



# **Monitoring and Evaluation report**

Reporting period: Q2 2025

**Project:**Transitioning to Regenerative Agroforestry

Location: Chone- Manabí, Ecuador

Estimated beneficiaries: 25 smallholder farmers

### Introduction

This report presents the first results from the Monitoring and Evaluation (M&E) plan of the Rotary Global Grant project "*Transitioning to Regenerative Agroforestry*". The initiative supports 25 smallholder farmers in Manabí, Ecuador, to shift from monoculture production to biodiverse syntropic agroforestry systems.

Through a combination of technical training, material support, and continuous field visits, the program aims to improve soil health, diversify income sources, and strengthen resilience to climate change. The M&E framework tracks progress using a set of quantitative and qualitative indicators designed to measure individual learning, implementation success, and early signs of ecological and economic transformation.

## **Indicators**

The following section summarizes progress made during the current reporting period across all key indicators.

#### 1. Individuals Trained

**Indicator:** Number of individuals trained

Frequency: Monthly

Collection Method: Grant records and reports

**Progress:** 25 local farmers have been enrolled and actively participating in the training program. The courses have focused on soil health, organic fertilizers, and pruning of cacao and fruit trees. Participants received 14 full days of intensive training at Los Arboleres Farm, totaling 112 hours.









## 2. Youth engaged

**Indicator:** Number of youth employed in income-generating activities

Frequency: Monthly

**Collection Method:** Grant records and reports

**Progress:** Youth have actively supported field logistics, early planting, and syntropic system management. Several have expressed interest in continuing their involvement through future apprenticeships on model farms. Three of the participating farmers are under the age of 29 and considered young adults. In addition, 6 to 7 youth, including sons, daughters, and grandchildren, have regularly participated in communal workdays (mingas), bringing the total number of engaged youth to approximately 9 to 10.







#### 3. Farmers income

**Indicator:** Household income (\$/hectare)

Frequency: Every 3 months

**Collection Method:** Surveys/questionnaires

**Progress:** Baseline income data has been collected, with reported earnings ranging from \$0 to \$12,000 per year from monoculture cacao systems, usually across several hectares (~10ha). However, it is still too early in the project to observe any measurable income changes from the regenerative agroforestry plots, as they have not yet begun producing harvestable yields.

Despite the absence of short-term income results, early signs of success are evident. Approximately 97 percent of the cacao trees planted have survived, which indicates that the





systems have been successfully established and are on track to generate income in the future (**Table 1**). This is particularly relevant for species like bananas and short-cycle intercrops that are expected to begin producing within the next one to two years.

One participant was not able to implement his agroforestry plot due to land-related issues. Still, he remains actively involved in the program, attending training sessions and participating in collective work days (mingas) alongside other farmers.

**Table 1.** Number of Surviving Trees in Implemented Plots.

Crop	Number of alive trees	Percentage of survival
Cacao	1536	97%
Plantain	1367	86%
Jackfruit or Guaba	293	31%
Mango or Aguacate	133	69%
Amarillo	1152	89%
Pachaco	1417	80%

#### 4. Crop Productivity

**Indicator:** Farm productivity (ton/hectare)

Frequency: Every 3 months

**Collection Method:** Surveys/questionnaires

**Progress:** Baseline productivity data has been collected for existing monoculture systems. Reported yields vary across farmers, depending on land size, crop type, and management practices. Some farmers harvest between 10 and 15 quintals of cacao per year, up to 18,200 kilograms of plantain, and several thousand citrus fruits annually. Others report minimal yields or production focused mainly on household consumption.

It is still too early in the project to observe productivity changes from the regenerative agroforestry plots, which have not yet reached a productive stage. Most trees are young, and first measurable harvests from bananas and short-cycle crops are expected within the next 12 to 18 months.

Despite the lack of short-term yield data, the high survival rate of planted trees indicates successful establishment of the regenerative systems. For example, 97 percent of the cacao trees and 86 percent of the plantains are still alive. These survival rates, detailed in **Table 1**, serve as early indicators of future productivity as the systems continue to mature.









