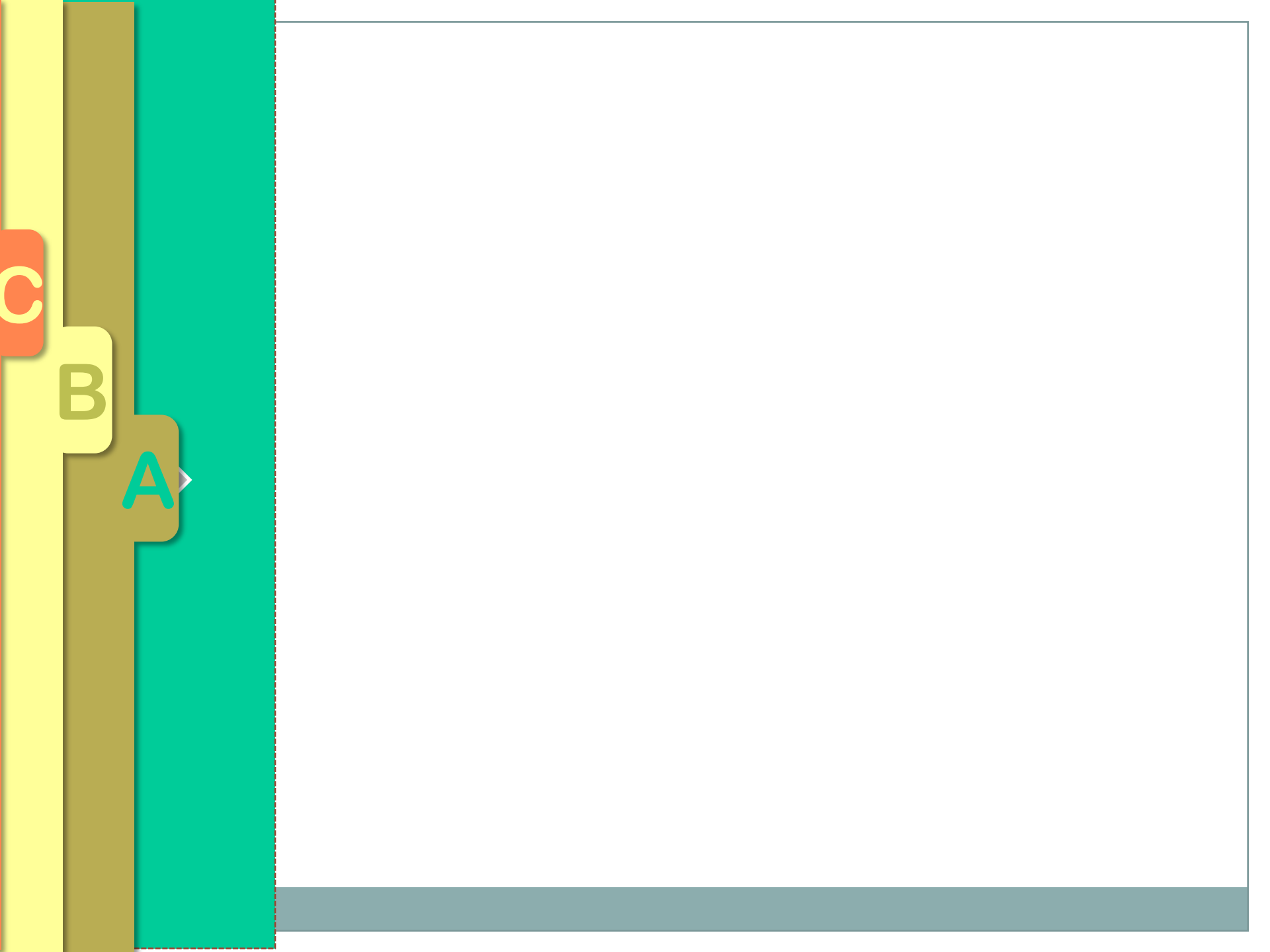


# CHANDRA MATRICULATION HIGHER SECONDARY SCHOOL

## EVOLUTION OF FOOD AND PRESERVATIVE TECHNIQUES USING HOUSE GARDENING

RAAGAVARTHINI P



C

B

A

# OBJECTIVES



**TO STORE FOOD  
WITHOUT POWER  
CONSUMPTION**



**TO HAVE ECO  
FRIENDLY  
REFRIGERATING  
METHOD**



**TO GET COST  
EFFICIENT STORAGE  
METHOD**



**To reduce the level  
of room  
temperature**



**To bring  
weightless roof  
gardening.**



