#### **SEWAGE TREATMENT & PISCICULTURE**

## **Introduction:**

To treat the sewage water with natural material. In this method water can be purified with some natural materials. This purified water is useful for growing plants and culturing fishes. It changes its alkalinity, turbidity etc.

## Relevance of the topic:

Water is one of the very precious natural resources. Wastage of any natural resource is be detrimental to our future prospects. Hence we should not only conserve the water but also find out the various ways to treat the used and sewage water, so that we can use this water for farming and any other purpose.

#### **Objectives:**

- > To treat Sewage water with natural method and to purify the waste water.
- > To use this purified water for growing plants.
- Water is also used for pisiculture (culture of fishes).

## **Working Principle:**

- •Step- 1. Usage of stones/pebbles for purification of large solid particles in the sewage water.
- •Step- 2. Usage of Charcoal to remove dissolved toxins.
- •Step- 3. Usage of fine sand particles for the removal of micro pollutants and to decrease the turbidity.
- •Step- 4. Usage of pieces of Banana plant material to change the water colour and decrease the salinity.
- •Step-5. Usage of corn plant pieces duly dried up, to change the turbidity, alkalinity and colour of Sewage water.

#### **Materials and Methods:**

We used naturally available material such as Stones (or) pebbles, coal, sand, banana branches and corn.

• The total project is undertaken by using the natural material and natural methods only.

## **Result and Analysis:**

Before treatment of sewage water pH is 6.77- acidic medium.

After treatment – pH is as under.

- 1-Step- Ph-7.33.
- 2-Step- Ph-7.40.
- 3-Step- Ph- 7.69.
- ❖ Turbidity test by using turbidity meter. Before treatment = -0.05, range : 1000 NTF After treatment the values are as under:
  - 1-Step 0.07
  - 2-Step 0.11
  - 3-Step 0.14

# **Conclusion:**

After treating sewage water with the above natural material we can conclude that water can be purified by this method. And this purified water can be used for pisciculture and plantation purposes.





<u>Process of treating sewage water</u> <u>Introducing fish into the treated water</u>

# **JIGNASA STUDENT STUDY PROJECT**

Name of the Project : <u>SEWAGE WATER TREATMENT AND</u>

**PISCICULTURE** 

**Students participated** 

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