

Seminar Series: Regenerative Agriculture Q&A

Question	Targeted panelist	Answer
Do you have examples for numbers/facts on how farmers benefit from reg. agriculture? How do you measure the success of your approach?	Charlotte, LDC	Hi, our approach has been to yearly assess the adoption of practices promoted by farmers under our programs alongside the performance of survey that aims to assess the impacts of the adoption of the practices promoted. The impact surveys are conducted every 3 years. Some of the results presented today are coming from this type of survey done in collaboration with co-implementing partners and external consultants/local universities. We can consider today, especially for Indonesia and Ethiopia, that we have preliminary results of the implementation of regenAg practices such as Agroforestry/GAPs. So far, the surveys are demonstrating positive correlations between improvement of soil health and farms adopting agroforestry and GAPs practices. It is also confirmed by the farmers' positive perceptions of the impacts of the activities into their farms. Impact on income is expected and already have been observed with farmers in Indonesia and Vietnam. Further studies will have to confirm these results.
How different was the initial situation in the countries you worked in and how was your implementation different also? Did you notice specific regional challenges?	Charlotte, LDC	As mentioned during the presentation approach is very context specific. Contexts are specific to communities. Pre-liminary assessments are very important before developing interventions in specific locations and then, monitoring surveys help to better shape activities while being implemented to ensure impacts expected are achieved.
Pictures are not ideal to see the before and after on certain practices. In your experience, what is the most difficult practice	Charlotte, LDC	Indeed, pictures presented are about the results. I take note of your points for my next presentation ②. In general, I'd say that farmers are reluctant to adopt practices that do not lead to immediate benefits/short term economic benefits. Agroforestry in that sense -



to implement, the one that you find more resistance from previous farmers mindset?		via the planting of shade trees is complicated for farmers to adopt - when they are not familiar at all with shade benefits and management - as fruit trees take time to deliver fruit, for example. And, as sometimes the trees grow higher than coffee, farmers if not supported tend to remove these trees because they fear, for example, that there is competition for nutrients between coffee and fruit trees. Support on long term is very important to ensure mindset and behavior are changed.
One of the major problems for coffee exporting countries is the Maximum Residue Limit (MRLs). Is there any approach to address this issue? Also, how efficient is the mechanical weeding? How low is the carbon emission compared to pesticides use (understanding that mechanical weeding tools need some fuel too).	Charlotte, LDC	Yes, MRLs is obviously something that we take into account while working with farmers. RegenAg practices help to comply with MRLs as RegenAg promotes the reduction of usage of chemical fertilizers but also herbicides via manual/mechanical weeding. Impacts of mechanical weeding are – I assume - lower in terms of carbon emissions than the usage of herbicides for the following reasons: The herbicide production is energy intensive and emits CO2. In addition, their application impacts negatively the soil as well as the air and water resources present in and around a farm. I cannot share specific data but I assume that studies out there exist demonstrating what I explained above.
Do you have any data or modeling that shows the overall farm income improves over time? Or that shows the development / evolution of overall farm income as the farmers make the transition?	Charlotte, LDC	Detailed graphs can be found in Charlotte's presentation. The graphs in the presentation are preliminary results of what we think is a positive correlation between the adoption and application of GAPs/Agroforestry and increased profitability for coffee farmers by improvement in terms of productivity, soil health, biodiversity, carbon reduction. Additional surveys should be performed to put in evidence a link between these positive results and an increase in the farmers' income.



What are some key incentives you have discovered that ensure adoption and continued buy-in as farmers make the transition to more integrated, regenerative systems?	Charlotte, LDC	By fulfilling immediate needs via practices that deliver short term benefits to farmers we enable the overall transition. For example, cover crops or intercrops that can be market locally is usually seen as very positive for farmers and incentivize them to commit to participate into our program. The perspective of additional income generated immediately is important and enable us to start the journey with the farmers.
How did the project support the needs of labor and strategies implemented during the short term of implementation?		At LDC, we are working to build capacity of labor by providing knowledge that should lead to an increase in labor productivity but also we are thinking about the introduction of technologies/tools that will reduce the labor needs. At this stage, it is still very experimental but it is a major challenge that we need to tackle to make sure the transition is possible for farmers we support.
Have you applied in zero tillage mechanism in your project?	Charlotte, LDC	Not yet.
How do you plan to RSV program in 2027?	Charlotte, LDC	Do you mean LDC RS Program (LDC RSP)? Our Responsible Sourcing program targets that – at least – 80% of the total coffee purchased by LDC will responsibly either via certifications or via our own responsible sourcing program (RSP Core and Advanced).
What was the specific role of Syngenta in the project for Vietnam?	Charlotte, LDC	Syngenta has been a partner of LDC since 2016 in the Central Highlands of Vietnam to build capacity of coffee farmers to use safely and appropriately crop protection and synthetic fertilizers via training and the establishment of demonstration plots.
Do you have a sampling approach? What do you consider as representative sample?	Myrna, COHONDUCAFÉ FOUNDATION	If the question is referred to model farms; yes, we have model farms that implement regenerative agriculture.