**To get healthy  
fruits and  
vegetables.**

# Foods stored in refrigerators



**It helps in  
keeping food for  
prolonged period.**



**It requires  
electricity.**

**Emits  
chlorofluorocarbon.**

**Spoils the nutrients  
in food.**

# storage without refrigerator

## ZEEER POT



### Invention

- It dated back to Egypt around 2500 BC

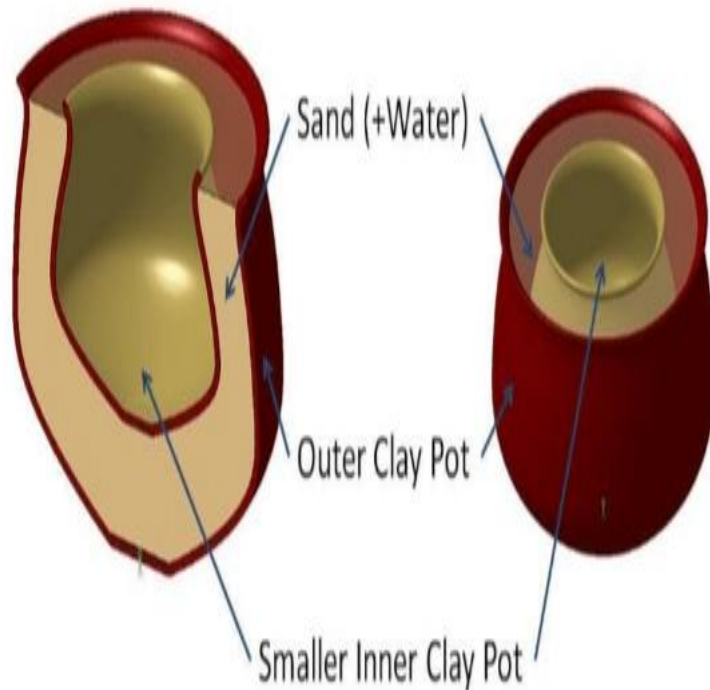
- It has also been used in Indus valley civilization around 3000 BC

