

Joel James MS - Report on visit to Mbale, Uganda – March 10th-March 18th 2023

Purpose of Visit

Since being elected to the Senedd, I have developed an interest in the Welsh Government's Wales and Africa programme, and how it benefits residents living within my region – as there are many historic church and charitable links.

I have asked several questions to the Minister for Social Justice about the work that is carried out, how they manage the tree planting programme in Mbale, and I have also met with the deputy director of Size of Wales, but despite this I felt there were still many elements of the project that I didn't fully appreciate and understand.

I therefore visited the region of Mbale and the project METGE - who are in receipt of Welsh Government funding through the Size of Wales - to determine :

- the extent of deforestation and the need for on-going work
- how the programme was delivering on its stated claims
- if the project was providing value for money
- whether there would be benefits if funding was available for the project to be expanded
- if there were aspects that could be applied to Welsh tree planting projects
- to learn about limitations of the project
- to understand the culture of the community surrounding the tree planting programme
- to better understand how money from residents in my constituency is being used
- the impact of climate change on the region.

Size of Wales project

I met with METGE and Nicola Pullman the CEO of the Size of Wales – who are the organisations that are facilitating the project in Mbale and who are in receipt of funding from the Welsh Government. METGE explained how 80% of the population were dependent on agriculture for their livelihood and this had led to extensive deforestation in order to grow crops to eat. There had also been a large increase in the population of the region which had led to more farmland being needed and existing farms being divided up to provide for families. Culturally, existing farms and farmland are divided equally upon inheritance and this had meant that in recent years there has been more intensive farming on smaller land plots. This has put extensive pressure on farms to remove trees to make way for crops.

I made enquiries regarding illegal logging which I understood has been a problem in Uganda both on a national and local level and I learnt that on a local level, trees are seen as a monetary asset that families have needed to access in order to provide essential items such as school supplies or food, and so many trees have been illegally felled for the financial gain of households.

With so many trees now removed, the area is experiencing considerable levels in soil instability as well as a change in climate. Heavy rains frequently cause landslides, and they are experiencing longer periods of dry weather.

I also learnt that 90% of the population are reliant on firewood and this has meant that there are trees being logged to provide charcoal that is a tradeable commodity.

I travelled around the Mbale region as best as I could to see for myself the extent of deforestation and was truly surprised at the level that I saw.

Deforestation in Mbale Mt Elgon region



Image 1 from Mount Elgon, showing deforestation on the mountain itself.



Image 2 from Mount Elgon showing a small crop of trees which were typical of the trees that originally covered the region.



Image 3 taken from the top of Mt Elgon showing the extent of deforestation and the high number of small farms and land plots.



Image 4, deforestation on lowland which has been carried out to provide farmland.

Deforestation and the subsequent planting of crops has a huge impact on the region, most notably causing soil instability resulting in landslides. Image 5 shows the extent and potential of this. High up on the hillside, it can be seen that forest has been removed to make way for farmland.



Image 5 showing deforestation and crops growing high on the hillside.



Image 6 shows a landslide caused from deforestation.

From my meetings with METGE (See figure 7) I understood that one of the tree planting project aims was to help mitigate against climate change and in order to do this they were principally helping to change the local culture and respective understanding of the importance of trees. In particular they were encouraging farmers to see trees as a sustainable crop and highlight the potential for agroforestry, in particular for growing coffee, cashew nuts, bananas, boundary hedges for keeping in livestock, and for the harvesting of bee hives. The project also encourages the use of energy efficient stoves which reduces firewood consumption by over 50%. Since 2018 METGE has supported 4000 households with Lorena stoves (See figure 8).



Figure 7 Meeting with METGE at their offices in Mbale.