Did you find it difficult to get farmers to agree with the necessary changes?	Myrna, COHONDUCAFÉ FOUNDATION	Yes, it can be difficult, but we support the farmers in their journey. The important part is that they also understand how the adoption of regenerative practices will improve their productivity and eventually their living conditions.
Can you say more about what types/forms of good agricultural practices can be claimed as scope 3 emissions under SBTi, for example, cook stoves, water management etc.?	Kelly, PUR	Cook stoves are a highly demanded measure, especially in Africa. However, to claim a reduction of scope 3 emissions under SBTi the emissions have to be linked to the company's footprint, which appears difficult in the case of cook stoves. Regenerative practices in connection with the on-farm footprint, such as water management or fertilizer management, 0 pesticides, however, can all be valued as reduction strategies in a company scope 3 target.
Countries like India, where the shade tree are already is a cultural practices, what kind of activities do you see that have potential in terms of RegenAg adoption, and helping farmers to go an step ahead from where they are currently?	Kelly, PUR	In her presentation, Kelly listed several regenerative practices that can be applied apart from agroforestry. Agroforestry is a key concept that comes to mind when thinking about regenerative agriculture in coffee landscapes, but RegenAg is not limited to agroforestry. In the case of India, other practices can be considered such as cover cropping, integrated pest management or composting. Additionally, the complexity of the agroforestry systems has to be assessed. Maybe intercropping is well applied but there are still needs for reforestation on the parcels' borders or next to riverbanks. Also, Kelly points out that it is important to include a variety of different tree species into an agroforestry system.
What's the definition of RegenAg and how is this differentiated from agroecology given the many overlaps?	Kelly, PUR	Kelly elaborated on the definition of RegenAg in her presentation pointing out that the concept is quite broad and can be understood in different nuances. Agroecology and RegenAg can be considered as synonyms, RegenAg being more commonly used in North America and in the business world vs. agroecology, the agronomic word commonly



		used by agronomists, scientists and farmers. In both cases, it is about sustainable farming practices targeting the maximization of ecosystem services delivered. RegenAg also has the component of sustainable livelihoods where agroecology is more focused on environmental benefits provided.
PUR project acts as a carbon project developer ?	Kelly, PUR	Most projects are designed to deliver carbon assets in the long term. In most cases, the company that is funding is the one also purchasing coffee from the area, this is what we call insetting. This being said, PUR is a carbon project implementor, but not a broker for carbon credits.
For agroforestry are there species of trees that are better than others? How do you best choose the trees?	Kelly, PUR	It is important to consider models with diversity of trees and mostly select the species depending on the famer's goals (fast growing shade trees, nitrogen-fixing, timber and fruit characteristics). In the project PUR conducts each farmer selects the trees species he/her prefers. While we usually manage a list of species with up to 30-40 different ones per country, for each farmer, PUR advises and encourages them to select at least 3-4 different species for his/her farm.
What other types of projects are being promoted that add value to agroforestry?	Kelly, PUR	Agroforestry and reforestation are the core expertise of PUR. Additional to the planting activity, it is necessary to conduct a variety of different community-benefit activities specifically targeted to empower farmers and communities and strengthen local capacity. We may need to work on the installation of tree nurseries, the development of supply-chains for co-products or awareness raising campaigns that all support the permanence and success of agroforestry projects.



Is planting over 100 trees per hectare considered normal for agroforestry/shade trees?	Kelly, PUR	The density of tree planting per hectare will depend on a variety of criteria assessed case by case in each farm/plot, e.g., existing shade before planting, sun exposure, altitude, variety of coffee planted, soil quality, farm management practices, slope, etc. There is no one size fits all approach.
		We have developed planting models which can reach 100 trees / hectare in intercropping in certain conditions. In many of our projects, there is a need to plant the boundary of the parcel as well, in these cases, the planting density can reach 150-200 trees/hectare as at least 100 trees would go on the borders.