### .IMPLEMENTATION

- The Arabic word Zeer means large pots

zeer pot

# **Construction**



Place small  
clay pot into a  
larger clay pot

• STEP 1

sand is placed  
between the  
interior space

• STEP  
2

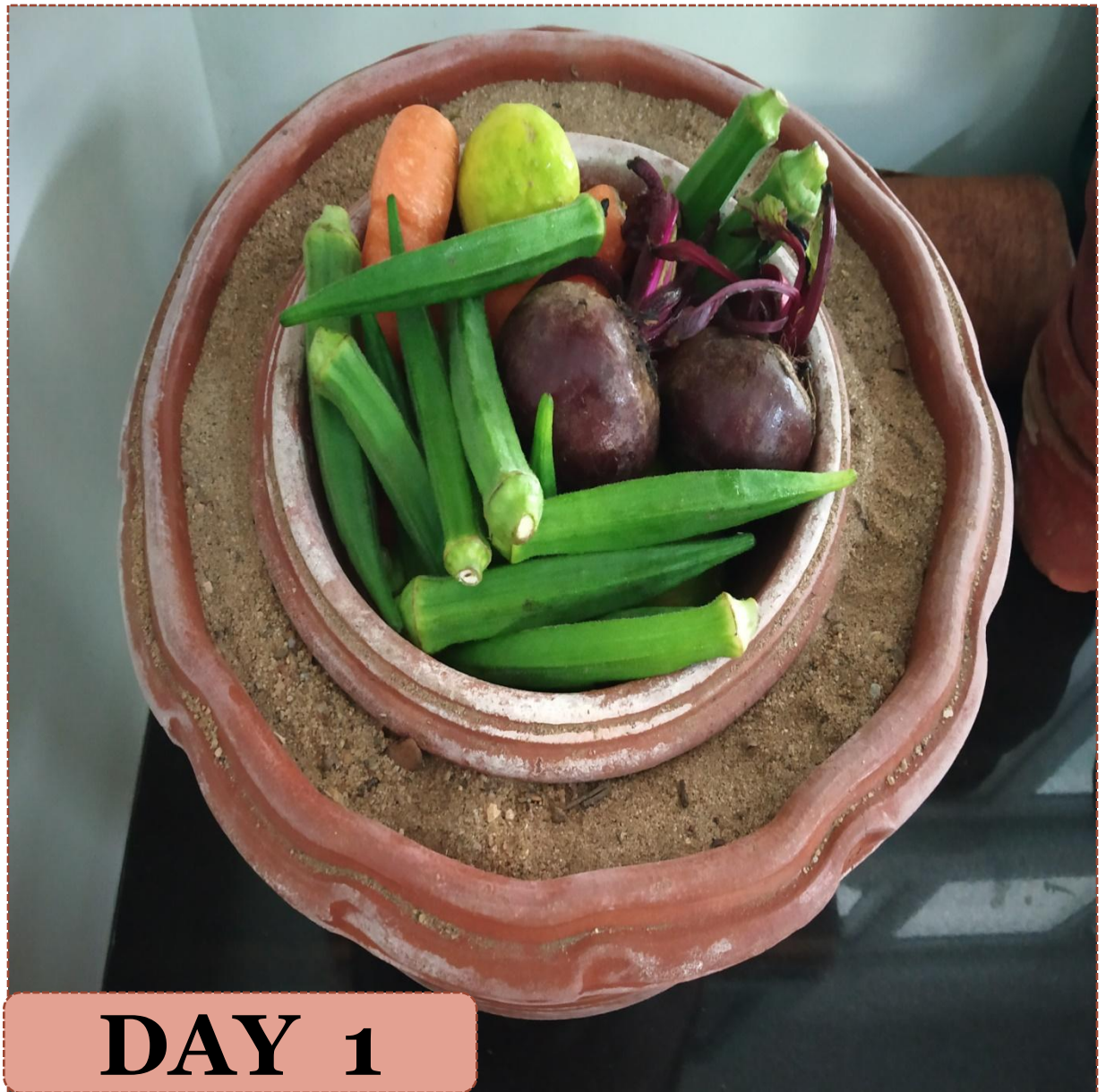
Water is  
then poured  
into the  
sand

• STEP  
3



# WHY ZEER POT

od



**DAY 1**





**DAY 7**

**STILL FRESH !!!**





ECOLOGY IN ACTION

# Rooftop Gardens



# WHY A ROOFTOP GARDEN?

- ✗ Reduce the “urban heat island effect”
- ✗ Reduce amount of greenhouse gas
- ✗ Provide more space for agriculture
- ✗ Reduce and clean storm water runoff
- ✗ Reduce energy consumption
- ✗ Increase the beauty of cities



# DISADVANTAGES OF USING SOIL IN ROOF TOP GARDENING:



**Require extra  
maintenance**



**Roof garden  
weight and  
structure**



# Alternate for normal soil in roof gardening



SOIL LESS MEDIUM



# PREPARATION METHOD OF SOILLESS MEDIUM



All these substances are mixed with little amount of charcoal and allowed for 2-3 weeks for the formation of the medium.



# Plants cultivated using soil less medium





# TYPES OF CONSTRUCTION USING SOIL LESS MEDIUM



**TOWER  
PLANT**



**SELF  
WATERING  
PLANT**



**WALL  
GARDEN**



# WEIGHT COMPARISON

**NORMAL SOIL**



**SOIL LESS  
MEDIUM**



# ADVANTAGES OF SOILLESS MEDIUM



**WEIGHTLESS**

**LESS WATER AND MAINTENANCE**

**OWN CULTIVATED VEGETABLES  
WITHOUT ADULTERATION**

# THANK YOU

