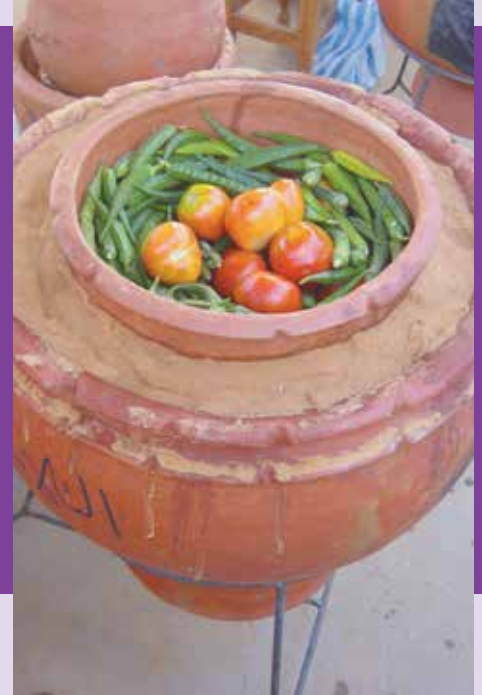


# Making a zeer pot fridge

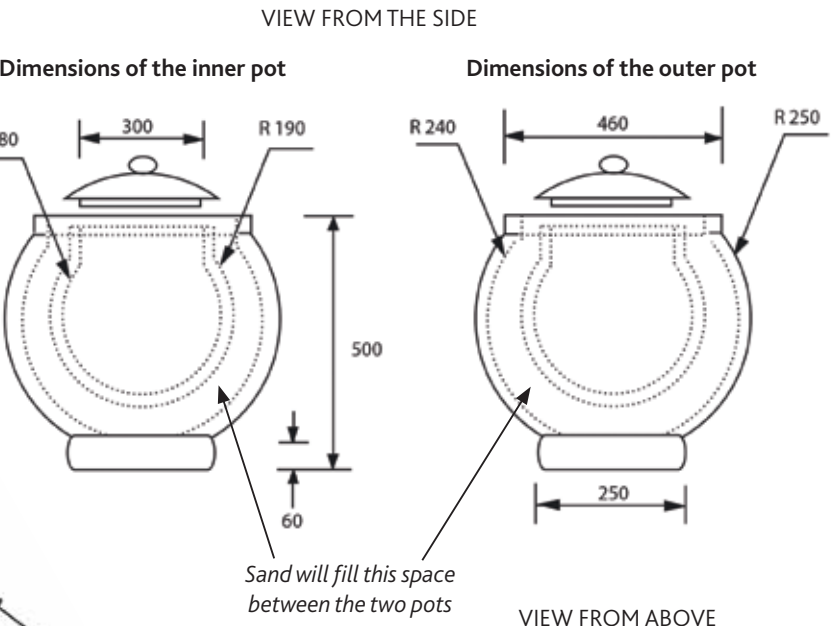
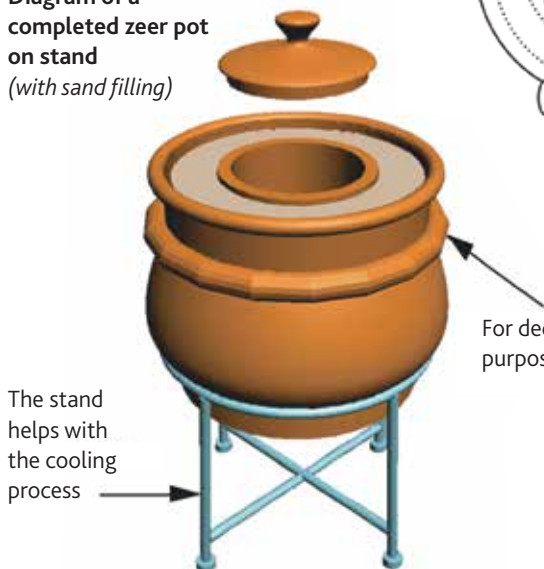
In Sudan, zeer pots are exactly what communities need to find a way out of poverty. Decades of fighting have displaced hundreds of thousands of families. Forced to abandon their land and their livelihoods, they are doing their best to start again. But food is scarce, and in temperatures of over 40 degrees centigrade, anything they are able to grow rots very quickly. One solution to this challenge is the zeer pot – a very clever fridge made using clay, water and sand. It consists of two earthenware pots of different sizes, placed one inside the other. The space between is filled with damp sand that is kept moist by adding water, and the smaller pot is filled with food. The top is covered with a damp cloth, then as the water in the sand evaporates towards the outer surface of the larger pot, there is a drop in temperature of several degrees. This keeps the contents of the smaller pot cool.



## 1.

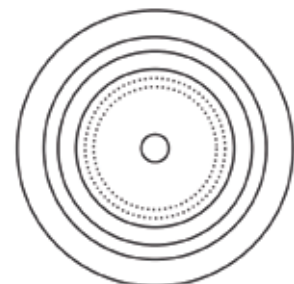
First, create bowl-shaped moulds from mud and water – and leave to dry in the sun. Press the clay onto the moulds to form the size of pot wanted. Add clay rims and bases and remove the moulds.

Diagram of a completed zeer pot on stand (with sand filling)



For decoration purposes only

VIEW FROM ABOVE



A zeer pot can keep 10 kilograms of food fresh for up to 20 days

2.

Once the pots have been fired in a pit of sticks, the zeer pot is ready to put together. Place the smaller pot inside the larger one, and fill the space in between them with sand.



With many thanks to Practical Action for their kind permission to reproduce this article.

[http://practicalaction.org/solutions/why\\_zeerpots.php](http://practicalaction.org/solutions/why_zeerpots.php)

For information on other practical solutions to poverty, visit: [www.practicalaction.org](http://www.practicalaction.org)

3.

Next place the whole structure on a large iron stand.

This allows the air to flow underneath and helps the cooling process.



4.

Twice a day, add water to the sand between the pots so that it remains moist. The zeer pot needs to be left in a dry place with fresh air.



5.

Put fruit, vegetables and sorghum in the smaller pot, which is covered with a damp cloth.



6.

In the heat, the water contained in the sand evaporates towards the outer surface of the larger pot. This evaporation makes the temperature drop by several degrees, cooling the inner pot and extending the life of the food inside.

