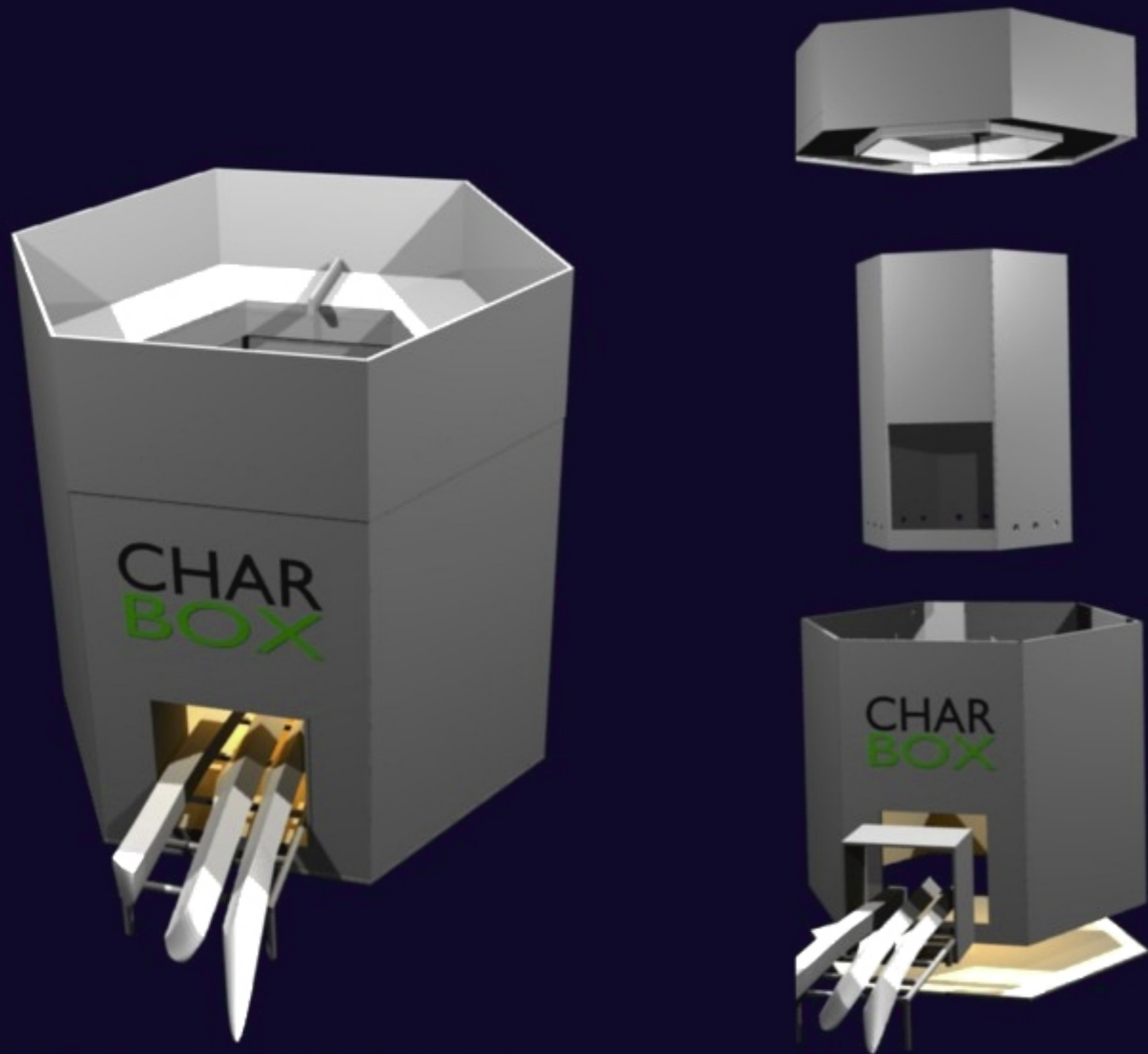


CHARBOX



:: The CharBox can be described as a 'rocket retort' stove

:: No need to transform primary feedstock into small pieces, as is the case with woodgas stoves; women like to work with woodsticks because these can be easily manipulated (reducing heat when needed)

:: Advantages of the rocket stove (clean burn, pre-heated air, concentrated heat)

:: Uses less fire-wood as biomass surrounding the rocket (in the 'retort') is pyrolysed: pyrolysis gas travels through bottom into hot coals and combusts

:: Feed biomass from the top instead of the bottom; weight of the pot pushes down the top-lid

:: Simple manufacturing (no welding, no riveting, just plying)



Prototype testing in Cameroon

1. Fill the retort with agricultural residues



2. Close the lid, and start using the stove as a 'rocket stove'



3. Biomass in the retort will char and generate pyrolysis gas, which is combusted in the combustion chamber. After cooking, empty the retort full of char.

