SUSTAINABILITY INITIATIVES



COCOA NECT.

The ProcarBOOH initiative, Ivory Coast

REGIONS: TAÏ, SOUBRE, GAGNOA, ADZOPE FARMERS: 10,000 STARTED: 2016 CERTIFICATES: UTZ CERTIFIED, RAINFOREST

Alliance, Gold Standard

PARTNERS: IVORIAN REDD+ SECRETARY (CN-REDD+), THE IVORIAN ALLIANCE FOR IMPROVED COOK STOVES (CIACC), THE IVORIAN AGRICULTURE AND RESEARCH FUND (FIRCA), SOCIETÉ DE COMMERCIALISATION DE CAFÉ ET CACAO (S3C), MY CLIMATE.

Biomass is the main fuel resource used for cooking in Ivory Coast, providing 73% of the country's increasing energy demands. Smallholder cocoa farmers depend almost entirely on firewood and to a lesser extent on charcoal.

The excessive use of firewood and charcoal by farmers brings with it some social and health issues. Firewood collection is time intensive and child labour is commonly used. Girls from the age of 7 to 12 years carry up to 15 kg of wood on their head for several kilometres. The wood is used for the traditional three-stone open fires where stews simmer for hours. These fireplaces are generally placed in smaller huts to provide shelter from



the rain, resulting in thick blankets of smoke indoors. This Household Air Pollution (HAP) is a big health risk, as it causes respiratory infections. HAP contributes to the premature death of 22,000 lvorians per year and is the third major cause of death for children below the age of five.

Another growing concern is the impact of energy demand on deforestation. Ivory Coast's forest cover has decreased from 12 million hectares in 1960 to 2.5 million hectares today. Although firewood collection may well take place after agricultural land clearance rather than directly driving deforestation, both are closely linked. Growing energy demand pushes up local prices of charcoal and firewood and increases the exploitation of protected forests. In many villages, local firewood and charcoal prices have already doubled over the past five years. Unfortunately, a shift to alternative resources such as gas and electricity is still a long way off due to the huge price gap.

In response to this need, Cocoanect launched the Procarbooh initiative (Booh means forest in the local Baoulé language), which aims to boost more sustainable energy use by introducing Improved Cookstoves (ICS) to farmers and their families.



During the pilot phase of this initiative 1,740 surveys were conducted to understand the daily cooking needs, and different stove models were distributed for testing.

The baseline study showed that on average, 346 kg of firewood and 59 kg of charcoal was used per month per household.

A small majority (51%) collects the firewood themselves, 49% buys the firewood costing an average of €13 a month. The survey also revealed the strain that the firewood collection puts on deforestation and forest degradation; 36% of the wood is cut in the forest, 20% comes from forest torn down for new agricultural plantations, 23% is dead wood collected from the forest and 21% comes from maintenance on agricultural plantations.

During the testing phase, 488 respondents tested 12 different stove models. These stoves, manufactured by producers and artisan groups from Burkina Faso and lvory Coast, differ in ease of use, efficiency, and size. Although the fuel efficiency differs between stoves,

on average the respondents reported a saving of 60% on firewood, and 40% on charcoal. The reported

advantages, in addition to fuel saving, were the speed of cooking and health benefits from reduced smoke levels.

Respondents indicated that their preference for a certain stove was not only driven by the efficiency of the stove, but also dependent on the type of dish cooked (for example a simple pot of rice versus a large cassava stew which needs hours of slow simmering). This indicates the need for multiple types of stoves in one household.

While piloting different cookstoves, we learned there was a clear need for more information on the benefits of cooking on the ICS. None of the households interviewed in the western region were aware that these stoves were available. We will continue to work with cooperatives to inform people about the benefits of fuel efficiency. Cost saving is a clear benefit to those buying their firewood, with a return on investment after about four months. For those collecting their firewood, the benefits of time saving, smoke reduction and forest protection should be stressed.

We will start distribution as soon as we have finalised all the lessons learned from the pilot. Our aim is to distribute 7,500 cookstoves in two years, by selling them in local stores and through our farmer cooperatives using certification premiums.

As part of the initiative, we will also generate carbon credits from reduced CO2 emissions, in collaboration with the REDD+ secretary, the Ivorian Alliance of Improved Cook Stoves (CIACC), and the My Climate Foundation. Finally, we will support local cookstove manufacturers, such as GreenKer, an ICS production company based in Abidjan. We provided them with a loan to increase their stove production to 600 units per month.



Key-Impacts

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INCOME

Sav hoi	/e up to \$30 usehold.	per month	n on fuel	costs per

CHILDREN

Less child labour involvement in firewood collections.

CLIMATE

10,000 ICS save up to 20.000 tonnes of carbon emissions per year.





COCOA Nect.

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