Specialising in small-scale horticultural, environmental and social projects in East Africa



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Newsletter

DECEMBER 2024

Seasonal greetings to all SGG partners, supporters and friends wherever you may be.

Christmas and New Year greetings to all supporters and partners of Sustainable Global Gardens. While I recover from the recent long journey from Malawi and adjust to a different lifestyle in Britain, I have been reflecting on what has happened since the last newsletter a year ago. The phrase that comes to mind is 'continued progress at an ever-increasing pace'. I shall use this newsletter, therefore, to recall the projects mentioned one year ago in the December 2023 newsletter and then provide evidence of progress since then.

Here are the two Demonstration Kitchen Gardens in November 2024. The Nankhunda garden [see top right] now contains 10 raised beds, some already planted with tomatoes & 'Chinese'. Within the fence there are 19 small Grevillea robusta trees, 24 Tephrosia bushes to be used for soil improvement & pest control, and 24 fruits. Rain had been limited before the visit on 22nd November, so not all the raised beds were planted. The Nsanama garden [see bottom right], which was visited on 26th November, was flourishing with the benefit of nearby water. The garden contains 10 bananas, 1 pawpaw and 5 Tephrosia as well as one mango, one avocado and one citrus – 3 fruits which were planted long before the garden was established. The raised beds contained more than 50 tomatoes, rape, 5 gourds and maize. Both gardens have used space to develop tree nurseries with a plan to distribute tree seedlings to members when the main rains arrive in December.

Kitchen Gardens

Last year's newsletter started with a photo illustrating the start of the Demonstration Kitchen Garden at Nankhunda village in Zomba District, Malawi. Soon after the writing of that newsletter a second Demonstration Kitchen Garden was established in Nsanama village.





These demonstration gardens near Zomba, Malawi are not the only garden projects where SGG has been active. The kitchen gardens established by OVC groups in Busia continue to make progress. We have few photos of gardening activity taken during our field visit in February before the onset of rains [see page 2: bottom left], but the reports which SGG received from our partners in June indicated that the investments

made in 11 group kitchen gardens at the start of the rains was the equivalent of £992. The estimated value of vegetables given to the 500 OVCs during their weekly communal meal was £1,214, while the sale of vegetables from the gardens generated £1,099. This shows that horticulture can be a profitable activity in Busia, so we hope to encourage gardens on individual holdings in 2025.

Mukwano's garden [see bottom left] planted with sufficient sukumawiki to provide vegetable for their OVC weekly meal for the following six months.

St. Denis Libolina School for the Physically Challenged

The most striking success mentioned in the last newsletter was the transformation in 2023 of St Denis Libolina School for the Physically Challenged. Would we see further progress with this project when we visited the school in February? In fact, we found very significant progress. Sales from the school permaculture gardens had enabled the school to pay off the school's crippling debt for food supplies. Furthermore, the Rotary Club of Sherwood Sunrisers continued their partnership with the Rotary Club of Bungoma by making infrastructural improvements in the school, such as new toilet facilities and an improved kitchen. However, the greatest interest for SGG was the community outreach where parents had been trained by SCOPE to develop permaculture kitchen gardens on their home plots.

Our February visit to St Denis revealed the continued transformation of the school grounds along

permaculture principles. This patch [see main picture below] was wasted ground a year before. Now there is a ridge & furrow plot with sukumawiki & sweet potato on the ridges and arrowroot & bananas in the furrows. Next to the fence is a new line of Grevillea robusta. Elsewhere in the plot there is a pawpaw tree and lemon grass, which is often used to make 'tea'. Our main interest on this visit, however, was permaculture outside the grounds of St Denis. Here [see bottom centre] a parent has planted sweet potato on a plot with the characteristic ridge & furrow system. Such furrows are dug to ensure that all rainwater soaks into the ground rather than flowing elsewhere. There is also interplanting with bananas growing among the vegetables.

Some schools nearby are copying these permaculture methods to increase their own food supply [see bottom right]. The latter three photos illustrate the work of the Kenya SCOPE team. SGG is impressed with what they have achieved, so we regret that we have been unable to find more funding for them in 2024. Let's hope that we have more success with fundraising for SCOPE's practical training in permaculture.









Agroforestry planting is SGG's other major activity in 2024. This is true in all 3 countries where SGG currently operates, but we currently have more detailed data for the Zomba project than elsewhere.





In Kenya one of our biggest tree schemes is based at Kitale Friends, who intend to plant 10,000 trees annually for 5 years, and who are currently sponsored by The Edith Maud Ellis 1965 Charitable Trust. A crucial part of the Friends' policy is to discourage eucalyptus and replace them a variety of trees [e.g. Grevillea robusta, Markhamia lutea, fruits & coffee bushes] – as seen above left. Within the OVC groups in Busia there are many farmers who have been treeplanting with SGG since 2014. They now have trees which they wish to keep for continued carbon capture [see above right].

In Tanzania SGG continues supporting a few schemes located between Arusha and Same. Some of these focus on the production of fruits, such as pawpaw [see below left] and avocado. Others are concerned with a wider range of species, including

indigenous hardwoods for carbon capture, fruits, and multipurpose species [see below right]. One species of particular interest is Tephrosia vogelii, which is being promoted as a natural pesticide within the Kilimanjaro region.

