Key Programme Information

Gold Standard for the Global Goals (GS4GG) Programme of Activities (PoA)

"Global Syntropic Agroforestry Program"

Introduction

Forests are of great importance for biodiversity, climate, healthy soils, retention of water and food production. However, 314 million ha of tree cover has been lost worldwide between 2001 and 2015. Deforestation linked to agriculture is a major driver of climate change. Commodity-driven deforestation (including cattle pastureland, cocoa, coffee, soy, oil palm etc.) and shifting agriculture contribute to 25% and 21% respectively of the total tree cover loss.[1] This amounts to almost 10 million hectares (ha) less forest every year due to agricultural activities, resulting in alterations of weather patterns, food insecurity, and damage to entire ecosystems, soils and wildlife.

The economic impact on society is enormous. The global cost of land degradation is estimated at $23 trillion by 2050.[2] But degraded land is not irrevocably lost and can be restored. Nair and Garrity (2012) estimate that a total of 1.6 billion ha of land worldwide has the potential to be under agroforestry management.[3]

Purpose of the Programme of Activities (PoA)

A Programme of Activities (abbreviated PoA) sets the framework for different project activities (so called Voluntary Project Activities, abbreviated VPAs). The objective of the PoA "Global Syntropic Agroforestry Program" is to implement agroforestry projects on farmers' lands, which restore soils, enhance food security of farmers, increase resilience of supply chains and remove the greenhouse gas carbon dioxide (CO_2) from the atmosphere through carbon sequestration across different countries in South- and Central America as well as Africa (see Table 1 with the list of countries being envisaged to be included under this PoA). Note that except for the Republic of Kenya, a PoA Design Consultation had been already conducted for all other countries between 01.06.2024 to 03.07.2024. This PoA Design Consultation covers 'The Republic of Kenya'.

The first voluntary VPA being included under the PoA has been implemented in Brazil (State of Minas Gerais) in the context of coffee farms, a 2nd VPA is planned for Kenya.

Table 1: List of countries being envisaged to be included under the PoA

Federal Republic of Brazil	Republic of Colombia	Republic of Peru	Republic of Nicaragua
United Mexican States (Mexico)	Republic of Uganda	The Federal Democratic Republic of Ethiopia	The Republic of Kenya

[1] Curtis et al. (2018), Classifying drivers of global forest loss, https://doi.org/10.1126/science.aau3445.
[2] https://www.unccd.int/news-stories/stories/poor-land-use-costs-countries-9-percent-equivalent-their-gdp
[3] K. Ramachandran Nair, Dennis Garrity (2012), Agroforestry - the Future of Global Land Use, https://www.researchgate.net/publication/321611950_Agroforestry_-_The_Future_of_Global_Land_Use

Applied approach

The projects involve either the conversion of existing plantations with annual and/or perennial crops (like e.g. coffee, cocoa, cotton, soybean etc) into agroforestry systems or agroforestry systems are established on non-forest lands (either fallow land, shrubland, grassland or a mix thereof) or it is a mix thereof. Alternatively, silvopastoral and/or agrosilvopastoral systems are possible. What all project types have in common is that they apply syntropic principles to the greatest possible extent. Syntropic farming – created by the Swiss geneticist and farmer Ernst Götsch – is a concept that claims to respect and mimic nature by steadily accumulating diversity, life and complexity. It is characterized by the optimization of photosynthesis, high diversity and density of plants of different life cycles, vertical stratification, consideration of natural succession and permanent soil cover with organic matter. Intensive management by pruning, pollarding[4] and mowing maintains the dynamics resulting in a recycling of organic matter of 2 to 4 times more than in a natural forest, hence increasing significantly the relationship of fungus to bacteria with positive impacts on soil fertility and microbiological life.

To fulfil objectives of each target area, the choice of tree and plant species depends on the specific project location taking into account soil properties, precipitation, temperature, latitude and altitude. The planting concept and combination of tree species also considers parameters such as main cash crop(s), degree of mechanization, agroforestry type (agro-silviculture, silvopasture, agrosilvopasture), experiences from the past, prevalence of species in the immediate surroundings. Trees are either planted by seeds or seedlings or a mix thereof. Both small-scale and large-scale farmers can participate under the programme.

Photo above: Coffee agroforestry farm in Bolivia: Coffee flowering induced by previously “pollarded” trees

[4] Pollarding means the removal of the upper branches of a tree (the crown), which promotes the growth of a dense head of foliage and branches, to keep trees smaller than they would naturally grow.

Photo above: Ernst Götsch farm – Fazenda Olhos D'Agua: Recently pollarded trees in a highly diversified cocoa plantation

Photo above: Ernst Götsch farm – Fazenda Olhos D'Agua: Recently pollarded organic material is evenly distributed on the soil in a cocoa plantation

Coordinating and Managing Entity (CME) and other entities involved.

