Essay on groundwater depletion

Environment, Water



The groundwater level of the world is continuously falling. The sad and worrying thing is that so far no concrete initiative has been seen at the global level to deal with this acute problem of decreasing ground water. It is a harsh truth that if the ground water level of the world keeps falling like this, then it will be difficult for people to get water to drink in the coming times.

Today, the world is largely dependent on ground water to meet its water needs. Therefore, on the one hand, this continuous exploitation of ground water is going on a large scale; on the other hand due to the climate changeand industrial destruction, there has been a significant decrease in rain due to the decrease in trees, plants, mountains etc. The earth is not getting water in proportion to the exploitation of ground water. That is the main reason why the ground water level of the world is continuously falling.

Long and Short Essay on Ground Water Depletion in English

Following are given some long and short Essay on Ground water Depletion of different word limits for the help and use of students and scholars.

These Ground water Depletion essay may provide you the basic and detail knowledge of the depletion of ground water and its consequences on the earth and the life forms.

The essay on ground water depletion can be used in various kinds ofacademictasks such as discussion and debates, knowledge sharing, competitive examinations and in others.

Groundwater Depletion Essay – 1 (200 words)

It is believed that 85% of the population of India depends on ground water to meet their domestic demands. In rural areas, ground water is an important source of drinking water. Ground water plays a very important role in irrigation and other uses for human and animals. There is also a great demand for ground water in industrial areas.

Waste generated from agriculture, urban areas and industrial factories is threatening the quality of ground water. If once this waste goes within the sub-surface of the earth, it will also contaminate the ground water and it will not be fit for the use ofhuman being.

The increasing demand for water has increased awareness about the artificial recharge of groundwater supply enhancement. In simple terms, artificial recharge is a process in which the maximum part of surface water is directly sent into the ground either by spreading it on the ground or by using recharge wells.

In other words, the filling of aquifers in relation to the replenishment is the movement of water from a human-made system in which surface water is stored in or below the ground. Artificial recharge sometimes called schematic recharge is a way in which water is stored below the ground so that it can be used in times of water scarcity.

Groundwater Depletion Essay – 2 (300 words)

The transformation of water into water vapor called evaporation is a natural action conducted continuously by the sun and gravity called hydrologic-cycle

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or water-cycle. After the evaporation of water from the sea and surface land, this water again comes back to the earth in the form of rain. Rain is the source of all fresh water on the earth. When it rains, the water falling on the earth flows in the form of a stream and goes to the water bodies on the surface of the earth. This water is called surface water.

Some part of this water gets absorbed into the soil and gets collected beneath the ground. Some part of the rainwater gets transmitted slowly and goes under the ground due to gravity. Therefore, this process of making ground water is called aquifying and the accumulated water is called ground water. As a result of the gravity, underground water slowly moves beneath the surface.

Water table or underground water is beneath the upper surface of the land in which soil or rocks are permanently saturated with water. The depth to which the soil is completely filled with water in the holes and the level at which it is found is called the water table. The water table separates the ground water area which lies below it or the capillary fringe airborne area which is above it. Fluctuations in the water table vary from year to year as variations in rainfall and climate influence it. It is also affected by the extraction of water by wells or artificial form.

The process of precipitation through which ground water is supplied is called recharge. Generally, recharge occurs in tropical climate only during rainy season. This precipitation on earth is often 10% to 20% which is absorbed by the soil and contributes to the water-holding level. Ground water is continuously functional as compared to surface water it flows very slowly.

The actual rate of transmission of this water depends on the transmission and storage capacity of the aquifer.

Groundwater Depletion Essay – 3 (400 words)

Introduction

Everybody will have to bring awareness among children and adults by running a campaign of water conservation by being a conscious and responsible citizen. Today, the depletion of water table is a cause ofstressamong the people. They have started thinking on this burning issue that could transform the whole planet. The increase in population increases the consumption of water so in its wastage. Days are not far when either no ground-water or polluted ground-water will be extracted. Hence people have to become conscious about the facts.

Some Methods are Suggested below to Save Water

- While taking bath, a lot of water can be saved by taking water in bucket as compared to bathing in shower or tub. If you clean utensils in a bucket or tub of water in the kitchen, then a huge loss of water can be prevented. This water may be used in irrigation.
- Earlier, there used to be ponds on the border of villages, towns and cities or somewhere on the lower surface, in which the monsoon rain water naturally collected. This water gradually enters into the water table.