Our main focus for trees in 2024 has been around the villages of Nankhunda & Nsanama in Zomba District, Malawi. By 27th January SGG had recorded 19,615 trees being grown by around 190 small-scale farmers who are members of the ZombaTREEZ-Nankhunda Transformation partnership. After the November 2024 field visit another 7,988 trees could be added to give a total of 27,603 with 6 community groups still to have their trees counted and confirmed. Agroforestry planting here will be a major SGG activity for the next four years.





Soil conservation and soil management

Another major activity has developed towards the end of this year in Malawi. This is soil conservation & improved soil management. The background to this new interest is FAO research which has suggested that much Malawi farmland is losing 29 tons/hectare of topsoil annually amidst a situation of widespread hunger. We need to remember that Malawi is one of the poorest peaceful countries in the world, and usually ranks about 170th out of 193 on the Human Development Index with many farmers unable to feed their households throughout the year.



Much of my recent field visit to Zomba was spent giving practical advice on improved soil management, making use of the Tiyeni Manual for 'Deep Bed Farming'. See **www.tiyeni.org** for details. The basis of this method is: a] breaking the hardpan just below

the surface [see left] to improve soil moisture and aid better root penetration, b] construction of retention ditches between the planting beds [see below] so that rainwater is retained in the field rather than allowed to run off the surface & erode the topsoil, c] the addition of compost-manure to increase the organic content & fertility of the planting beds, d] the use of vetiver grass on slopes to reduce surface runoff & soil erosion [see below left], e] the use of interplanting, and f] the addition of agroforestry trees, especially along the contour lines, to aid soil stability and to produce a greater variety of harvestable products. We anticipate that this last activity will be a major part of soil conservation measures next year. The photo [see below right] is what we hope to achieve. Here there are a series of tree lines across a steep slope. The trees there include: bananas at the bottom of the slope; pines suitable for steep & stoney ground; a variety of fruits such as mango, guava & avocado; general purpose agroforestry species such as Senna spectabilis; and bamboo. Unfortunately, the slopes next to this excellent illustration of contour treeplanting are without trees and show clear signs of soil erosion. Our task for the next few years is to make these tree lines shown below the norm rather than the exception in the Nankhunda-Nsanama landscape. If sufficient funding is found we intend to plant 250,000 trees for increased fruit production, improved household incomes and for soil conservation.







Orphans and vulnerable children [OVCs]

So far in this newsletter there has been limited reference to our core programme which is the support of 500 orphans &/or vulnerable children [OVCs] in Busia County, Kenya. These OVC groups continue to be a crucial part of SGG's actions, but despite the wish of some community leaders these groups are not expanding because SGG feels unable to guarantee continuous, sustainable funding needed to maintain this programme. Thus, SGG is extremely grateful to the various charitable trusts [e.g. The Community of the Presentation, The Catriona Hargreaves Charitable Trust, St Peter's Aid for the Needy, Paradigm Norton Trust, and The Lady Leech Fund] and our many individual supporters who enable this project to continue.

The photos below were taken during SGG's visit to Nyusa Farmers. This was a busy day with some tree counting undertaken & a visit to the group kitchen garden nearby, but the main activities were the feeding of 50 OVCs [see above right] and discussions concerning table-banking [see below right]. The latter provides important supplementary income to Nyusa Farmers, often used to cover educational costs.





Of course, the project to provide a weekly, nutritious, communal meal for some 500 underprivileged children is accompanied by 3 schemes to aid the households where these children live. One scheme to help families who foster OVCs is the kitchen gardens, but these have already been briefly mentioned. Another component of the programme is tree-planting, but this year SGG spent so little time in Busia that we where unable to collect data on this activity. Nevertheless, we have good reason to believe that thousands of trees have been planted by these 11 groups since SGG's last count. Although limited time was spent on table-banking matters we do have evidence that this activity flourishes. In February one OVC group, CIF, paid a Ksh70,000/- [£433] local contribution and received Ksh100,000/- [£617] from SGG in exchange. They divided this money among 16 members, who usually purchased 3 piglets. By November CIF reported that most pigs had been reared and sold to give an income of Ksh162,600/- [£1000], while the group members were still in possession of 11 pigs. A very profitable enterprise!

There is so much more which could be reported as evidence of progress during 2024, but space here is limited. If there is space for just one more item, I would need to mention the current climate change crisis which is liable to undo all the progress achieved in the localities where SGG is active. I have been very pleased with the progress made during my two field visits to Malawi this year, but such progress there is vulnerable to cyclone damage. This morning I heard the news that Mayotte was destroyed by Cyclone Chida, and dreaded the consequences when the BBC showed the cyclone passing over Zomba today. Fortunately, our WhatsApp call to Zomba suggested that wind and rain damage is much less than during Cyclone Freddy in 2022. My New Year wish is the same as last year: that is, we all accept the need to reduce our carbon footprint – even if it means adjusting the prosperous lifestyle we enjoy. While a reduction in our carbon emissions is the only way out of the climate crisis, you may like to consider during your struggle to reach 'net-zero' the possibility of offsetting some of your footprint by asking African farmers in the SGG network to grow trees on your behalf. The current cost of this 'carbon-trading' is £10 for each tonne of CO2e captured. I can assure you that SGG knows hundreds of farmers willing to undertake carbon capture at this price.

Thank you for your support

You can read further details on the website **www.sustainableglobalgardens.org.uk**. Go on: consider making a contribution to saving the planet as we know it this Christmas. And thank you to everyone who has helped sustain our work this year.

Paul Keeley

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