

2026 PROGRESS REPORT ON SGG-ZOMBATREEZ PROJECT

INTRODUCTION

It is normal practice for SGG to produce a report for donors after every field monitoring visit to projects. This year a field monitoring visit to Nankhunda, Nsanama & Malumbe villages took place from the 17th January to 8th February 2025. During this 3 week period several different but interconnected actions were undertaken. Most of these actions were a continuation of what had been started in previous years, so this report follows a similar format to previous reports. For those unfamiliar with this 'Community Development Through Environmental Improvement' project near Zomba, we recommend that you browse through the accompanying attached reports. One gives details of actions during the last field visit in November 2024. The second document gives information reported to SGG in 2025. These two accompanying papers will facilitate a better understanding of the progress currently being made in this locality.

This project continues to evolve. Of particular importance here is the increased number of community groups participating in forest restoration as well as improvements made on their own household farms. Such groups include Mlumbe, NT Committee, Police, Villages Heads, Bright Dreamers, and the ZFL Staff group. It is particularly pleasing to see the local village chiefs participating in this project. It bodes well for the future. It is also good to see new initiatives proposed by local members of Nankhunda Transformation. Of course, this will mean increased budget costs. At present SGG & ZombaTREEZ have not yet developed a new budget. However, whereas the annual budget between 2023 and 2025 was approximately £6,000, the future budget will be of the order of £10,000.

CONTEXT

The initial project documents of 2023 mentioned the following: "Malawi is a peaceful but economically poor country. In the U.N. Human Development Index [HDI] it is ranked 169th out of 191, with most countries below Malawi either locked in political instability/war or located in the Sahel. It is estimated that some 70% of the local population are living on less than \$2.15/day with the majority of the rural population engaged in subsistence farming". By 2026 that situation has not substantially changed. The UNDP 2025 report indicates that the HDI for Malawi was 0.306 in 1990 and 0.517 in 2023, so there has been significant social progress over the last generation. However, the HDI ranking for Malawi is currently 172 out of 193, so it remains one of least developed countries in the world with a cluster of environmental & socio-economic problems.

There is perhaps one aspect of development where there seems to be a gradual shift in both government and local farmer attitudes. The national disaster associated with Cyclone Freddy in 2023, when many deaths resulted from landslides on steep slopes denuded of trees, seems to have created an increased awareness of the importance of trees. In the first village visited by SGG in 2023 there was a voiced reluctance to plant trees because "they used up precious ground needed to grow maize". In 2026 around Nankhunda villagers are much more positive about the value of trees, as a source of nutrition, shelter & income as well as protection of precious topsoil. Perhaps this is a partial explanation of the new community groups joining the Nankhunda Transformation- ZombaTREEZ partnership.



A final matter for consideration here is illustrated by the above photos. The field of maize [see above left] is going to fail, while the maize [see above right] is healthy and promises a good harvest. What is remarkable is that these two photos were taken less than 10 metres apart. The rainfall, slope & soil conditions are exactly the same for both, so why the difference? Possible explanations include: poor tillage where only the surface soil is scratched [i.e. lack of deep bed farming]; late tillage & sowing; inadequate rainwater retention, soil erosion; reliance on unavailable chemical fertilizer; inadequate weeding – all customary practices found on the left. SGG’s objective here is to encourage the techniques found on the right. This striking difference between neighbouring plots was noticed on several occasions. It is related to variations in individual farmer capacity to implement innovation.

