Travel Report

Visit to the project on gas wood stoves in India, February 2014

So far, I've been fortunate enough to visit, support, prepare for, or assist with the verification of cookstoves projects in Nigeria (including verification), Rwanda and Lesotho. In February 2014, I traveled to India for the first time to visit our wood gas stove project. Before it started, I was very curious and excited. Moulindu, our local partner, was planning to visit 15 stove users, interview them, and run an efficiency test on each stove. In addition to it, I visited the stove factory in Chennai and the related research institutes.

In sum, I can only say what I said during the visit: I am impressed! We found happy stove users, something that I only knew from experiences with the Save80 stove. Additionally, we have a well-organized project partner, Sapient, who has made an important contribution to the success of the project, especially in the construction of the infrastructure for collecting biochar. With the income from the biochar sale and the savings in wood consumption, the stoves were amortized within just 2 months.

Background of our wood gas stove project

In India, up to now 3000 wood gas stoves have been sold at a subsidized price through climate protection contributions. The stoves are operated with wood waste. They are remnants of mango wood, which are otherwise used for the production of tool handles. The wood waste has the same price for the end customer as other wood, but is delivered tailored. Therefore, there is a great interest to switch to wood waste, which additionally protects forests.
The special feature of the wood gas cookers is that they not only save about 50% wood compared to the traditional clay oven, but that they only have to be filled once and no wood needs to be refilled.

The new stove relieves the stove users a lot. The following aspects are specially appreciated by the users: There is no smoke, the cooker saves wood, the resulting biochar is bought back, and the stoves looks good and users have more time to do other things while the stove is cooking.

By collecting the biochar there is also a closer contact with the stove users. Stoves that are not accepted in the first few days will be taken back and distributed to other interested users. This results in a usage rate of almost 100%. Through the interviews, I was able to gain many other impressions besides the stoves. The first stove user was Hausmann and one of his hobbies was cockfighting. He introduce this hobby to us directly.

Later, we did an efficiency test in a household where the cow was still in the kitchen. Many young women in their saris stood around us and watched us giggling and seemed to be interested in what we were doing.
Very impressive was the team spirit. Together, the employees set up a small fund to help each other. The sale of the coal will also create a fund for scholarships for children from poor households. The team spirit was also clear when we tried to run the stove with rice straw. After a few failed attempts, the employees became more and more motivated. At some point, an employee came up with the idea to use a folded grater for the air supply. It actually worked and it even had a blue flame - like a gas stove. We are now working on the further development of this. The use of alternative fuels, such as "cow dung sticks", is also very exciting. These also work surprisingly well in the TLUD stove.

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