

# Costa Rica - Coffee of Costa Rica: Keeping Coffee Growers and Farming Families in Business

## Global NAMA Financing Summit

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## Introduction

Costa Rica is the first country in the world to take on the challenge of becoming carbon neutral, which it intends to do by the year 2021. This goal will be achieved, in part, through the implementation of proposed nationally appropriate mitigation actions (NAMAs) in different subsectors. Costa Rica's agricultural sector accounts for nearly 40% of national GHG emissions (4.6 M Ton CO<sub>2</sub>e/year), of which 10% comes from coffee production,<sup>1</sup> representing an enormous opportunity to contribute to the country's mitigation goals. Costa Rica's Coffee NAMA will also contribute to maintaining the relevance of coffee cultivation in the country, which has been at the heart of the country's identity since 1830 but is now being threatened by climate change and other factors. The subsector affects the livelihoods of 50,000 farming families (400,000 direct and indirect beneficiaries), and involves an area of approximately 93,000 hectares.

The coffee subsector stands out because of its solid institutional setting, high degree of organization, functional collaboration of stakeholders (private, public and social society), strong relationship between implementing agencies (e.g., *Instituto de Café de Costa Rica*, ICAFE) and growers' families, and recent successes in carbon market integration (e.g., launching of the world's first "carbon neutral coffee," a NAMA in progress, and a local carbon-neutral coffee roaster/exporter). The political-institutional framework is provided by a National Development Plan, a National Strategy on Climate Change, a Carbon-Neutral Country Program, and a specific framework of State Policy for Climate Change in Agriculture and Food. A Coffee NAMA Steering Committee, "*Mesa NAMA – Café*,"<sup>2</sup> established in 2012 under the umbrella of the Agriculture and Livestock Ministry of Costa Rica, plays a key role in championing the NAMA's readiness, by facilitating coordination and strengthening collaboration of relevant actors.

Given these strengths, the vision of the subsector serving as a "NAMA laboratory" for other sectors in the country, and the potential for scaling up the effort to other Latin American coffee-growing countries, the Costa Rican Coffee NAMA, the first around the World and one of the few NAMA's in Agriculture, is being proposed for international support for implementation.

## NAMA Description

The objective of the Coffee NAMA is to deliver a smart combination of public and market incentives for adoption of measures aimed at increasing carbon dioxide (CO<sub>2</sub>) sinks and reducing emissions of nitrous oxide (N<sub>2</sub>O) and methane (CH<sub>4</sub>) for the entire Costa Rican coffee sector. Combined with climate adaptation practices, the NAMA would also yield important benefits such as increased eco-competitiveness of Costa Rica's coffee and improved resilience of farming systems.

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<sup>1</sup>Coffee plantation side, GHG National Inventory, 2005.

<sup>2</sup> Representing: Agriculture and Livestock Ministry of Costa Rica (MAG), Climate Change Department of the Environment and Energy Ministry (MINAE), Fundecooperación para el Desarrollo Sostenible and the Institute of the Costa Rican Coffee (ICAFE).

The NAMA will address the production of coffee at two levels: at coffee farms and at coffee mills. Changes at the farm level will aim primarily to improve adoption rates of innovative mitigation practices and proven adaptation techniques that reduce N<sub>2</sub>O emissions (increasing efficiency in nitrogenated fertilizer use and increasing sinks through coffee shading and augmented farm-tree growing). The main changes at the mill level will aim to introduce technologies and techniques that reduce methane emissions from wastewater treatment and pulp



(using coffee byproduct (biomass) as a fuel source in mills) and improve mill efficiency.

The main barriers to adoption of these mitigation actions are: a) policy barriers: low incentives to capital investment and process innovation; b) technology and capacity barriers: weak access to GHG-efficient fertilizing technology, weak or costly equipment for GHG- monitoring, risk adversity of growers and millers, knowledge gaps of extension professionals; c) financial barriers: low and late return of investment of GHG-efficient fertilizing and milling technologies, severe cash-flow problems of coffee growers and millers; and d) market barriers: insufficient access to market incentives for adopting climate adaptation measures (like shade growing), weak market incentives for GHG-efficient fertilizers, high and uncertain transaction and MRV costs.

The total reduction potential in growing and milling alone is approx. 30,000 Ton CO<sub>2</sub>e/year, meanwhile carbon sink potential is approximately 90,000 Ton CO<sub>2</sub>e/year (120,000 Ton CO<sub>2</sub>e/year<sup>3</sup>, near 25% of the emissions total national GHG emissions of coffee growing section in the GHG Inventory until 2024 at full implementation). The expected aggregate GHG emission reductions over 20 years will be 1,850,000 Ton CO<sub>2</sub>e. Significant environmental and socio-economic co-benefits are expected, including: improved wastewater management, decreased energy demand of external sources at mills (using coffee biomass), increased soil and biodiversity conservation, cost savings, income diversification, and investment in technology, production capacity and others.