FOREST RESTORATION

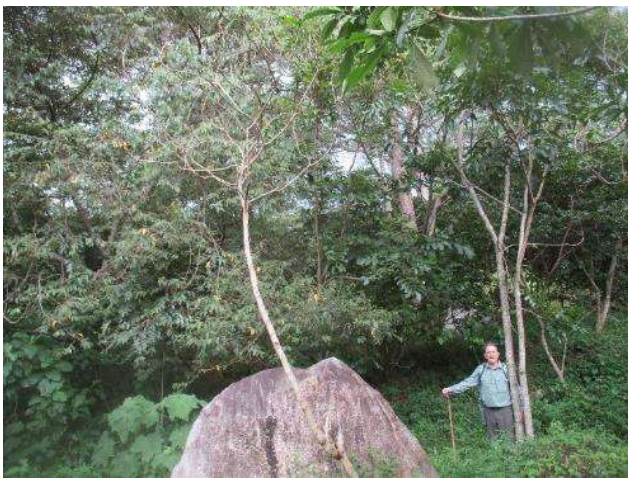
During previous SGG field monitoring visits the main focus was innovation for small-scale farms through deep bed farming, the establishment of demonstration kitchen gardens, and the promotion of horticulture with double-dug raised beds. Nevertheless, there had been significant attention to strategies for increasing tree cover. An issue to consider is whether forest restoration by natural regeneration is a more effective method than agroforestry tree-planting. In order to provide some field evidence on this issue more attention was put this year on trees within the various Zomba Forest Reserve conservation areas



The first point to recognise here is the difficulty of producing accurate tree counts within these conservation areas. Undergrowth can be dense & thorny [see above left]. Where community groups had not finished their maintenance work by 20th January, tree counting was often impossible. Slopes are often steep [see above right], so generally SGG employed the Nankhunda Transformation team to complete this work. The data given below should only be regarded as estimates.

By early February SGG had tree counts for 16 conservation areas which produced a total figure of 37,800 trees. Some of the counts may have been overestimates when the work was completed without supervision by SGG. However, some counts were undoubtedly underestimates where the community group responsible for maintenance of an area had not completed their work by the time of counting. In view of estimates made in previous years, SGG regards the total estimate of 37,800 as acceptable. There are two more conservation areas where trees can be counted. These were not monitored because normal annual maintenance had not been done on time. When this work is completed we would consider 40,000 trees a good approximation of the trees on these conservation sites.

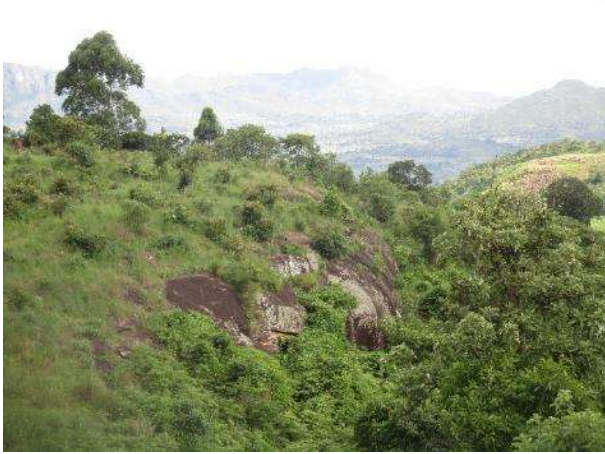
This figure is very different from those mentioned in the accompanying interim report of 2025 where 112,000 trees were estimated to be in these 18 conservation areas. However, the explanation of this difference is very straightforward. The 2025 figure includes any small sapling above knee height, many of which may not survive to maturity, whereas the lower SGG figure is based on trees already at least shoulder height and likely to survive to maturity.



Above are two examples of conservation areas. ZombaTREEZ have 2019 photos which show this part of Maguba Choir's area [see above left] as a rocky area devoid of trees. Hyena Rock Protectors area [see above right] is the largest conservation area with more than 8,000 trees counted. SGG has tried to record the growth of Happy Hammers conservation area trees since 2023. This area which was cleared in 2020 now has trees well above head height, so it is now difficult to see the eucalyptus tree which previously provided a marker [see below left]. Here Carole shows the general height of this regenerated forest around the marker eucalyptus. Another view of the marker eucalyptus, just visible in the background, can be seen here [see below right].



A difficulty concerning forest restoration is that these conservation areas are located within the Zomba Forest Reserve, with the Ministry of Natural Resources and Climate Change as the official authority. Villagers are aware that these areas could be redeveloped for commercial timber production. Although government policy accepts the importance of community involvement to regenerate Malawi's degraded forests, it has not yet reached the point where Nankhunda villagers are the officially recognised managers of these areas. With this in mind SGG has encouraged small areas outside the Zomba Forest Reserve, with at least 250 trees & significant indigenous species, to be maintained as 'copses'.



