plant can produce 4 healthy ones. Normally we grow them together with the corn, since we did not plant the corn in 2023, we do not have a lot of them.

Food Forest

We created a food forest started with a few plants, now the forest has become dense with different food stuff like, cassava, pawpaw, Mexican spinach /Chaya, peajon pea, sweat potatoes naming not all. This forest three years ago it was wide open, in Permaculture we say fill the basket first and then sale the access. I'm quite happy with the food forest.





We have intensified our **banana plantation** and they have now started giving out fruits and we are also harvesting shoots and sell to those who want to plant. The size of our plantation is not massive but each year we add some plants on the ground. We have planted the on 150m stretch, on this stretch we have plus or minus 300 plants including shoots. Our bananas were not planted at the same time, so they give out fruits at different intervals also. So far we can pick a bunch or two in a week. Since the banana population is increasing through shoots and add once, it's high time now to look at it with a commercial value. So far we have not looked into the market value for the bananas since we were producing enough for ourselves. We have also got into a formal agreement with a colleague who runs an Agriculture agent premises to allow us to display our trees for sale and he will be doing the selling and he collects between US1 and US2 per tree depending with the value per tree.



We have significantly increased the **cassava** plant in the food forest and we have also extended our food forest. We have increased the number of cassava plants double than what we used to have. This year alone we have grown more than 200 cassavas. Actually, cassava dominates the food forest with 40% and Mexican spinach takes 30%, peajon peas, hibiscus herbs also takes 20%, and Pawpaw 10%. Initially the food forest was for self-consumption but now it's beginning to produce more than enough. We now need to look into the market for Mexican Spinach and cassava, since both vegetables are not common vegetables.



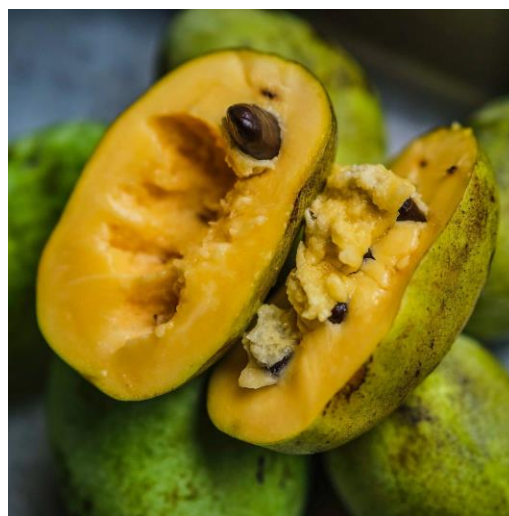
I brought only one piece of cutting of **mexican spinach/chaya** from Fambidzanai a few years ago and now it has become the most dominant plant in the food forest, it covers at least a third of the food forest challenging the dominant cassava. We have also planted it along the fence it also acts like life fence for animals, this last year. 2023 and beginning of 2024 we have planted more than 250 Chaya plants. It grows very fast in summer and in winter it slows down, it can grow over 2m high and its origin is Asian. It is cooked in differently, it can be used as side dish or a regular spinach, spread it on pizza, pasta, Asian cuisine and soups. Not a common vegetable a bit of market research and feasibility study is needed.



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We are doing very well in our **pawpaw** project, this year only we have planted 112 trees and we have nursed over 300 plants. Pawpaw is a very tricky plant to propagate otherwise you can plant the whole field later to realize they are all male. So certain instructions need to be followed in order to have the right plant in the ground. It takes maximum of a year for the variety that I have to produce fruits and 1 tree can produce plus or minus 80 fruits per tree. Propagating the pawpaw trees, we also keep seeds from the fruit, preserve them and plant when time is ready. Those that we don't use we then sell them. The cost for a pawpaw plant is US3 minimum, it can be sold more.



Orchard

We have maintained our orchard and we have been adding trees each year without fail so the plant population is growing significantly. We have quite a variety of fruit trees in the orchard e.g. Mangos, lemons, oranges, apples, bananas, pawpaw, avocado and guavas to name but a few. Most of the trees were not grafted so they took normal time to start producing fruits. The biggest number of trees are mango trees followed by pawpaw, the orchard also constitutes lemon and oranges. Unfortunately, they were not grown the same time so some are still young some flowering and some are already producing fruits.



We have kept our **grapes** for food and nursery, we have been doing cuttings for some time now and now we have started taking them where they are exposed most, it might make a change in terms of market. We have also nursed 50 plants we want to extend our vine yard. Aim considering enlarging the vine yard we have taken 60 grapes plants to the agent to sell. Grapes generally they fetch very well to people who know what they are buying but for ordinary people it's a luxury to buy grapes so it's a targeted market. Targeted markets mean having customers that you produce for. They can even determine what you should produce.



We started planting some **aloe** two years ago now we have a very big family of aloe. I'm now thinking of value addition since they are just multiplying every time as long as they get water. The Aloe are so many one can't even count the number of plants that we have. Currently I'm going through a number of researches to see how we can add value into the product. I also realized that it is widely used in the propagation of trees and plants. A proper market research is needed in order to come up with the correct details and figure. We really need to identify all possible means to add value to the plant.



Water

The water situation has improved a bit since we installed a new and slightly bigger pump that translated into more liters of water being pumped out. We have been able to use the bore hole throughout the year without it drying up, and we are now getting into the rain season.

Energy

The energy issue just exploded and set the whole center into total darkness. We had a terrible disaster, with lightning striking the power station and the transformer at the house. This transformer supplies three houses with power. The transformer was hit by lightning so badly that it is beyond repair. It simply means we won't have power indefinitely, maybe 10 years or more. The reason being is the electricity company is broke, and they cannot replace the transformer. So, in conclusion, the inverter saving the woman's project was hit beyond repair and one lithium battery was destroyed, as well as my inverter and batteries. We didn't have any power at the Center at the end of the year.



Inverter



Transformer

Bar | Shop | Food Market

The shop and the bar are only running slowly due to the lack of stock. The bar is a bit better since we got something from the Association. As power is off, we cannot sell cold drinks for the moment. The shop will be our next project to tackle in the beginning of 2024.

We pay us100 for the workers, but as it is we cannot even pay the workers from the sales. The cost of running these two entities exceeds what we get in return. In the bar we are looking at beverages, beer, drinks and ice and then in the shop we are looking at groceries, drinks, water and milk.

Grinding Mill

The mill is working well but the other machine, the Diala, needs attention. The exhaust broke numerous times and we were getting it welded and now it cannot be welded anymore. When I consulted an engineer, I was told that it is being caused by vibrations from the engine. So, I was instructed to dig it out, and I also need to buy a new exhaust pipe after this problem is rectified. There are three grinding mills within a radius of three km, so the competition is very tight and one of them is charging mad prices, very low prices, which has affected our projected income.

Animals

We lost four goats this year; three were killed by our dogs and one died from natural causes. We have reduced the number of pigs due to the condition of the pig stay, so we now are left with three pigs only. We lost three cows due to diseases and we also lost two calves during the dry season, which we could only locate now.

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Conclusion

We still maintain the Vision and the spirit of greening and empowering the people of the village to be self-sustainable through permaculture and other sustainable means surrounding them.

I would also like to thank all members of the association for the whelming support that you have shown to us, we thank you.

Mubaya Ecovillage Zimbabwe

Michael Mubaya
Project manager

First January 2024