COFFEE AGROFORESTRY AS A WIN-WIN SOLUTION IN PERU

Coffee is the second most popular drink globally and the most important agricultural commodity in Peru. The unpredictability of rainfall and temperatures resulting from climate change makes this crop highly vulnerable. If the world wants to continue enjoying its favourite hot beverage, adaptation action needs to happen now.

KEY FACTS

- Produced in the highland ecosystems on the eastern side of the Andes, primarily by smallholder farmers cultivating less than 5 hectares, more than 150,000 families in Peru currently rely on coffee for their income.
- Coffee is the main source of income for more than 30% of the population of the Peruvian Amazon, led by small producers who constitute 85% of this group.
- More than 425,000 hectares are cultivated with coffee (considering that a rugby pitch is just over 1 hectare in size!). In 2015 alone, almost 500 million kg's of green coffee were exported with a value of $888 million.
- In the next sixty years, up to 40% of the coffee-growing area in north-eastern Peru may no longer be suitable for coffee production.

Coffee is grown in hilly lands as good quality coffee requires cool temperatures. However, with increasing global temperatures, farmers grow coffee at increasingly higher altitudes. The movement of intensive coffee farming to higher elevations leads to deforestation, exacerbating rising temperatures and climate change. This vicious cycle of diminishing returns harms both smallholder farmers and the climate.

As a result of unpredictable rainfall and temperatures, fluctuating prices, and intensive coffee farming practices (for example, using chemical fertilisers and pesticides to maximise yields), many areas of conventionally farmed coffee have degraded and become unproductive.

The future of rural farmers, their crops, and ecosystems rely on swift adaptation action. Practical Action is working with rural communities to improve livelihoods by managing trees and land in coffee landscapes and diversifying to maintain, protect, and restore biodiversity in the ecosystem.

The primary technology Practical Action offers coffee-farming rural communities is the multi-strata agroforestry model. Simultaneously delivering climate change mitigation and adaptation for communities that need it the most to sustain their livelihoods, multi-strata agroforestry is a triple-win strategy: it helps smallholder farmers adapt to climate change and secure stable income by creating more than 200,000 rural livelihoods, supports the Peru government in achieving their emissions reduction goals, and finally, increases the share of coffee production and exports in the Peruvian GDP.

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CASE STUDY: GENARO IS DIVERSIFYING FOR SUCCESS

Santa Fe is an agricultural area of Peru. Most people who live here are coffee farmers. Genaro Alarcon Perez started his coffee farm 63 years ago. He struggled to keep his farm profitable enough to support his family and witnessed the devastating impact of deforestation.

However, Genaro was ambitious to improve his business while protecting the planet. A collaboration with Practical Action helped him do just that.

Genaro is now using an innovative farming method called layer farming. By planting five crops that grow at different heights together, Genaro has diversified his crop, boosted production, and has generated reliable income.

Half of Peru’s smallholder coffee farmers are living in poverty right now, but we are working with regional and national government in Peru to get this planet-friendly farming approach adopted into national policy. This means farmers like Genaro will be able to make farming profitable again, while protecting the amazing biodiversity around them.

“My greatest pride is the quality of my product. Thanks to the technical training programme provided by Practical Action, I’m making a bigger profit. Almost all my coffee has been of good quality, and I have had good returns even in difficult times.”

Multi-strata agroforestry has helped people in poor and remote farming communities increase the quality and productivity of their farming systems. Farmers can now improve their quality of life without migrating to cities, provide their children with better education, and pursue other business opportunities in agriculture through the diversification and greening of their farms.

Practical Action continues to promote diversification and influence public and private stakeholders to embrace this triple-win solution with local communities in the driving seat. To reduce vulnerability to climate change and build community-centred resilience, we are (1) working with rural communities, building on agroecology as the foundation and diversification of crops as the adaptive response, (2) producing evidence for policies to promote both the conservation of natural resources and livelihoods in rural communities, (3) sharing knowledge to ensure sustainability and replicability.

Transforming the coffee sector in Peru will help local farmers improve the wellbeing of their communities. Developed for and implemented by those who need it the most, multi-strata agroecology is a community-driven livelihood solution that tackles poverty, biodiversity, and delivers much-needed climate change adaptation and mitigation action.

About Practical Action

Practical Action is an international development organisation that puts ingenious ideas to work so people in poverty can change their world.

Big change starts small.

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References and Further Reading