It was noted in the 2025 Interim Report that this area [see above left with the scale given by a person visible in the top left] is now being developed as a 'conservation copse'. One year ago the grass was cut and some 550 seedlings planted. In February 2026 the tree count above shoulder height [so not including those planted in 2025] was 1,750. This included a few small patches of fruits [see above right]. The best news is that the new Mlumbe group also wish to establish a conservation copse on the neighbouring hill [visible on the middleground right of the above left].

Another action in these conservation areas has been the counting of 'carbon capture trees'. These are trees with trunks sufficiently large for SGG to be confident that 50 such trees would produce one tonne of CO₂e/year. This year 3,774 such trees have been counted, which corresponds to 75 tons of CO₂e 'captured' each year. Such a figure is almost certainly an underestimate as no account is taken of the smaller trees & undergrowth within these conservation areas.



Here Carole [see left] demonstrates the method used to decide if a tree is suitable for carbon capture. At shoulder height, with thumbs touching each other, hands are stretched around the tree trunk. If the fingers cannot touch each other on the other side of the trunk, the tree is counted. This is a crude method, suitable for local conditions, but as the IPCC emphasise urgent action is more important than a slow scientifically robust methodology. Browse www.undep.org with their 2025 'Emissions Gap Report' indicating that **“Nations remain far from meeting the Paris Agreement goal to limit warming to well-below 2°C “**

AGROFORESTRY

SGG primary goal is to contribute to the eradication of extreme poverty and hunger. Consequently we support the actions of our partners ZombaTREEZ who manage the forest restoration because that action provides income to the community groups who participate in the forest restoration. However, SGG places more importance on agroforestry tree-planting, which can provide more sustainable revenue as well as other benefits directly to the small-scale farmer. SGG's plan for 2026 was to finish the counting of agroforestry trees for all members of Nankhunda Transformation. This activity mainly required the counting of members in the new groups

Our current records show a total of 438 participating farmers who own a total of 46,246 trees which are above hip height.



Here [see above left] trees are being counted at the home of a new member in the Bright Dreamers group. Most groups had their agroforestry trees counted in 2024, so for those groups the focus was on establishing their own group tree nursery. This is the nursery for Chigwandembo [see above right] at the home of Gloria Chikaola with several hundred seedlings to distribute. Here [see below right] the 20 members of Chigwandembo are collecting 30 seedlings each to plant on their farms. The biggest local nursery was that belonging to the Maguba Choir group. Here on 27th January SGG purchased 1020 agroforestry trees & 95 fruits, at a total cost of approximately £300, which were then distributed to Maguba Choir members to plant in their fields.



It was hoped that 2026 all farmer groups would have their own tree nursery, but this was not so. Despite SGG emphasising on previous visits how profitable and environmentally beneficial local tree nurseries can be, we noted only seven groups had their own nursery. Furthermore, we hoped that those nurseries would produce 3-5,000 seedlings to plant in members fields or their conservation areas, whereas the typical nursery had about 1,000 young trees. Limited local production meant that many seedlings were purchased from outside sources. Such seedlings were significantly more expensive, because of transport costs, than ones produced locally. SGG's plan is now to offer a prefixed guaranteed price to all groups which produce at least 3,000 seedlings by 1st December 2026. We think this will enable us to reach the planned planting target of 50,000 seedlings for the next two years of the project.

DEEP BED FARMING

Harvest results from last May, given in the 2025 Interim Report, suggest that maize yields can be increased by about 50% when Tiyeni deep bed techniques replace traditional tillage methods. See www.tiyeni.org for details. Thus, SGG intends to continue the training done in November 2024. The problem in 2026 was that January-February is the middle of the rainy season when farmland is already planted with maize and when farmers are reluctant to leave any ground unplanted for deep bed training. Consequently, SGG is planning to continue such deep bed training in November 2026.

