

Solidaridad

DEUTSCHE POSTCODE LOTTERIE PROPOSAL

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Last updated:	
Target audience:	German Postcode Lottery
Related documents:	1 Budget / 2 Copy of dreamfund budget Gantt Chart Official guideline (German) → “IV. Fördergrundsätze”

1.

PROJECT INFORMATION

PROJECT TITLE:

Kaffeebauern werden zu Klimaschutzhelden

PROJECT LOCATION (MIN. 1 LOCATION):

Continent: South America

Country: Colombia

City: Cauca

CAUCA



COLOMBIA



PROJECT DESCRIPTION (2500 CHARACTERS):

Agriculture is responsible for about 34% of global GHG emissions¹ and a key driver of climate change. However, farmers, especially smallholder farmers, also play an indispensable role in the production of food and beverages. 70% of the carbon footprint of food products can be traced back to farm level activities. So the coffee or any commodity consumed in Germany contains the carbon footprint created by farmers to a large extent.

Farmers do not only contribute to climate change, they are also a victim of climate change. Over 50% of the Colombian coffee growing areas will be affected by climate change by 2050. Average temperatures will increase, reducing the suitability for current coffee growing areas and changing rainfall patterns will increase droughts and landslides. For the adaptation to climate change agroforestry and climate smart agricultural practices are the most promising and affordable technologies with a win-win potential for farmers and the society as a whole. Climate smart farming combined, improves productivity, reduces GHG emissions of food production and enhances resilience to the impact of climate change².

The opportunity of providing access to making carbon markets work for smallholders is an opportunity to reduce the carbon footprint of the agricultural products we consume. With the ACORN carbon marketplace we can financially reward farmers and trigger/incentivise the adoption of climate smart agriculture and agroforestry. Together with farmers and partners we can produce real, additional and uniquely sold and counted, and independently verified carbon credits, meeting the carbon credit quality recommendations of the Umweltbundesamt. We can create these carbon credits at competitively lower costs and the majority of the carbon value created (80%+) can be delivered to farmers.

The Cauca department in Colombia is home to over 30,000 coffee farmers. Rural communities in Cauca, and in particular women and minorities have been hit badly by the armed conflict between guerrilla, paramilitary groups and drug traffickers. Coffee growing offers these rural families a lifeline to escape illegal crop growing (coca/poppy).

The introduction of agroforestry holds significant benefits for the farmers to adapt to the impact of climate change. Climate smart farming increases productivity and quality, reduces the use of natural resources and higher, more consistent income. It will allow the beneficiaries of this project to become more resilient .

For the training & education of farmers, Solidaridad will leverage its CO2Herencia training courses for field technicians and producers. These training courses will be delivered through a blended learning approach (virtual and in-person). The blended learning modality, which consists of mixing access to digital content and tools with face-to-face support through promoters, will enable us to reach more farmers with the content, as well as promote the improvement of their digital skills, much needed in a world with Covid-19. Agrolearning, the mobile-based educational platform will allow farmers to access and use learning content and capsules, tailored to their individual profile and according to the improvement plans elaborated during the producer assessment. Field technicians will be equipped with digital field school kits that can be easily attached to motorcycles or cars for transport. These kits consist of a satellite receiver (for satellite internet), electronic devices and training equipment.

This project will have an inclusive approach, especially at the field level and in spaces that require the participation of all stakeholders impacted or that could contribute to the goal to reduce and sequester CO2. Solidaridad tailors its interventions based on specific supply chain assessments (e.g. Coffee in Colombia) where the contribution, role, and challenges of women, young people, and other minority groups are analyzed. At field level this would typically involve embedding an inclusive technical assistance model that has two goals: 1) developing the skills of field staff to be inclusive (from language use to targeting disadvantaged groups); and 2) increasing the gender balance of field staff, who are

