Naturator

Crafted to uplift farmers and aid them in their service to society.

The name **Naturator** is a combination of the words "natural" and "refrigerator".

The Natutator with its brick exterior, cow dung interior, and bamboo lid.
How can I make this?

1 Lay the brick
First, create a large rectangular structure with an open top and an inner chamber.

2 Line the interior
Then, the interior of the outer chamber must be lined with cow dung cakes which is a natural insulator and prevents heat gain or loss.

3 Fill the outer chamber
The outer chamber must be filled with sand that can be easily attained from a nearby field or ground.
Construct the bamboo lid

The lid can be constructed using bamboo sticks that are tied together to create a rectangle.

Fill the inner chamber

The inner chamber is used to store the produce that is required to be at a lower temperature.

Water every 6-8 hours

By watering the outer chamber, the produce is kept 50-60 degrees Fahrenheit cooler than the outside temperature.
Who: The farmers and middlemen

In recent years, due to global warming and the rise of temperatures in the summer, farmers and middlemen in India have been losing produce and forgoing their already meager income.

As a result of the extreme heat in the summer, in the time period between the harvest and the transportation of the produce to the wholesale markets, fruits and vegetables end up rotting.

These rotten vegetables and fruits have to go to waste and not only cut into the income of the farmers but also add to the food waste that is produced by the country.
The Naturator is designed to be a refrigerator that can be built using materials that easily available in villages like bricks, sand, bamboo, and water. This refrigerator works without electricity and can be used by farmers and middlemen in place of electric fridges to store their produce and reduce post-harvest losses.

This design will also increase the amount of produce that reaches the markets. This increase in supply will bring down the prices of produce and make fruits, vegetables, and grains more affordable for the common Indian.

Thus, this design not only affects farmers and middlemen directly, but it also improves the affordability of basic food products for the general public, increasing the well-being of the people.
How: A non-electrical alternative!

The Naturator is a large rectangular structure made of bricks within which there is another rectangular chamber. The space between these two layers is lined with cow dung cakes that are natural insulators and also filled with sand.

The inner chamber is used to store the produce and the entire rectangular structure is covered with a lid made from bamboo.
I envision that it can be of use to farmers across India, especially in the northern regions of India where the temperatures are extreme and unpredictable.

I desire to reduce the hardship that farmers have to endure and to make food products that are grown in India more affordable to the general public. Thus, reducing the food shortage problem that is rampant in India.