



Developing Carbon Credits to Finance Smallholder-Inclusive Supply Chains

Case information	
Action area:	Cross-cutting
Focus area:	Financing
Country:	India
Sector(s) involved:	Reforestation, Agroforestry (coffee, fruits and other tree species)
Timeframe:	2011-2020
Case summary:	<p>The Livelihoods Carbon Fund has invested in developing smallholder agroforestry systems in marginalized regions occupied by tribal minorities in the state of Andhra Pradesh, India, through the local NGO Naandi Foundation. The project is embedded in organic coffee production and marketing and serves to increase the resilience of the coffee production systems at landscape level.</p> <p>The main climate hazards identified in the region are an increased number of extreme weather events, including heat, storms, and flooding, resulting in livelihood loss. For local farmers, the most effective way to adapt was found to be reforestation of degraded areas in combination with crop diversification and higher value addition to already grown and new crops.</p> <p>The combination of the restoration activities and the commercial aspect of local farming is a best practice to generate additional income while applying ecosystem-based adaptation measures (in this case, mangrove reforestation). Impact investors use the climate benefits of restoration (carbon credit) to reinvest in commercial value chain development, making it an economically sustainable project.</p> <p>The project aligns with India's NDC mitigation and adaptation targets: It contributes to bringing 33% of India's area under forest cover, while engaging the private sector to spend at least 2% of their annual profits on corporate social responsibility, including environmental initiatives. Adaptation funding for the most vulnerable rural poor is another NDC priority captured by the project.</p>
Case description	
Background	<p>Livelihoods Venture started ten years ago with seed funding from Danone to establish the Livelihoods Carbon Fund together with Schneider Electric, Crédit Agricole S.A., Michelin, Hermès, SAP, Groupe Caisse des Dépôts, La Poste, Firmenich, Voyageurs du Monde, Mars Inc. and Veolia. Their common objective is to simultaneously tackle environmental degradation, climate change and rural poverty. They partner with local NGOs and pre-finance their technical assistance activities and inputs such as seedlings. The climate benefit monitoring system is very robust compared to mainstream development projects, since it is verified externally to be able to create carbon credits.</p> <p>In India, the Livelihoods Carbon Fund partnered with the local NGO Naandi Foundation. Naandi Foundation is one of the largest social sector organizations in India. Founded in 1998, Naandi implements solutions tackling education of girls, safe drinking water and sanitation, sustainable agriculture, skilling and employment for youth,</p>

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	<p>safe motherhood and early childhood development. With a team of 300 full time professionals and over 3,000 front line development workers, Naandi's approach is to listen to communities to better understand their needs and motivation and to make them equal partners in solving their problems. The Araku valley was chosen as a project site in order to address the needs of one of the most marginalized communities in India, the Adivasi tribes, and at the same time create a carbon benefit. The area in Andhra Pradesh lies at 1,200 meters above sea level and receives an average annual rainfall of 1,300 mm. It was severely deforested during the English settlements, causing erosion, soil degradation and poverty.</p> <p>On the impact investment spectrum, the Livelihoods Funds can be found on the extreme impact end. The investment is not planning to generate financial returns. The Livelihoods Fund is providing upfront financing to generate livelihood benefits for the local population. In return, the fund will receive certified carbon credits if carbon is sequestered. The credits are used by the fund investor to offset their emissions.</p> <p>The diagram illustrates the spectrum of impact investments, categorized into five main types:</p> <ul style="list-style-type: none"> Financial-only: Focuses on delivering competitive financial return. Responsible: Focuses on mitigating ESG risks. Sustainable: Focuses on pursuing ESG opportunities (or CSR policies). Impact-driven: Focuses on delivering measurable high-impact solutions. Impact-only: Focuses on positive screens and impact measurement. <p>Traditional investments are positioned at the left end of the spectrum, while Traditional grants are at the right end. Investments integration non-financial factors in investment analysis is shown as a central axis connecting the two extremes.</p>
Activities	<p>The Naandi foundation helped communities restore organic coffee production and participate in value chains. Most of the local health and nutrition issues of the Adivasi communities were linked to the fact that they did not have access to forests anymore, due to previous deforestation. The solution was to support these communities rebuild their forest. Naandi developed "the Araku Way", a holistic approach where farming is linked to education and community bonds. The NGO mainly focuses on land productivity, crop and organic pest management as well as market connection. With the support of the</p>