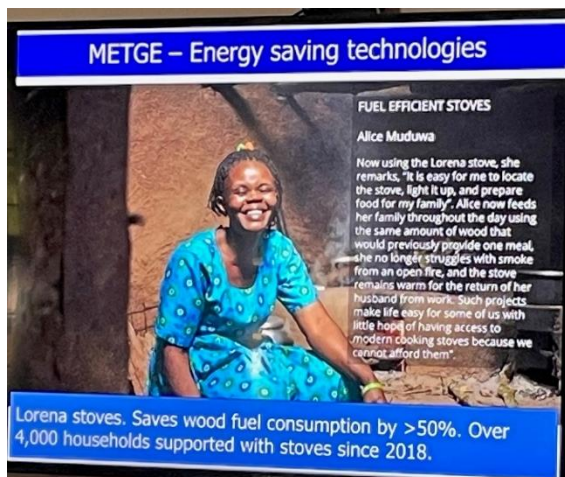


Figure 8, image of a slide presented to me highlighting the Lorena stove.

In helping to change the culture to see trees as a sustainable source of revenue from agroforestry we discussed how the project uses funding from the Size of Wales project to establish local tree nurseries and pay for their upkeep and supply of seeds. Figures 10, 11 and 12 show three nurseries I visited which plant different crops for the communities they serve. I was also pleased to hear that the project

had been working with Bangor Bio Composite Centre, who are part of Bangor University to test out biodegradable tree sampling wraps instead of using plastic wraps, and so there were wider links established between other organisations in Wales. The biodegradable wrap can be seen in Figure 9.

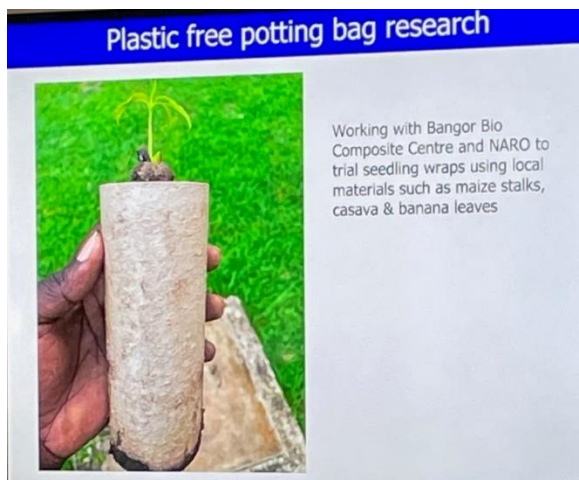


Figure 9 showing the biodegradable wrap provided by Bangor Bio Composite centre to help reduce the amount of plastic needed in raising tree samplings.



Figure 10, Nursery in Bumaena showing samplings, planting occurs twice per year and this nursery can produce up to 50000 sampling per planting cycle.



Figure 11 showing the nursery at Makunda. Here we can see the plastic wraps that are used to surround each sampling which is removed upon planting and shows the use of the biodegradable sampling wraps that are being supplied by Bangor Bio Composite centre.



Figure 12 showing the nursery at Komokunda which supplies coffee trees which supply fruit for Jennifer's coffee in Wales.

The project reported to me that the community network of nursery planting has 44 nurseries across seven districts of the Mbale region, and at the time they had distributed 21, 311, 766 trees with the aim of distributing 25 million trees by 2025. When samplings are ready for planting the project uses a local radio station (Farmer voice radio) to advertise that the samplings are ready, free to collect and the benefits of trees planting. It also helps disseminate basic knowledge, discusses the use of traditional methods and practical advice in helping maintain tree plantations. This has helped communities hear about the availability of tree samplings and stimulated demand.

I was also pleased to hear that the project has now developed a data capture system from satellite images that will allow them to start measuring how areas around the nurseries are becoming reforested. Figures 13 and 14 show images of the data capture system they have employed.

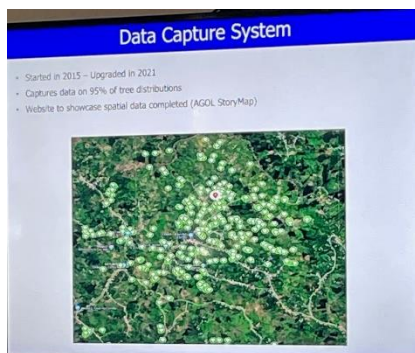


Figure 13: Image showing that data capture system used to record where trees are being planted as part of the project. Data is uploaded onto a website which allows partners to view where project is making progress.

