RAIN WATER HARVESTING

**GROUP MEMBERS:**

1. A.Devika Rani – 19P31A0571

2. Ch.Maha Swetha – 19P31A0581

3. G.Navya – 19P31A0587

4. G.V.D.Jyothi – 19P31A0588

5. M.Sowmya – 19P31A0593

6. N.Prathyusha – 19P31A0598

7. P.Kamalatha – 19P31A05A6

**PROBLEM:**

How to fix or conserve runoff rain water from the roofs of the building rather than wasting.

**SOLUTION:**

To conserve runoff rain water from the roofs, we thought “RAIN HARVESTING” process will be perfect.

Rain water Harvesting, means normally water is collected from the roofs of the buildings and stored in tanks .This water can be used for farming, gardening purposes and more. So, by implementing rain water harvesting water is conserved and it consumes less cost .So naturally we can get fresh air and can promote greenery around us .If we implemented correctly it helps in augmenting the ground water level of the area. And also the floods can be controlled to some extent.

**WHITE HAT:**

White hat is all about facts and information .The white colour stands for neutrality .Just the facts.

**WHITE HAT RELATED TO RAIN WATER HARVESTING:**

* By this project, nearly we can conserve gallons of water.
* By implementing this method. We can promote greenery.
* By promoting greenery we can control floods.

**RED HAT:**

Red hat signifies feelings and it is typically worm by the project manager to keep the base lined schedule and associated project and stage plans up to data.

**RED HAT RELATED TO RAIN WATER HARVESTING:**

* Unpredictable rainfall .Rainfall is hard to predict and sometimes little or no rainfall can limit the supply of rain water.
* Rain water harvesting system may cost between high and low and benefit from it cannot be derived until it is ready for use.
* During the heavy downpour the collection systems may not be able to hold all rain water.
* Installing rain water harvesting system may not be possible for the people living in huts.

**BLACK HAT:**

Using Black hat thinking, look at decisions potentially negative outcomes. Look at it’s cautiously and defensively try to see why it might not work.

This is important because it highlights the weak point in a plan.

It allows you to eliminate them. It’s one of the real benefits of the model.

**BLACKHAT THINKING FOR RAINWATER HARVESTING:**

* Rainwater is hard to predict, and sometimes little or no rainfall can limit the supply of rainwater.
* It is not advisable to depend on rainwater alone, where there is limited rainfall.
* Depending on the system requirements for harvesting system cost may vary from low to high.
* Certain types of roofs may seep chemicals, insects, dirt that can harm plants if it is used for watering the plants.
* When rainwater collected from the roof, dirt and germs can be washed into it.
* The collection and storage facilities may also impose some kind of restrictions as to know, how much rainwater you can use.
* During heavy rains, collection systems may not be able to hold all rainwater.
* Rainwater collected during the rainy season is generally not need by plants until the dry season.

**GREEN HAT:**

By this green hat, we make a deliberate effort to actually look for new ways of doing things. We signal to others and our brains that now is the time to be creative. There is a correlation between the amount of time we spend looking for new ideas and the number of new ideas we can come up with.

**GREEN HAT RELATED TO RAINWATER HARVESTING:**

* During rainy season, already plants get sufficient water to grow. So, the stored water can be utilized to clean the floors.
* To avoid insects and mosquitoes into the tank, we can insert mosquito’s nets.
* Due to photosynthesis algae grows in the tank which is harmful to use.
* To overcome this tank is covered perfectly so, Thus
* Sunlight is prevented from entering into the tanks.

**YELLOW HAT:**

Yellow indicates the optimistic, speculative, and base case scenarios.

They are happy and have a positive outlook on things and always expect the best outcome.

**YELLOW HAT RELATED TO RAINWATER HARVESTING:**

There are many different types of uses for collecting rainwater harvesting system:

* We can use this water for many purposes, but we will use this for promote greenery.
* By this rainwater harvesting we can grow plants in our house, and we get fresh air from it.
* By this rainwater harvesting, we get so many benefits:
  + - Less cost.
    - Helps in reducing the water bill.
    - Decreases the demand for water.
    - Promotes both water and energy conservation.
    - Improves the quality and quantity of groundwater.

So by this method we have so many advantages.

**BLUE HAT:**

Blue hat is nothing but it is about process control. It is used for thinking about thinking the black hat asks for summaries, conclusions, decision and over view.

**BLUE HAT RELATED TO RAIN WATER HARVESTING:**

* By rain water harvesting we can control many things.
* Rainwater harvesting in the collection and storage of rain water that would otherwise flow down gutters into the drain.
* Rainwater is collected from the roof, then re-used with in homes and gardens
* This can provide substantial savings on water bells.
* It also makes your home more sustainable.
* We can reduce the floods also.