¹ <https://www.nature.com/articles/s43016-021-00225-9>

² https://www.nature.com/articles/nclimate2437?error=cookies_not_supported&code=3efb0ebe-7dd2-4756-9057-8b3fb79c49f3
<https://www.pnas.org/content/114/44/11645>

mainly men. We also frequently work with our partners to address gender and related power dynamics at the household level

COPY / SHORTENED VERSION

Storyline:

- Ag source of GHGs and farmer exposed to climate risk
- the project will reverse this trend through increased resilience building a incentives from carbon markets in line with UBA carbon credit guidance
- Carbon credit are co-delivered through the Rabobank ACORN marketplace, that specifically for smallholder farmers and through Solidaridad effective system to train farmers

The agricultural sector, that serves us with many of our daily consumed goods, often produced by smallholder farmers, is responsible for about 34% of global GHG emissions³, making it a main driver of climate change. Since 70% of the carbon footprint of food products occur at farm level, the largest opportunity to lower CO2 emissions is through working with farmers.

Farmers do not only contribute to climate change, they are also a victim of climate change. Average temperatures will increase, reducing the suitability for current coffee growing areas and changing rainfall patterns will increase droughts and landslides. The livelihoods of thousands of coffee farmers are at risk and supply of high quality coffee to consumers across the globe, and in Germany, is in peril. But there is a solution. Adopting agroforestry and climate smart agricultural practices, provide a win-win potential by reducing GHG emissions of food production, and enhancing farmers' resilience of farmers to climate change⁴. It converts coffee plantations into carbon sinks and through carbon emission trade these smallholder farmers can create well-needed income sources to adapt to climate change.

With the project "Kaffeebauern werden zu Klimaschutzhelden" we want to help 1,200 farmers in Colombia by switching them to climate smart agroforestry models and enable them to increase their income through the sales of carbon emissions. The project will be implemented in the Cauca region in Colombia, a region that was hit badly by the armed conflict and suffered from the violence by guerrilla, paramilitary groups and drug traffickers. 50% of the Cauca's coffee growing areas will be affected by climate change by 2050.

Solidaridad's mission is to support these farmers in their journey to become carbon sinks, make their plantations climate resilient and provide access to the international carbon markets. To become climate resilient we will introduce on 3,000 hectares better soil practices, improve water efficiency and plant more climate resilient coffee varieties. To reduce net carbon emissions will 30,000 plant shade trees and optimize fertilizer use. To enable access to the carbon markets, we will onboard the coffee farmers to the ACORN platform to trade carbon credits at low costs. This online carbon market place connect smallholder producers to international buyers.

For the training of farmers, Solidaridad will leverage its Climate Smart Agriculture (CO2Herencia) courses for both field technicians and producers. The blended learning modality called Agrolearning.org, which consists of mixing access to digital content and tools with face-to-face support through promoters, will enable us to reach a large number farmers, as well as to promote the improvement of their digital skills. The digital technical assistance will allow farmers to access information and advice tailored to their individual profile and according to the improvement plans based

³ <https://www.nature.com/articles/s43016-021-00225-9>

⁴ https://www.nature.com/articles/nclimate2437?error=cookies_not_supported&code=3efb0ebe-7dd2-4756-9057-8b3fb79c49f3
<https://www.pnas.org/content/114/44/11645>

on their producer assessment. The 1200 farmers will receive inputs (seedlings, equipment) to switch to agroforestry on their farm.

