WeForest
Making Earth Cooler

Mara
Tanzania

Mid-year report 2021

Transitioning villages to agroforestry

Forest resources in Mara, Tanzania, have been degraded to such an extent that local smallholder farmers are struggling with infertile soil, low water tables and erratic rainfall. Our project with Global Resource Alliance (GRA) grows seedlings in nurseries and distributes them to the people that need them most.

Many smallholder farmers in this programme have planted an average of 200-800 trees on their farms, including high-value trees such as fruit and timber. Provided certain rules are followed regarding the quantity and the timing of harvesting, some trees can be used for timber or firewood in ways that do not prevent their growth and natural regeneration.

With these agroforestry systems on their farms and lands, farmers and institutional beneficiaries such as schools and churches are able to produce their own fodder, fuelwood, fibre, fruit and construction materials, and so no longer need to depend on forests for food or incomes.

Mara

Our goals for the Mara project:

2021 goals:

Distribute 750 000 seedlings

Support local people with training and trees

Raise environmental awareness

Restoration technique:
Agroforestry

including species such as *Grevillea robusta, Casuarina equisetifolia, Moringa olifera, Leucaena leucocephala, Acacia tortillis, Albizia lebbeck, Markhamia lutea, Tectona grandis, Jacaranda mimosifolia*, avocado, papaya, orange and guava

What's new in Mara?
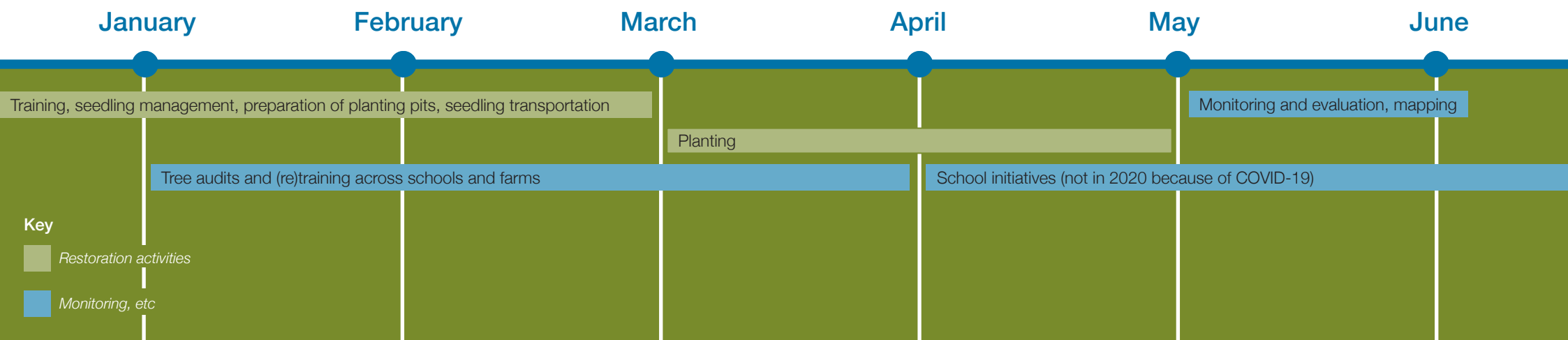
Recent highlights from the field

Despite COVID-19 restrictions that were in place until March, the team has made incredible progress and are on track to meet this year's target of 750 000 seedlings. Over 380 000 seedlings have been raised during the first season and almost all – 98% – have been distributed.

A new nursery at Utegi is now staffed (4 women, 4 men) and supplying seedlings. As well as a nursery, this 2-acre site will support practical training in agroforestry through a new demonstration plot currently under development. Practical demonstration is the best way to train local communities in agroforestry, so an additional demonstration site is also in development near Butiama nursery.

We hoped the plot could be at Butiama nursery itself, but activities are limited as it is next to a protected forest reserve – so a neighbouring farmer, Neema N., stepped in with 3 acres of land nearby! 451 tree seedlings are now planted alongside annual crops and vegetables in the demonstration site and visitors to the nursery now have the chance to see agroforestry systems in action and learn how to grow species

