

2	Unfertile Soil -Environment statistics suggest that 39% of soil is degraded in Punjab. Similar fate is shared by a lot of other geographical area in India.	<ul style="list-style-type: none"> Bio-Fertilizers and Compost Preventing degradation of soil. 	<ul style="list-style-type: none"> Bio-fertilizers and compost will replenish the soil's nutrients without inflicting any harm. We will not use any sort of artificial tool which will in turn degrade the soil. We plan to use "azolla" which can be used as a fertilizer with excellent properties.
3	Limited land	<ul style="list-style-type: none"> Multiple floors 	<ul style="list-style-type: none"> With our multi storied farm, the produce will be as many times as the number of floors on the same piece of land.
4	Energy	<ul style="list-style-type: none"> Gravity light Solar Trees Bio gas 	<ul style="list-style-type: none"> Gravity light will convert gravitational energy into mechanical energy, and then into chemical energy. Solar trees are solar panels attached to a pole which will increase space efficiency. The excreta of the animals reared would be used to produce bio gas.
5	Soil Erosion	<ul style="list-style-type: none"> Confined apparatus 	<ul style="list-style-type: none"> Since the farm would be a building, with our mosses acting as side walls, soil erosion by wind would not occur. Because of no extra water, water cannot cause erosion as well. In simpler words, we would not allow any agent of erosion to be a part of the apparatus.
6	Environmental Issues	<ul style="list-style-type: none"> Afforestation and eutrophication Organic Farming 	<ul style="list-style-type: none"> Forests are cut for agricultural purposes due to scarcity of arable land. Farms like ours would lessen the need of cutting forests and the environmental benefits of forests would not be lost. Runoff of water containing nitrogen fertilizers which have the chemical property of absorbing oxygen from water can be prevented with our confined apparatus.

Table 1: Agricultural issues in India

Azolla – Azolla (*AzollaPinnata*) is a plant, introduced and popularized in 1990s, which also acts as a fertilizer that provides the soil with many nutrients, along with the primary nutrient N, P and K (5%, 1% , 5% respectively). Because of its essential nature (i.e. purely organic), it is very productive in the long run (Go to ref. 3 to know more).

II. BUILDING STRUCTURE

The model is a four-story building (fig.1) – in which every floor is a tree cover; the floors also provide various other urban services. Accessibility to the building and the services provided requires a certain fee to be paid (For further information, refer to Section 4.2). Further, we will discourse the utility of each floor along with a brief description of the vegetation grown.

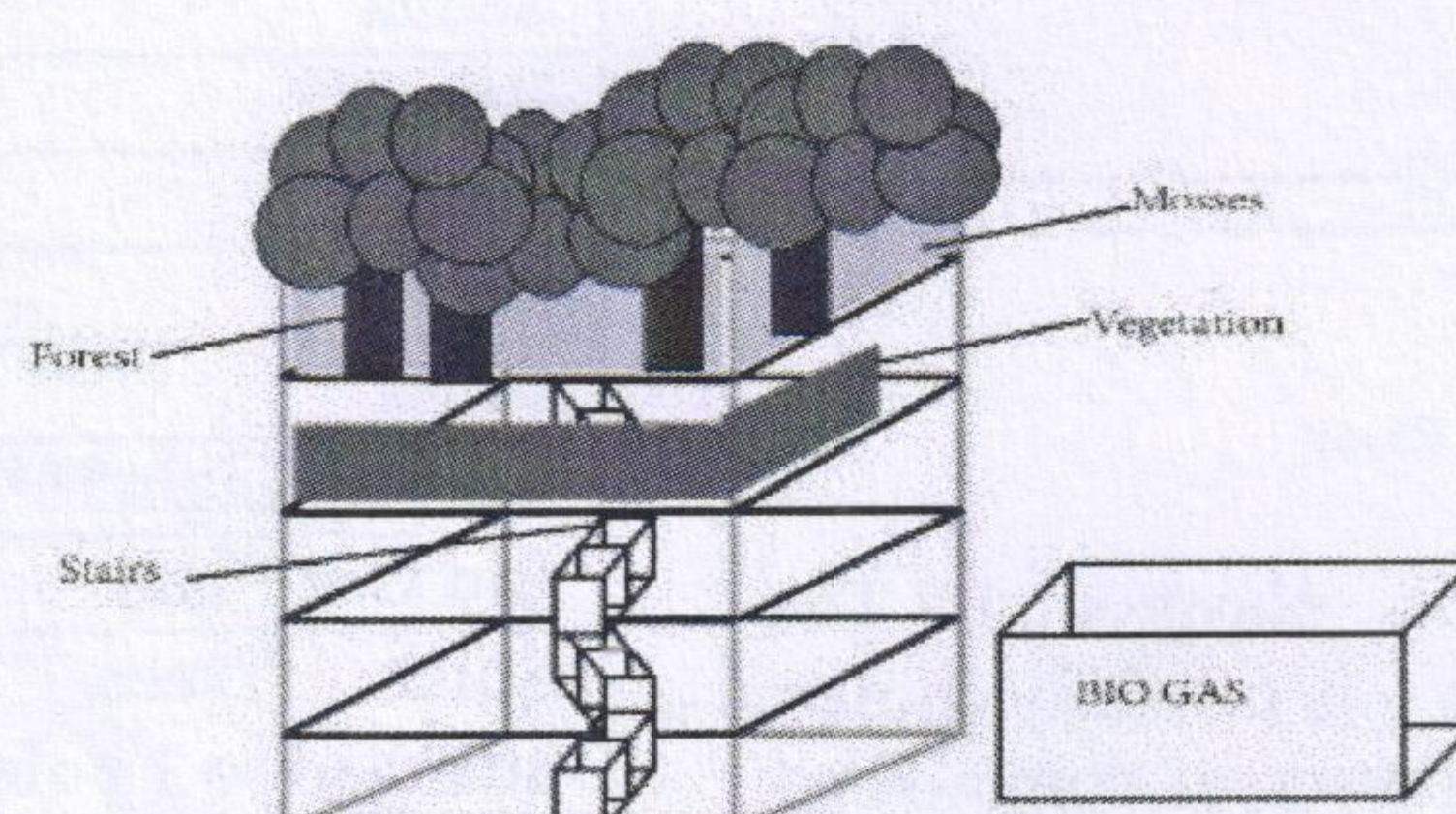


Figure 1: Building model