One of the problems not mentioned in the Tiyeni manual is, 'what is the best way to adapt deep bed methods to terrain which is both steep, rocky and subject to soil erosion?' ZombaTREEZ & SGG have started a small pilot scheme to address this question.



ZombaTREEZ have rented this plot [see above left] with a view to finding out how best to use such ground, which is not suitable for normal cultivation. In 2024-5 the field was left fallow, although some Grevillea seedlings were planted. The photo shows the general appearance of the plot before work started. The work done in early 2026 included the following: cutting of grass & weeds in those patches where cultivation may be possible & around the 145 Grevillea; using any large, loose stones to infill neighbouring gullies; digging a series of trenches for reduced surface runoff & soil erosion and improved water retention [see above right]; planting vetiver grass on ridges to reduce soil erosion; making a series of small beds where soil is sufficiently deep for Tiyeni methods & planting a variety of crops [sweet potato, maize, cassava, pigeon peas etc] there. Very rocky patches will be left to establish a woodlot. The plan here is to develop a productive field [food forest?] which can act as a model for those farming similar sites but practising unproductive maize monocropping.

KITCHEN GARDENS

The horticultural aspects of this project have included two separate actions this year. For Nankhunda Transformation there has been a continuation of providing double-dug raised beds for as many members as wanted them.



A major activity recently has been the making of new double-dug raised beds to increase vegetable production and raise nutritional standards among members [see above left]. By 29th January 23 new beds had been prepared. This work was accompanied by the continued use of raised beds made in 2024. Here [see above right] community leader Benedicto has two raised beds with pumpkins, sukumawiki, amaranth, maize & tomato. Around these beds there are 3 mangos & an avocado. He also has 100 pawpaw seedlings for sale. The demonstration plot of Nsanama Women continues to flourish with both the bananas & vetiver providing produce for sale [see below left]. There is also a tree nursery here with agroforestry seedlings ready for members to plant. SGG's visit included group discussions, which was led by coordinator Aaron [see below right]. These discussions were mainly about future plans and in particular the need to produce more vegetable seedlings by the beginning of the rains later in the year. There was a shortage of vegetable seedlings again in January, so SGG emphasised that this could be a very profitable activity if the women produce seedlings for the start of the November rains.



The second horticultural action was the establishment of a Demonstration Kitchen Garden at Mbedza's new school at Namadidi. This included training 10 Mbedza volunteers on how to make a double-dug raised bed on their own farm.



This space between the school buildings and the maize was grass-covered waste ground a few days before this photo [see above left] was taken. Then in 3 days the 10 trainees constructed 10 double-dug raised beds. This involved: digging the topsoil to a depth of 35-40 cms; mixing the soil with 3 bags of manure for each bed; the mixed & aerated soil now stands above the general level of the ground, so the perimeter of the bed is lined with bricks to reduce soil erosion; finally the bed is covered with a mulch to stop the soil drying out before being planted. Later a fence will be constructed around the gardens and a variety of trees, mainly fruits, planted. As there were few rocks at this site the work was completed more quickly than expected. Thus, a demonstration of 'making a compost heap' [see above right] was added to the training. This involved: making a base layer of twigs to aid aeration of the compost pile; add a succession of layers of green materials [mainly Tithonia in this case], then brown material [mainly dried grass], then manure; this succession is repeated 3 or 4 times; the heap is then covered with soil and watered. It is worth noting that all these materials for composting were available at no cost, except for the bag of manure. Each farmer should have 3-4 compost heaps like this on their farm, especially as artificial chemical fertiliser is becoming prohibitively expensive.

FUTURE PROSPECTS

At the time of writing there is still much to do this year. The planting of vegetables and the completion of the garden fence needs to be done before the opening of the Special School at Namadidi. The Nankhunda Transformation team should continue establishing double-dug raised beds on members' farms. There is a request to develop a conservation copse on Mlumbe hill. Nevertheless sufficient has been done so far that the Nankhunda Transformation-ZombaTREEZ-SGG partnership can be truly pleased with the progress already made and good prospects for a further expansion of activities in the coming year.

Paul Keeley

Sustainable Global Gardens

21st March 2026