

FROM NIGERIA THE POT-IN-POT REFRIGERATOR

In 1995, Mohammed Bah Abba, a Professor in Nigeria who came from a family of potters, used very wisely the laws of thermodynamics to create the fridge Pot-in-Pot, known in Arabic as Zeer. Since ancient times some populations used fridges made out of clay, but this extraordinary invention was forgotten.

After having developed and tested the Pot-in-Pot fridge, the inventor decided to freely pass out thousand of replications among the communities in Nigeria, in order for people get acquainted with his invention. Successively, he charged only the production costs of the fridge. Each fridge can contain around 12 kilograms of vegetables and its production cost is approximately of 2 USD.

The fridge is composed by two pots of clay, of the same shape but of different sizes, placed one inside the other. The space in between the two containers is filled with sand which is simply humidified with water. Food is placed inside the pot that is in the interior, covered with a lid or a humid piece of cloth. The fridge Pot-in-Pot has to stay in a dry and ventilated place. The laws of thermodynamics take care of the rest. When humidity evaporates from the sand, it dissipates the heat of the internal container, cooling the content inside of it. The only maintenance required is to add water to the sand, twice a day.



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