

AUTO INDOOR HYDRO PHONIC FODDER GROW CHAMBER

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ABSTRACT

As we know the most of the families earns by the means of farming in rural are & most them don't know have enough land & water resources.

As we know that about the water shortage in many states in India we all are concerned about the water supply.

Hydroponic uses water but it use very less water & we can reuse it as well. So this system helps in growing different types of plants and fodder for cattle.

This system does not need soil it also consumes 80% less water as compare to old method.

This system is made to allow cool air to flow and also glow light to simulate sunlight along with water to simulate best condition for growth

INTRODUCTION

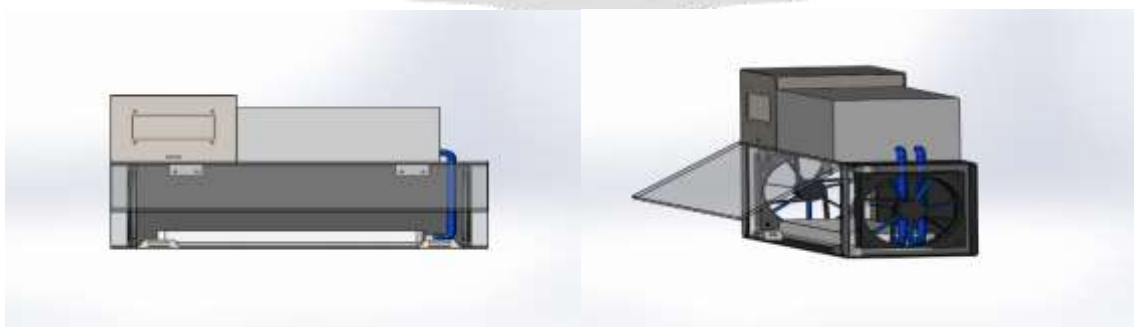
According to data 870 million people in the world do not have access to enough food . this problem occur due to increasing population unpredictable weather condition . droughts and low level production and poverty

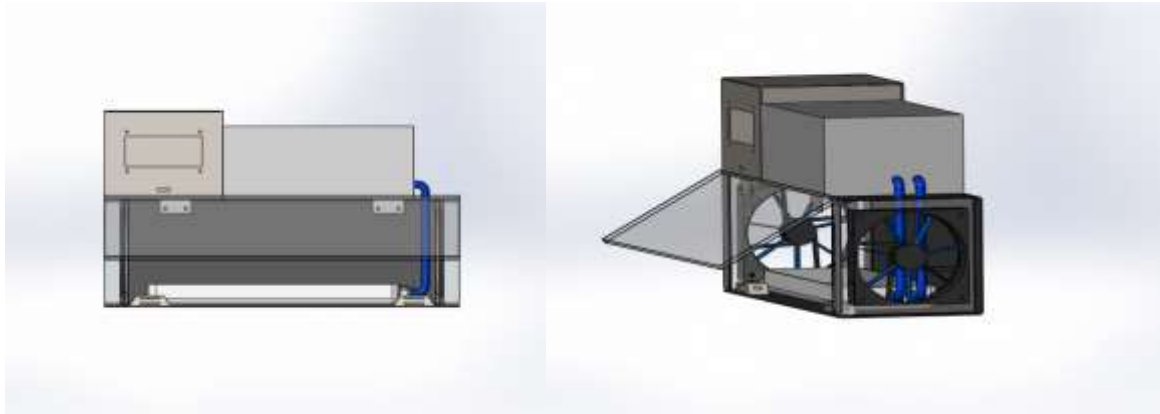
Conventional agriculture are struggling to overcome obstacles to feed the world due to growth of population over the years the agriculture load is overcome by residual needs and unpredictable weather condition are also responsible for leaving conventional form expect and financial withdrawal

Low land productivity is overcome by overwork of soil to full fill quates which eventually leads to degradation of soil

To overcome all the problems new agricultural techniques are being developed and to meet the need of the future generation one process is known as hydroponic where plant are grown without soil in water nutrients are mixed this nutrient rich solution which leads to less use of water

CAD MODEL





WORKING

- 1) the fodder grow chamber maintains the temperature and flow of air help to maintain humidity and grow plant easily.
 - 2) fodder grow chamber basically work on some of the sensor like Arduino, temperatures sensor etc. And use of some pump.
 - 3) fodder grow chamber is a modern way of farming to grow fodder, in traditional way of farming land is required but in grow chamber we are framing in some unit of water and some nutrients.
 - 4) first step add some liter of water and nutrients in tub, and they are circulate in the pump and the seed are added in the tub.
 - 5) seed are added in the tub where water is passed to grow their plant and they are maintain their temperature and cooling some help of light. And fan also help to maintain humidity.
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ADVANTAGES

- 1) It will help to grow crops in the area where soil is contaminated with diseases or in the area where no suitable soil exists.
 - 2) It is very cost efficient as it reduces the cost of the traditional practices used in farming.
 - 3) In expensive land areas and highly dense area it is more economically feasible
 - 4) this system help in conservation of water and nutrients and it also helps in reducing the pollution of land and river by preventing the use of chemicals.
 - 5) In this system we are not using soil which prevents from soil born diseases.
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DISADVANTAGES

- 1) cost of Construction in more, but only one time .
- 2) skilled labor are required to handle chamber conditions , like maintain temperatures, humidity.
- 3) they need to be cleaned every week because some nutrients choke pipe .
- 4) not for large use.
- 5) plant growth is very rapid because of chamber conditions the observer obsessed plant in every 12 hour.

6) special type of seed are use in this chamber.

REFERANCES

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