	<p>Livelihoods Carbon Fund, the Naandi foundation was able to scale up its activities and reach 100,000 people in 300 villages.</p> <p>Within the Livelihoods-Araku project, the communities themselves have planted 3 million fruit and timber trees to restore the degraded land. These act as a buffer around the remaining degraded natural forest, which is not supposed to be used any more. An additional 3 million coffee plants were planted for income generation.</p> <p>Grown in local tree nurseries, the saplings were distributed in the villages. Together with forest engineers, the communities decided which plots to replant and were involved at all project stages. Naandi trained 14,000 farmers on sustainable farming practices to enable them take good care of their trees and soil while preserving their fragile ecosystem. They learned to produce their own organic compost to and manage pests and diseases without chemical products.</p>
Institutions involved	<p>Investor: Livelihoods Carbon Funds Local implementer: Naandi Foundation Co-investor: Fonds Francais pour L'Environnement Mondial</p>
Cooperation with	Araku Coffee (their own coffee brand and marketing channel)
Finance	<p>The financial structure of the fund is independent of the participating companies' balance sheet and can therefore be considered as pre-competitive, purely impact oriented or corporate social responsibility. Projects are developed based on pre-financing from the fund and executed through technical service providers. Revenues to the fund are currently generated through carbon certificates in the voluntary market.</p> <p>This project is embedded in organic coffee production and marketing and serves to increase the resilience of the coffee production systems at the landscape level. Under the Araku Coffee brand, producers are connected through as few intermediaries as possible to high end consumers in Paris, France. This way the producers can capture a higher portion of value added within the supply chain.</p> <p>Ratio of grant and reimbursable financing: 100% grant</p>
Impact of activities	<p>The Adivasi tribes diversified their crop portfolio with 18 varieties of fruit trees per acre, increasing their food security and also their income with the sale of extra fruits. Shortly the communities will be able to produce 12,000 tons of mangoes per year for the local market, resulting from the 3 million fruit trees planted. Also, thanks to the 3 million coffee trees planted some years ago, the communities now produce a high quality certified organic coffee. Organized into "Small and Marginal Tribal Farmers' Cooperatives" they sell their coffee directly to consumers and the Araku Coffee store in Paris. Transformed into functional forests, the previously degraded lands of the Adivasi communities are now providing them with food and income.</p> <p>The restoration of 6,000 hectares of degraded lands also provides shelter and food for wildlife and particularly endemic birds. Moreover, the trees planted by the communities will sequester around 1 million tons of CO₂ over 20 years. The project will be monitored and independently verified during that time span to guarantee that it is delivering expected results for the environment and for the communities.</p>
Case learning:	
Why is it good practice	<p>The Livelihoods Funds are targeted corporate social responsibility funds, meaning that investments are focused around core business areas of the investing companies, in this case, relevant agricultural value chains. This helps to ensure top management buy-in and continuous investments into projects that are seen as essential rather than nice to have.</p> <p>The main intended outcomes are economic, social, and environmental benefits; climate change mitigation is regarded a co-benefit. Adaptation benefits are achieved but are not independently verified per se. The long term sustainability of the project is more likely due to the resilience and income benefits to the community and economic benefits to the investor. A second phase is currently under way (see further resources).</p> <p>The economic sustainability of projects is a core aspect and ensures continued implementation beyond donor resources. Capacity building for smallholders and linking</p>

	local production with global demand through a newly created value chain (in this case, boutique coffee brand Araku coffee) addresses the core concern of smallholders: increasing farming income.		
Success factors	<p>A strong local partner NGO with a long history in the project region is absolutely key and ensures that the project meets local demands voiced by various stakeholders.</p> <p>The diversification of farming into both cash crops for income and food crops for nutrition is a frequently cited best practice adaptation solution for smallholders. The direct connection to a high value supply chain ensures cash income, while the continued cultivation of food crops limits the dependency on volatile global commodity markets.</p> <p>The investor gains economic and reputational benefits from the project, as it represents an investment in a key value chain of global importance to the company.</p>		
Overcoming barriers/ challenges	<p>What were the main barriers / challenges to delivery?</p> <p>Information: Understanding the carbon economy and respective requirements from the investor and project implementer point of view.</p> <p>Institutional: Capacity to plan and implement a livelihoods project incl. a carbon financing mechanism.</p> <p>Financial: Pre-financing a high-risk project without collateral.</p>	<p>How were these barriers / challenges overcome?</p> <ul style="list-style-type: none"> - The investor contracted out the development of a carbon benefit monitoring system to a technical service provider that then trained local stakeholders in the relevant monitoring mechanisms. - Targeted technical assistance was delivered to support the local NGO in running a project that continuously succeeds at generating carbon credits. <p>Technical Assistance was provided by Livelihoods Venture and UNIQUE forestry and land use GmbH through a learning by doing approach and peer to peer learning from other Livelihoods projects.</p> <p>The selected local NGO had a long track record regarding their delivery capacity. Together with a highly dedicated local community determined to invest in-kind work and learning, the lack of financial securities could be overcome and the investor covered all upfront costs.</p>	
Lessons learned	<p>In the beginning, coffee was marginal and of poor quality in the project region. But farmers expressed interest in developing it as an income source together with Naandi and the Fund's support. Altogether 14,000 farmers were trained on composting, tree pruning, and shade trees plantation. Gradually, local farmers enthused over these farming practices and started focusing on quality. Naandi gathered farmers into "Small and Marginal Tribal Cooperatives", which today have more than 10,000 members.</p> <p>Very early in the process, significant efforts were made to connect Araku farmers to coffee markets, targeting premium segments to make their origin and unique story known. World-class coffee experts were invited regularly to rate the Araku coffee and reward the best farmers. Finally, the Araku Coffee brand was established with the first store in Paris.</p>		
How to replicate this practice	<p>The Livelihoods Funds raised overall 240 million EUR for this and other projects and is eager to invest in other projects with the following features: Project benefits marginalized communities; resilient production of crops (potentially interesting for invested companies); focus on potential economic and social benefits; strong locally trusted technical NGO to implement projects at scale (e.g. >5,000 hectares for coffee, fruit tree and mangrove planting activities).</p>		
Further information			
Contact for enquiries:	<p>David Hogg, Chief Agriculture Advisor at Naandi Foundation: david@naandi.org Naandi Foundation 502 Trendset Towers, Rd No 2 - Banjara Hills Hyderabad – 500034 India, mobile +91 8978616000, Phone: +91 40 2355 6491/2</p>		
Further key resources:	<p>Detailed technical project description from the carbon benefits point of view in the external verifier's database: http://www.vcsprojectdatabase.org/#/project_details/1328 Press release on the second phase of the project:</p>		

	http://www.livelihoods.eu/the-fruits-of-hope-the-livelihoods-araku-2-project/
Website(s):	An overview of the Livelihoods Funds and their activities: http://www.livelihoods.eu/lcf/ The local Indian NGO Naandi Foundation: http://www.naandi.org/ Website of the boutique coffee brand Araku Coffee: https://www.arakucoffee.com/
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