The new nursery at Utegi will play a key role in raising the 400 000 seedlings for the second planting season of 2021, which will start in October or November.
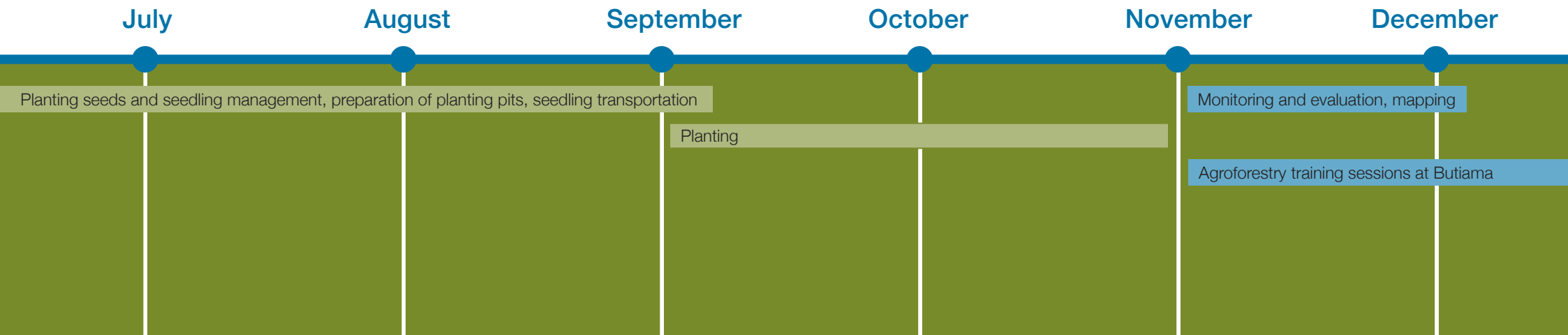
January	February	March	April	May	June

Training, seedling management, preparation of planting pits, seedling transportation

Monitoring and evaluation, mapping

Planting

Tree audits and (re)training across schools and farms

School initiatives (not in 2020 because of COVID-19)

Key

Restoration activities

Monitoring, etc

At the demonstration site adjacent to Butiama, visitors to the nursery can see agroforestry systems in action.

including *Grevillea robusta, Persea americana, Mangifera indica, Punica granatum, Carica papaya, Citrus limon, Acrocarpus fraxinifolius, Cedrela odorata, Gliricidia sepium, Gmelina arborea* and *Sesbania sesban*.

Delayed collaborations with schools during COVID-19 restrictions have restarted, and agroforestry demonstration plots are already established in Muriaza Primary School and Mekomariro Secondary School and will be used by students and teachers to learn practical skills and knowledge on best agroforestry techniques.

As well as training farmers and other beneficiaries in agroforestry practices on site and at these demonstration plots, the project continues to carry out training sessions in farmers' own woodlots on silviculture techniques and technologies. By May, more than 260 individual farmers had been trained in silviculture and more than 70 in agroforestry. The project had also carried out silviculture training at 86 institutions and agroforestry training at 37.

A baseline survey to collect data and establish benchmarks has been carried out. The data that has been collected from this first-time survey will give a picture of the present situation, while future surveys will measure the project's success and impact of the project over time.

July	August	September	October	November	December

Planting seeds and seedling management, preparation of planting pits, seedling transportation

Planting

Monitoring and evaluation, mapping

Agroforestry training sessions at Butiama

What's next?

- Raising over 400 000 seedlings for the second planting season of 2021; pot filling and seed sowing in Butiama and Utegi nurseries.

- Distribution of seedlings begins in November.

- Development and maintenance of the new agroforestry demonstration site next to Butiama.

- Analysis of the baseline survey data to create benchmark values to assess the project's success.

- At least 120 farmers will be trained at Farmers Field Schools, which include demonstration plots and classrooms.

What is agroforestry?

Agroforestry combines agriculture and forestry: trees and shrubs are grown around or among crops or pastureland. It plays a critical role in successful forest restoration by:

- reducing the pressure on forest resources and incentivise sustainable forest management by alleviating poverty;
- compensating the loss of access to forest resources;
- ensuring reliable incomes to fund sustainable forest management.

The value of an agroforestry system is in its diversity; selecting and distributing a variety of environmentally and socially-appropriate tree species. in Tanzania our programme grows between 45-70 species each year that have specific uses. Some trees, such as timber, are harvested and ideally replaced. Others, such as fruit and nitrogen-fixing trees, pruned year after year providing food, soil fertility and numerous other benefits. Of course, all the types of trees sequester carbon as they grow.

Please visit our **Why and How** webpage for more information.

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Stay up-to-date with our interactive Mara map, and check out the photos on Flickr.