

## **COOKING WITH CORN COBS IN SAIPINA, BOLIVIA**

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In March of this year GTZ PROAGRO ENERGIA hosted an international seminar related to rocket stoves and solar cookers, during which they launched a campaign to achieve 100,000 smoke free homes in Bolivia by 2010. To my knowledge this is the first time the “big boys” like GTZ have taken an interest in contributing solutions to the IAP and deforestation problem in Bolivia. Until now, it’s been tough going.

Bernhard Zylma’s (principal assessor) vision is to achieve this goal through partnerships and the synergy of getting many actors “on board”. To his credit and that of the fine team he has established, the Bolivian government has taken interest and 3 ministries (Electricity and Alternative Energies, Health and Education) have committed to help spread the word and to take part in the campaign.

One of the components of this program is a testing program administered by the University Mayor of San Simon in Cochabamba. Their contract with GTZ includes individual laboratory tests for each stove model that is participating in the program, followed with field tests to establish if the stoves in actual use perform the same as the stove manufacturers claim.

CEDESOL’s 2 burner rocket stove was chosen to be tested first and as a consultant to the project, David Whitfield was required to accompany the testing team to one of CEDESOL’s stove dissemination areas and help them find stove users willing to let us “borrow” their stove all day. This was an exciting opportunity to see how the “clients” had installed their stove and receive feedback on the stove’s performance.

One thing different about CEDESOL’s stove program is that the stoves are delivered partially assembled and in participative training sessions the stove purchaser learns how to assemble, install, use and maintain their stove. They must then take their stove home, make or find a base for it, assemble it, fill it with ashes as insulation, run the chimney through the roof or out the back wall and change their fuel habits from using big chunks of wood to small sticks or split the wood into small pieces so that several fit into the combustion chamber.

We were going to see it all that really could work.

Saipina is located about 1346 meters above sea level, a little more than 1200 meters below Cochabamba. Usually the climate is hot but the day after arriving a southern wind brought cold air in from Antarctica and everyone had to find some warm cloths.



Saipina Valley

The trip from Cochabamba takes between 6 to 8 hours depending on the climate and fog that can be encountered in some parts of the trip.

Carlos, the GTZ chauffer really did a great job of getting us there quickly and safely.

Right after arriving we went to look for candidates for the series of test we would be performing.



In a small town called San Rafael, right out side of Saipina, a city counsel woman guided us to her house and it was emotional to drive down a road and see CEDESOL stove chimneys on all sides!

One of the high lights was finding a stove so shiny that it was difficult to believe the stove had been used. It even looked better than when it was delivered! Doña Corina Montañó assured us that she used her stove for every meal and in fact it was so clean and shiny because she just loved her stove so much!



Another exciting moment was walking into a kitchen and finding a stove in operation on a beautifully made cane pole and mud base, using corncobs to cook with. I asked Doña Veraranda if she had any problems with her stove. After a lot of urging she said the only thing negative she could think of was that if you put a big pot on it (30 to 50 liters) it took a while to boil. She said it never smokes not even with corncobs as fuel.



She normally cooks for a family of 4.

Marlow is the Bolivian word for corncob.

When you check out the video notice how the pot is boiling but no smoke is coming out from around the pot even though it is significantly smaller than the hole the pot sits in over the combustion chamber.

Test results will be published soon.