

SUSTAINABLE DEVELOPMENT OF BIOFUELS IN HONDURAS

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Country: Honduras

Sector: Biofuels

CHALLENGE

With the current energy crisis, African Palm Oil is a hearty raw material for biofuel production, and if sustainably managed, can offer increased jobs and income among poor populations while promoting alternative energy. SNV's focus on natural resource conservation, through the Agriculture Programme in the Mesoamerican Reef (MAR) region, seeks to establish collaboration and partnerships from grassroots up to the government level in the development of sustainable African oil palm production among other crops, through the implementation of voluntary Better Management Practices¹ (BMPs) in the region.

Even though WWF in Central America does not support the expansion of oil palm for the sole purpose of biofuels production, the initiative targets established oil palm plantations to improve agricultural practices, reducing their impact on the environment. WWF believes that conservation priorities can be met with sound land-use planning (i.e. taking into account forest landscapes, catchments areas and habitats) and better practices on existing crops in the region. WWF is also promoting CO₂ sequestration and renewable energy sources through the Climate Change programme, with the goal of developing mitigation and adaptation strategies for global climate change.

SNV and WWF can leverage their capacity and influence to mobilise investors, policy makers, the corporate sector, communities, civil society organisations and consumers in support of these sustainable practices. SNV and WWF are jointly in contact with important stakeholders such as the Honduran government (Ministry of the Presidency), private companies focused on sustainable business, African oil palm producers' organisations and palm oil recovery plants, in order to promote BMPs, CP and effective implementation of the CDM.

OBJECTIVE

Create jobs and income opportunities based on sustainable resources, efficient production and climate change mitigation (African Palm value chain) for the 30 cooperatives and firms containing 600 members in the Honduran biofuels sector. Good knowledge management and communication with SERNA will enable learning development and the dissemination of the project's findings.

Hondupalma has been working in the region since 1985, and was selected as a pilot project because of SNV's primary focus on employment and income generation. This focus supports government initiatives to expand African oil palm plantations, but also focuses on sustainable and inclusive practices addressing environmental and social implications. SNV is involved in capacity building services in the biofuels sector (mainly African oil palm and *Jatropha*) through the promotion of public private partnerships for spatial planning practices in relation to feed stocks production and expansion, including business promotion for value chain development and the national biofuels and cleaner production policy development.

METHOD

- On-site analysis of oil extraction plant to establish recommendations for the implementation of Cleaner Production (CP)
- Advice and technical assistance in developing a business model that shows CP and the economic and social benefits of Clean Development Mechanisms (CDMs)
- Financial resource intermediation for CP and CDM implementation
- Knowledge management through the systematisation of the project's learning process in order to replicate experience
- Advocacy with relevant public and private players and local service providers concerning project's aims
- Building of SERNA (the Secretariat for National Resources and the Environment) capacities around issue of CDM

¹ The focus of WWF's BMP approach in African oil palm is the production of the crop (plantation) and the improvement of current practices in African oil palm production.

METHOD

- HONDUPALMA commitment to implement measures in the plant, definition of its relationship with SERNA, business model adopted and identification of the company as company in Honduras to sign CP Voluntary Agreement
- Approval of UNDP biofuels initiatives, achieved by SNV and SERNA
- Two workshops held for project systematisation and lessons learned
- HONDUPALMA was publicised through a Cleaner Production event held in San Pedro Sula, and was presented as a best-practice example to various entrepreneurs interested in duplicating this strategy.

IMPACT

After one year:

- Employment and Income / income-generation: Reduction of health risks by reduced chemical exposure; need for extra labour (0.5 jobs/ha/yr) on palm plantations: creation of 70 jobs for the conversion of organic and hazardous waste.
- CP application and development: Strengthening of policy-forming and directive-issuing capacities of SERNA to encourage better practices in the sector

After two years:

- Employment and Income: Net economic benefit for HONDUPALMA and beneficiaries from carbon credit sale and electricity sale; contribution to country's energy needs through electricity sale; temporary employment during plant construction.
- Environment: Reduced use of fossil fuels and thus lower costs for fuel imports; reduction of greenhouse gases, improved air quality
- Policy for application and development: HONDUPALMA and SERNA actively promote CP and GAP

After three years:

- Employment and Income: 15% increase in net income for 600 beneficiaries; income from sale of transformed organic waste; 50% cut in use of fertilisers and chemicals (meaning 50% fewer in surrounding environment); savings of 5% in energy costs (35% when biodiesel plant is functioning); savings of 10% in water from the extraction plant; 15% in agro-chemicals; savings in raw material recovery; 5-10% cut in production costs owing to CP
- Environment: 10% less water consumption, 10% less energy consumption, 25% reduction in hazardous residues; organic waste from the process will be reduced by 30%, while organic waste from sludge will also be reduced by 30%

LESSON LEARNED

Knowledge management: While results will be visible after first year, an ongoing process will improve conclusions from the third year, including process systematisation and identification of better practice; and dissemination of lessons learned among small farmers, palm and oil plants and plantations, businesspeople in the industry and government entities.

"The work done by SNV has the expected quality and the members of HONDUPALMA feel that the process is ours."
Juan Ángel Suazo, General Manager HONDUPALMA

"Thanks to SNV, we have received support in clean development mechanisms and knowledge about cleaner production."
Marco Tulio Colindres, CP and CDM Project Coordinator for HONDUPALMA