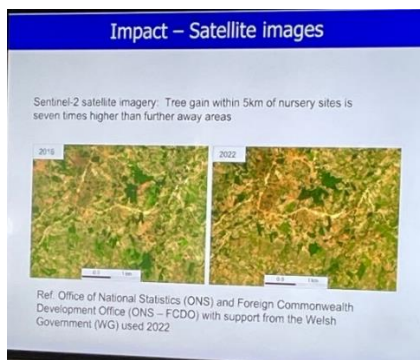


Figure 14: Satellite images have been taken to show how the tree planting as part of the project is impacting the local area. It also allows the project to view areas that are experiencing a decline in trees.

I visited numerous examples of small tree plantations supplied with trees for METGE. In figure 15, 16 and 17 images of trees planted as part of the project can be seen. In figures 18 and 19 an established forest can be seen which is used to support beehives. The Top-bar type of beehive is predominately used, and swarms are regularly captured to set up new bee hive colonies. At the time of visiting there were 30 groups with over 1000 beehives which had been established as part of the project to improve household income and show sustainability for forests.



Figure 15: showing can see a farmstead in the shadow of Mt Elgon and fledging banana trees which have been supplied by METGE.



Figure 16: As part of the tree planting programme fruit trees are planted around school perimeters to help supply school children with food.



Figure 17: Image showing new planted samplings in an area previously used for crops.



Figure 18: Image of established forest in the Sunu area and the top-bar beehive that are located in the forest.

Limitations of the project

The project has distributed over 21million trees and report that this consists of around 20% general trees which will not be used, 60% of trees are planted for timber and firewood and 20% are fruit trees (Coffee, banana in particular). They also report a percentage survival rate of 47-50%, meaning that approximately 50% of trees die before maturation. This is largely due to failure to manage the trees after planting and this is a particular problem around schools during school holidays, and so although schools have been eager to plant fruit trees, they have a very low success rate. There is also a limitation in that the local population need more awareness of the full potential of replanting trees and also land is still needed to grow crops.

The major challenge of the project is to change the culture of some areas to understand that the trees can be used for income other than for timber or firewood. Coffee in particular is a high yielding tree, and the plantation can also house numerous beehives that can also provide a source of income. However, there are limitations in the marketplace to sell these products which means that the value of the produce is low, and the market is susceptible to saturation.

Improving Gender inclusion

I discussed with METGE how they are trying to mitigate for these limitations, and their focus to change the cultural understanding of trees so that communities value them for their livelihoods is to improve gender inclusion in decision making. I visited the group at Bumaena where the tree sampling nursery and distribution and planting of trees was carried out by a co-operative of women, and this has helped improve the role of marginalised group in reestablishing the ecosystem and had the other benefit of improving social inclusion and education of women in the area.

Coffee and Honey co-operative

I also had the pleasure of visiting the Mt Elgon Coffee and Honey Co-operative. This group has grown significantly from 25 farmers in 2016/17 to 752 farmers in 2022/23 and it now employs 15 staff who are involved in the training of beekeepers, the roasting and blending of coffee beans and the running of the organisation. It has 1 beekeeper trainer per 70 bee keepers. Notably 80% of profits are back to farmers and they help secure a more favourable market price because they can supply consistently to the market. This model has proved successful and local and national governments have come to learn how they can replicate their model.



Figure 19: Image taken from at the MT Elgon Coffee and Honey Co-operative with some of its staff.



Figure 20: The Co-op does more than sell coffee beans, it also can roast and blend the beans thus improving their value in the market.

I was also pleased to be able to learn about other local projects such as the Casa Uganda Foundation that helps girls to stay in education whilst they are menstruating. This is an ongoing problem that limits the ability of girls, particularly in rural communities to stay in education.