#### 5. Acquired Skills from Training

**Indicator:** Acquired Skills From Training (q)

Frequency: Quarterly

**Collection Method:** Field technician evaluations

**Progress:** Farmers have shown steady improvement in key technical skills, particularly in pruning, composting, and agroforestry plot design. Field technicians report that several participants have begun to apply these techniques independently on their own land, beyond the training site. These practical applications suggest that knowledge transfer is taking place effectively and that farmers are gaining confidence in regenerative practices.

The training curriculum was delivered in a structured sequence, combining technical instruction, hands-on practice, and community-based feedback.

Below is a summary of key skills acquired, organized by training module:

#### **Soil and Organic Fertilizer (Course 1)**

- Compost preparation using local materials
- Application of organic amendments
- Soil health observation and basic diagnostics
- Use of mulch to retain soil moisture and suppress weeds

#### **Pruning and Fruit Tree Management (Course 2)**

- Correct pruning of cacao, citrus, and mango trees
- Use and maintenance of pruning tools
- Tree spacing and canopy management
- Identification and removal of diseased branches

#### **Regenerative Agroforestry Design (Course 3)**

Plot design based on syntropic principles





- Species selection according to strata and cycles
- Successional planting planning
- Use of pioneer and support species for soil regeneration

#### Bamboo, Livestock, and Ecosystem Integration (Course 4)

- Basic bamboo propagation and management
- Integration of livestock into agroforestry systems
- Understanding plant-animal-soil relationships
- Land use planning for ecosystem restoration

#### Follow-Up and Peer Learning

- Group coordination and collective work (mingas)
- Troubleshooting plot design and management issues
- Sharing techniques and tools with neighbors
- Participation in subregional support groups

As the program advances, these training phases will continue to reinforce both individual competencies and collaborative learning among farmers. The long-term follow-up component ensures that skills are not only acquired but also applied and refined over time.

#### 6. Graduation Rate

Indicator: % of graduates Frequency: Annually

**Collection Method:** Direct observation

**Progress:** Retention remains high, with 100 percent attendance during the initial modules. Formal graduation will take place after participants complete all four training cycles and demonstrate on-farm implementation by the end of the one-year program.

Out of the 25 participants enrolled, 24 have fully implemented their agroforestry plots and are on track to graduate. One participant did not receive its tools or establish a plot due to land-related limitations but remained engaged through training attendance and support of other farmers during group implementation activities.

The projected graduation rate will therefore be 96 percent.

## 7. Active Participation Rate

Indicator: % of active students

Frequency: Monthly

**Collection Method:** Direct observation

Progress: All 25 participants have consistently attended the scheduled training sessions and





group implementation activities, resulting in a 100 percent participation rate to date. Attendance has remained strong even during more intensive phases of the program, such as hands-on plot establishment and pruning workshops.

A few farmers required additional technical support due to delays and challenges caused by the rainy season, particularly related to land preparation and planting timelines. These follow-up visits ensured that all participants could stay on track and apply the training effectively under local conditions.



# **Qualitative Observations**

**Engagement and Motivation:** Participants show strong enthusiasm, especially during hands-on practicums and group visits to model farms.



**Knowledge Transfer:** Early peer learning is emerging among neighboring farmers, an encouraging sign for long-term replication.

**Challenges:** Transport logistics and irregular rainfall patterns have caused minor delays in on-farm planting; however, these were mitigated by technician support.





## Conclusion

During the second quarter of 2025, the *Transitioning to Regenerative Agroforestry* project has made solid progress in laying the foundations for long-term ecological and economic transformation. All 25 participating farmers have remained active throughout the training process, with 96 percent fully implementing their agroforestry plots. Training sessions have resulted in meaningful skill development, particularly in composting, pruning, plot design, and integrated system management. These competencies are already being applied in the field, demonstrating strong knowledge transfer and early adoption.

Although it is still too early to observe measurable changes in income or productivity from the regenerative systems, high tree survival rates and full participation levels suggest that the program is on track. Short-cycle crops like bananas and plantains are expected to begin yielding within the next 12 to 18 months, while other components such as cacao and timber will mature over the coming years.

Community engagement remains high, and the program is fostering a collaborative environment where farmers are learning from one another and building resilient support networks. Technical support has been crucial in addressing seasonal challenges, ensuring that implementation remains consistent across all participant farms.

Overall, the project is progressing as planned and is well-positioned to achieve its long-term goals of improving livelihoods, restoring ecosystems, and scaling regenerative practices in coastal Ecuador.