Solidaridad collects the needed data from farmers to onboard farmers to the ACORN platform. Most important, farm boundaries, land ownership, farm features and crops planted, location and several other personal information data points are collected to ensure farmers are fully identifiable and eligible for future payments. By following the EU GDPR rules, the farmer data is channeled to the ACORN platform. Based on the developed remote sensing algorithm for the specific landscape of operation, the technology of ACORN enables the determination of a carbon stock baseline for each farm boundary. Farmers can now start adopting climate smart practices and plant shade trees on their farms that qualify for the carbon removal unit (CRU) generation. With the adoption of climate smart practices, and the carbon baseline information, the remote sensing technology determines the biomass growth every year and quantifies the difference between the baseline carbon and the actual carbon. The difference is then converted to carbon removal units. The amount of CO₂ removal is quantified by at least two remote sensing parties, verified by ACORN and certified by Plan Vivo. On a recurring basis the amount of CO₂ removed is audited by an external auditing party on a sample base, also financed by ACORN. Each carbon removal unit receives a unique identification code to ensure that each CRU is used and sold once. The verified CRUs are offered to the voluntary carbon market, where the corporate sector can purchase them to offset their unavoidable emissions. After a successful sale, ACORN transfers 90% of the carbon price to the farmer - (at least 18 EUR per CRU).

Inclusiveness is central to Solidaridad's work with farmers. It crafts its interventions based on specific supply chain assessments (e.g. [Coffee in Colombia](#)) where the contribution, role, and challenges of women, young people, and other minority groups are analyzed. Further Our work ensures gender balance targets disadvantaged groups and crafts interventions to maximize participation of women and youth.

EXPECTED IMPACT:

In the targeted coffee growing region Cauca in Colombia farms have an average size of 2,5 hectares, providing space for up to 250 trees. Once these trees are planted, their growth will capture up to 12 tCO₂ every year and protect the farm from extreme weather events. On top of that farmers can absorb between 2 to 4] tn CO₂ eq annually through improved soil management. (Reference to German citizen carbon footprint: 9 tCO₂ <https://ourworldindata.org/co2/country/germany>)

This project will start with 1200 farmers in Cauca, holding more than 3000 ha of land, but with an overall scaling potential to approximately 30,000 coffee farmers and their families beyond the project boundaries with a total tCO₂ potential of XXX.

The selected 1200 smallholders will become effective guardians of trees and soils on their farm, ensuring the long term capture of CO₂ emissions. Including the families of the 1200 coffee farmers, the project will increase resilience and provide additional household income by 20%) for up to 6000 people in the Cauca region. At the same time their farm productivity will increase by 10%

Women, young people, and minority groups will be the main beneficiaries to adopt innovative practices and technologies. Through the establishment of the [School of Entrepreneurship for young farmers](#) (see agrolearning.com/jovenes) we will include the daughters and sons of coffee farmers so they can take over their parents' farms (supporting 500 youth). The women (2000 women in total) will be part of the Leadership for Life training programme that was developed by Solidaridad in Colombia.

WILL THE PROJECT WILL BE CONTINUED AFTER PROJECT PERIOD ENDS, AND HOW (500 CHARACTERS):

Yes

By selling the CO2 emissions through the ACORN platform we will generate an additional income of up 220 EUR per year. Additionally, through the application of climate smart farming we will be able to increase productivity of the coffee farms up to 10% in 2 years (within project duration) and 20% in 4 years (beyond product duration). The increased income will sustain the Local Community Promoters after the initial 2 years of the project. Producer organizations will be able to use the additional capacity installed through the digital tools and trainings. All devices and hardware will be owned by local producer organizations when the project ends.

NUMBER OF DIRECT BENEFICIARIES:

1200 (6000 indirect beneficiaries)

NUMBER OF DIRECTLY BENEFITING ANIMALS:

Not applicable

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APPLICANT INFORMATION

COMMENT ON THE ORGANIZATION (500 CHARACTERS):

Solidaridad is a network organization. It is has 40 offices across the globe. For this project it will work through its office located in Bogotá, Colombia. The Colombia office has a team of 60 people, operating in 5 different value chains and supporting over 50,000 farmers.

POSSIBLE COMMUNICATION MEASURES FOR THE PROJECT (PRESS RELEASE, FLYER, SIGNS, EVENTS, SOCIAL MEDIA; 255 CHARACTERS):

To inform our target audience about our project we will

1. create a project page on the website
2. send 2 special newsletter including project pictures
3. release posts on social media (LinkedIn & Facebook) on a regular basis
4. release the project report on the website