Proposed policy changes will focus on an intelligent mix of regulations and incentives that concede preferential advice and microfinance for innovative farmers and mills. Some of them are: a) technical level: Best products from the agrochemical industry, stimulate to build local capacity for design preferred technologies, increase coverage of the extension services to support the whole coffee sector in transformational process and construction of innovative transformational technologies, facilitate a self-sustained MRV-system, build programs to create professionals for special technical advice and technology transfer support b) financial level: adequate loans and guarantee valuation, available funds for cash-flow bottlenecks (finance extra cost for new techniques and coffee mill transformation), financial readiness for specific transformations in the National Bank System, c) Market level: contribute development of "NAMA coffee" market and improve access to relevant market information.

The financial mechanism envisaged is a national NAMA Coffee Fund embedded into the multi-purpose *Fondo Nacional NAMA de Carbono*, which collects from a proposed national carbon tax (*Canon de Carbono*) and other public budgets<sup>4</sup> and attracts multilateral, bilateral and national money from sources

<sup>3</sup> Near 25% of the emissions total national GHG emissions of coffee growing section in the GHG Inventory.

<sup>4</sup> Agriculture and Livestock Ministry is expecting set up National Budget in 2014, amounts which are still to be defined.

like carbon markets. The objective of the fund is to attract, capture, collect and capitalize all possible revenues (actual and future, local and international) attachable to mitigation actions, in order to stimulate evolution of the coffee sector into a carbon efficient value chain. This includes even small revenues from coffee growers and millers, in order to improve ownership for the process and award them endowment for representation in the governing body of the fund. The fund would in turn emit carbon reductions and other environmental services, which shall be tradable, once the market reaches maturity. The fund would have a governance structure comprised of an intergovernmental panel (ministries have still to be nominated), a multi-stakeholder committee (evolved from the “Mesa NAMA Café”) and a technical advisory board with national and international partners. These bodies will propose and implement new and innovative policies and financial mechanisms required for the transformational process. After a transitional budget financing through the contributions to the fund, the operational costs of the governing body should be granted by retransmissions. An Executing Agency will provide technical services and follow up to the financial resources demanded for the farmers and coffee mills.

The “Mesa NAMA – Café” will serve on the advisory board of this NAMA Fund. Private investments of growers and millers are partly granted by the *National Development Banking System* and other financial actors. The national and international coffee industry, worried about future supply of premium coffee, should be a powerful contributing partner to the fund. The aim of the fund is to capitalize all mitigation and adaptation potential, offering it on the “carbon futures market” of Costa Rican coffee and refinancing part of the transformation costs.

The NAMA Fund will support: a) *institution building*: financial mechanism and mobilization, building a coordination architecture; b) *capacity building*: research and innovation, extension services, technology adoption, promotion of management models, niche market access (for “Coffee Types NAMA”); c) *evidence building*: establishing a smart MRV- system; d) *capital building*: investments in (NAMA-type) fertilizing technology, renovation of mills, increasing of MRV- equipment.

## Support requested

Costa Rica is seeking international support in the amount of USD 20,000,000 from 2014 to 2023 (equivalent to 40USD/family/year) for this NAMA. It is proposed that funds be received in installments based on achievement of performance milestones distributed along 3 phases. Total expected funding support provided by the host country will be USD 3,000,000 over 10 years. Coffee farmers and coffee mills will contribute with their labor and take the risks of adopting innovations. The *National Development Banking System*, other financial actors, and further financial incentives to be established by ICAFE will partly grant and support these private contributions. Estimated additional private sector and/or development bank financing mobilized by the NAMA will be around USD 8,500,000 over 10 years.

The public extension system makes available logistics and qualified personnel for the adoption process on farms and mills, including part of the MRV activities. FONAFIFO<sup>5</sup> will be contributing towards coffee-shading and reforestation with seedlings, looking for funding and advising on payment for environmental services. MAG will be issuing awards for environmental services delivered by the “best practices and performance”. Presently the German *Gesellschaft für Internationale Zusammenarbeit*, GIZ

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<sup>5</sup> Forest Finance National Fund

funded by BMU/ICI – International Climate Fund by means of advising development of NAMA- proposals and as potential donor the Multilateral Investment Fund of the Interamerican Development Bank, FOMIN/BID<sup>6</sup> will continue to support the evolution of the NAMA in the Costa Rican coffee sector through a pilot with 6 coffee cooperatives with around 3,000 farmers.

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<sup>6</sup> By means of funding the mitigation pilot project of “Promoting low carbon growth in the coffee growing sector of Costa Rica)  
NAMA Proposal Executive Summaries – Prepared for the Global NAMA Financing Summit