

# *Teaching on the use of the cooker*

## HOW TO USE THE COOKER

STEPS OF THE INSTRUCTIONS - Created by Mohamed Safieddine de OCÉANIUM (Dakar, Sénégal)

The cooker will contribute to improve the quality of life of women and their families: in particular, they will save money if they buy the wood, or they will save the time and efforts of long walks in the bush to gather wood, always more scarce and further. In addition, the cooker allows to protect environment.

## ADAVANTAGES OF THE COOKER

1. Wood saving: 3 to 4 time more efficient than traditional cooker.
2. Fast cooking: depending on draught (how good the fire is), cooking can be 3 to 4 time faster than traditional cooker. For example, what is traditionally prepared in 2 hours, will be cooked in 30-40 minutes.
3. Clean and safe: the ashes do not spread as they are contained inside the cooker; likewise, the fire stays inside the cooker.
4. Better for health: because the wood is fully burnt, there is no emission of unburnt gaz; the cooker does not emit carbon monoxide. We need to mention however that the cooker should be used outside only as there is still emission of carbon dioxyde CO<sub>2</sub>.
5. Easy to repair: as the cooker is made from 4 different and separate parts, if one is showing damages, it is possible to change or repair it, keeping the same dimensions, without having to change the whole cooker.
6. In addition: the cooker helps to preserve environment from intensive wood cutting and de-forestation and reduce wood shores for women.

For demonstration, you need to have a sieve and ashes. If there is no ashes, only use soil.

You need to take the cooker apart entirely so that women can see how it is built, and then provide explanation as you put it together: <sup>[1]</sup><sub>[SEP]</sub>

First the big part which is on top of the cooker: this part is used to keep the pot from falling on the side; but also it keeps the fire around the pot, which helps speeding the cooking.

Then, take the lid (the small part that covers the ashes).

Start the explanation related to insulation of the heart of the fire by the ashes (the heart of the fire is the bended tube, where the wood is put in the horizontal portion). The ashes will isolate the heart of the fire and therefore concentrate the heat around it - there is no loss, which allows for total combustion, thus greater efficiency compared to heat produced, which goes as high as 800 degrees celcius.

Before using the cooker, women will have to have dry ashes. What is the dry ashes used for? Well, to isolate the fire, or rather the chimney. And why should the ashes be absolutely dry? Because the mix water and ashes is very acid and it would melt the cooker in no time. This, I would repeat it every 10 minutes throughout the explanation, as this is the main reason for damages to the cooker. It is necessary to say that the mix water/ashes is to be banned, as well as stones, nails or sand as those are conducting heat, while dry ashes is insulating.

This is why it is necessary to sieve the ashes (or soil). You need to show the process to sieve the ashes and fill up the part around the chimney. You also need to specify that when it is raining, the cooker must be taken inside. We also noticed that some women add sand to go faster, saving getting the ashes. But this damages the cooker quickly (in a few days) and it is not insulated so uses a lot more wood. You need to explain that after filling up once with ashes, after 1 or 2 days, the level of ashes goes down 1 or 2 centimeters. It is then good to open the cooker and to top up with ashes to the top. If one day the ashes is made wet (because of rain or water from cooking), it is better to change it otherwise the mix will be very acid.

You need to bring a pot and boil water to show the speed and efficiency of the cooker. Add two small sticks in the chimney (horizontal part). It is advisable to avoid too big or long pieces of wood (chop the wood) as it would not be as quick and efficient - it is even a waste of resource to use too much wood. From the top (vertical part of the chimney), we add smaller pieces of wood with hays or paper to light the wood - we light the wood from both ends.

Finally, we bring the water to boil.