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LOWERING EMISSIONS IN ASIA'S FORESTS

POLICY BRIEF

Opportunities for AFOLU Emissions Reductions by the Private Sector in Lam Dong Province, Vietnam

Scoping Study Main Findings

- Greenhouse gas (GHG) emissions reductions by private sector actors in Lam Dong are currently achieved primarily through implementation of sustainable production practices to meet agricultural certification standards in the coffee, cocoa and tea value chains.
- The most realistic short-term opportunities for expanding on these efforts include increasing the number of hectares of the cash crops under sustainability certification and modifying the implementation of some sustainable production practices to enhance the amount of emissions reduced.
- Efforts to improve the enabling environment to enhance private sector participation in emissions reduction in the province over the longer term should aim to overcome the existing low technical, information and other capacity levels, in addition to the financial constraints currently hindering low emissions investment.

Background

The agriculture, forestry and other land use (AFOLU) sector is responsible for close to a quarter of global GHG emissions. In Vietnam, the proportion of emissions from the AFOLU sector is even higher at 50%. Despite its importance, the AFOLU sector has traditionally only attracted a small amount of private climate finance. Sustainably financing AFOLU emissions reductions will require much greater mobilization of private resources. In aiming to build on its contribution to the development of the Lam Dong Provincial REDD+ Action Plan (PRAP), the USAID Lowering Emissions in Asia's Forests (USAID LEAF) program conducted a scoping study to identify opportunities for private sector involvement in reducing emissions from AFOLU value chains in the province.

Credit: Lam Vien Coffee Cooperative/Rabobank http://bit.ly/1VACt4C

Existing private sector AFOLU emissions reduction efforts

Most private sector GHG emissions reductions from the AFOLU sector in Lam Dong are being achieved by producers operating in the value chains of coffee, and, to a lesser extent, tea and cocoa, through their implementation of sustainable production practices to meet different certification standards. Agricultural sustainability standards are not specifically aimed at maximizing emissions reductions. However, many of the activities encouraged by the main certification schemes do result in reduced emissions. These include:

- Prohibiting forest clearing for crop production
- Sequestering carbon in trees maintained in and around farms
- Employing practices that reduce soil carbon loss
- Proper use of organic and inorganic inputs
- More carbon friendly energy use in post-harvest processing

While producers are primarily attracted by the potentially higher prices for their commodities and access to stronger markets that certification can bring, there are additional economic, social and environmental benefits, which are equally, if not more, significant and ensure a positive net result for farmers. These benefits include:

- Increase on-farm productivity and efficiency
- Reduced production costs, such as for agrochemicals due to less plagues and diseases
- Enhanced social benefits, such as better organization on and between farms
- Generation of greater non-use environmental values, including improved biodiversity and landscape beauty

Potential short-term options for furthering private sector's AFOLU emissions reduction

Further increasing the number of hectares of coffee, cocoa and tea under certification in Lam Dong probably represents the best way to enhance private contributions to AFOLU GHG emissions reduction in the province in the short term. The implementation of some of these sustainable production practices could potentially be modified to enhance the amount of emissions reduced. However, producers would have to be incentivized by demonstration showing that such modification would result in additional benefits, such as lower production costs or increased revenues from the sale of additional products. The costs and benefits of two high potential opportunities for modifying production systems to further reduce emissions in Lam Dong province are qualitatively analyzed in the table below.

GHG emissions reduction activity	Cost-benefit analysis
Enhancing sequestration and reducing GHG emissions via soil carbon loss through the use of other industrial trees, with higher carbon storage and economic potential, as shade trees and wind breaks on plantations.	• Increasing the number and/or volume of shade trees on plantations would result in enhanced crop productivity and greater carbon sequestration, while the use of trees to form wind breaks would also limit erosion and soil carbon loss. • Shade trees and trees for wind breaks that also provide direct monetary benefits and sequester more carbon over the established crop may remove less GHG than the use of native forest species; however, they are more likely to be adopted by farmers, especially if the economic gains are significant. • Possible shade tree/wind break options in this regard could include intercropping with macadamia, acacia and even possibly large, high value fruit trees, such as durian.
Using lower emitting crop waste as a fuel in dry processing, and using the residue from processing, particularly wet, as a fertilizer instead of higher GHG releasing agrochemicals.	• Use of solar drying could be increased; however, those already using machines in the dry processing of harvested crops could be put off by likely losses in productivity. • A better option would be to switch to low cost, lower emissions fuel alternatives, such as coffee husks, instead of coal or firewood, which has been directly linked to forest degradation in Lam Dong. • While not currently used significantly in the province, wet processing produces a residue that could replace higher emitting synthetic fertilizers on plantations, instead of potentially ending up in waterways where it would release additional GHG.

These two options would be relatively easy to implement, as they are not a huge technical advancement over what certified producers are already doing to meet current sustainability standards. Furthermore, the existing networks aimed at helping farmers achieve certification standards could be used to gain access to already certified farmers who might be interested in modifying their practices towards lowering greater emissions.

Recommendations for enhancing private contributions to AFOLU emissions reductions over the longer term

Over the long term, other efforts could also be made to improve the enabling environment to enhance private sector participation in GHG emissions reduction from the AFOLU sector in Lam Dong. The main potential barriers identified are generally related to the risk-reward relationship of investing in lowering emissions. Financial constraints could be loosened through the provision of tax incentives, favorable credit or alternative forms of support.

The existing low technical, information and other capacity levels represent additional stumbling blocks. These could be removed through the development of a fund to mobilize financial and technical resources for use in training and education, in addition to the establishment or strengthening of existing knowledge and awareness raising platforms for overcoming information barriers encountered in each value chain.

Finally, with the exception of coffee stakeholders through the Vietnam Coffee Coordination Board (VCCB), most private sector actors currently lack avenues for participation in the decision-making and/or policy development processes of their respective value chains. The creation of bodies similar to the VCCB for other sectors would be beneficial by giving private actors a say in the development of their industries, including with regards to lowering emissions and coordinating with international corporations wishing to drive emissions reductions through their value chains.

The full report is available at: http://www.leafasia.org/library/opportunities-afolu-emissions-reductions-lam-dong

For more information contact:

Jeremy Broadhead, PhD
Senior Forestry and Land Use Policy Advisor
Tel: +66 (0) 2 631 1259
Email: j.broadhead@climatefocus.com

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