The Coordinating and Managing Entity (abbreviated CME) of the PoA is the sustainability-focused Danish-based company 'GrowGrounds ApS'. GrowGrounds is focused to decrease coffee's negative CO_2 impact and helps farmers to move away from monoculture coffee farming to syntropic agroforestry systems.
Other entities involved on the project (VPA) level are the implementing partners, carbon and agroforestry advisory companies.

Carbon credits

Greenhouse gas (GHG) sequestration achieved through the plantation or assisted natural regeneration of trees[5] will result in carbon credits following Gold Standard certification rules and procedures. The PoA will apply the Gold Standard methodology "Afforestation/Reforestation GHG Emissions Reduction & Sequestration Methodology".

For project activities implemented by GrowGrounds, 60% to 80% (still to be finally determined) of revenues from the sale of carbon credits are expected to be paid directly back to the farmers. The remaining portion of the revenues are used to finance the carbon certification related costs and to cover costs incurred by the project developer/implementer.

Duration and Time-schedule

The duration of the PoA is 50 years following Gold Standard for the Global Goals requirements.

The PoA along with the first VPA being implemented in Brazil is expected to be registered with the Gold Standard for the Global Goals latest by Q3, 2025.

The first trial plots are expected to be installed in Brazil in Q4, 2024. The more detailed implementation plan will be communicated to the local stakeholders during the stakeholder consultation at VPA level. Such stakeholder consultations are envisaged to be carried out for each of the VPAs or a group of VPAs.

In Kenya, the first trial plots are expected to be installed in October, 2025. The certification process for Kenya with the Validation/Verification Body (VVB) and GS is planned to start right after Gold Standard registration of PoA and VPA1.

Contribution to Sustainable Development

Project activities under the PoA make sure to be in compliance with all safeguards as defined in the Gold Standard requirements and are expected to contribute to the following Sustainable Development Goals (SDGs). Note that not necessarily all of the SDGs will be claimed and monitored later on.

[5] Carbon credits may be also generated through Soil Organic Carbon and/or Biochar.

SDG 1 - No poverty

Project activities are expected to reduce or even eliminate the use of external inputs (chemical or organic fertilizer, pesticides, herbicides, fungicides) and be independent of external irrigation resulting in cost savings for the farmers. Besides, the total income revenue stream in the project scenario is envisaged to be higher compared to the baseline scenario (pre-project scenario) based on a more diverse and stable production.

SDG 2 – Zero hunger

Project activities are expected to improve the food security of farmers since - besides the main commercial crops - fruit and nut trees and edible plants will be integrated into the syntropic agroforestry system and provide healthy and high energetic food to farmers and its families.

SDG 4 – Quality education

Farmers and technicians are trained in syntropic farming techniques which will make their work more efficient, effective and sustainable for soils and the environment.

SDG 5 – Gender equality

Women's work burden related to the collection of firewood will be reduced. Since sufficient firewood is expected to be available on the syntropic agroforestry plots.

SDG 6 – Clean Water and Sanitation

The project activities increase water retention in the soil through the continuous soil cover, reduce or even eliminate the use of chemical inputs and apply an appropriate waste management policy. Through these measures, the groundwater level can be raised, dumping of waste eliminated and the release of agrochemicals and pollutants to nearby waterbodies minimized.

SDG 8 – Decent work and economic growth

The project activities will increase business and income opportunities in the host countries'communities by addressing critical social and environmental issues in the commodities value chains (e.g. coffee, cocoa etc).

SDG 10 – Reduced inequalities

The project activities include a pay-back of between 60% to 80% of the carbon credit revenues to the farmers. This together with higher expected total income revenue streams (see SDG 1) result in a higher value capture in the producer countries of the Global South and contributes to livelihood diversification and higher income of producers often far from attaining a decent income.

SDG 13 – Climate action

The project activities result in carbon removals through planted trees as well as from trees of assisted natural regeneration. Soil Organic Carbon and/or biochar are further possible carbon sinks.

SDG 15 – Life on land

Previous monocultures, pastureland, fallow land and/or shrubland will be converted to agroforestry systems following syntropic farming principles. This will provide new habitats for flora and fauna.

SDG 17 – Partnerships for the goals

Through the project partners' united efforts, the project activities aim to build stronger farmer organizations that empower farmers, increase their agency, and improve gender equality.

Joining the PoA

Different organizations/entities may become VPA implementing partners. A contract between CME and VPA implementing partner will define all the arrangements between the Parties as well as the terms for joining the PoA. Different collaboration models are possible and are a matter of negotiation.

Similar initiatives/programmes in overlapping geographical boundaries will be taken into consideration and synergies will be explored as and where possible.