- In cities and metros, water from the drains of the houses can be collected by making pits and used for irrigation of trees and plants and for other purposes.
- If tap in houses, neighborhoods and public places are left open or they
 have some fault or leakage, then inadvertently thousands of liters of
 water is wasted every day.
- Applying scientific methods, the saline water of the sea is being made potable today. These methods should be promoted at a large scale.
- Regular cleaning of important rivers like Ganga and Yamuna is very important. It not only supply water to the people living at the banks but also replenishes the water table.
- Due to increasing population and industrialization, indiscriminate cutting of forest and trees is continuously reducing the moisture of the land, so plantation needs to be done continuously.
- It is very important to prevent mis-use and over-use of water by the
 constitution at all levels, by effective propagation through media and
 by compulsorily teaching the subject of water conservation at school
 level.

Conclusion

Now the time has come when the governments of the Center and the States should make a law to teach 'Water Conservation' to the new generation from primary to higher level. It is also needed to bring consciousness among the people by visual aids and propaganda. People should be encouraged to adapt rain water harvesting programme and then only they will begin to think as their duty to save water.

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Groundwater Depletion Essay – 4 (500 words)

Introduction

Agricultural development is the backbone of any country's economy. Water is essential for life and is a very important component in intensive crop production. Actually, it is a bitter fact that water is such a resource all over the world that will remain a matter of constant concern.

Presently there are many reasons for water crisis, such as population growth, decreasing rainfall, increasing industrialization, increasing urbanization, indiscriminate cutting of trees, luxury, modernist and indulgent trends, selfish tendencies and insensitivity to water, increasing dependence on ground water.

Its excessive exploitation, negligence in traditional water harvesting techniques, increasing dependence of society on government, increasing water consumption in agriculture etc. have become a major issue.

Prime Minister's Appeal

The Prime Minister of India was also worried about the water crisis prevailing in the country. Appreciating the good work being done on water in many places in the country, he urged the countrymen that till the time of good rains, we all had time to work for water for four months. We have to save every drop of water.

Water Harvesting

Most of the rainwater goes through the normal gradients of the surface into the rivers and then mixes in the ocean. In the process of reaching the rocks from the soil, water is stored by filtering through small natural pores, holes, and cracks into the rock-beds; hence its cleanliness is indisputable.

Conservation of this precious pure rain water as ground water is very important. If rainwater is collected and transported to the rock beds, underground reservoirs can be filled.

Nature keeps doing this work in its normal order. But today due to increase in population the use of water increases many times. Now this problem has taken a huge form, it has become necessary to do this work by running a campaign for humans. The main objective of this campaign is to consider water as life and to transport it into the land by simple scientific methods, in which all of us will have to gather.

Conservation of Ground Water

For the collection and conservation of ground water, every person must do the following at his level:

- 1. Arrangements should be made to collect the water falling on the roof of houses during the rainy season.
- 2. Old traditions of keeping the courtyard raw should be followed.
- 3. Plant at least one tree.
- 4. Water wastage should be prevented, such as the tap being closed after use.

5. Government efforts and scientific researchers will only give a partial solution to this problem, but if the common people understand this, then it can be replenished for future use.

Conclusion

Therefore, it is hoped that farmers can save water wastage in agriculture by adopting advanced methods of irrigation by harvesting rainwater as ground water. Scientists have developed such irrigation methods through continuous research, which not only saves water and energy, but also gives higher agricultural yield. These methods are – sprinkler and drip irrigation system. Farmers should adapt in their practices. Also Govt. institutions have to take solid initiatives and make corrective plans.

Groundwater Depletion Essay – 5 (600 words)

Introduction

Although water is the most available resource of this planet, it is becoming increasingly rare for human use. Two thirds of the Earth is water and one third is land. About 97. 5 percent of this immense water quantity is saline and only remaining 2. 5 percent is sweet and potable. 75 percent of this freshwater is in the form of icebergs, 24. 5 percent part of ground water, 0. 03 percent part of rivers, 0. 34 percent lakes and 0. 06 percent part in the atmosphere. Only 0. 3 percent of the available water on the earth is clean and pure.

Recharging Ground Water

By removing excessive water through boring or tube wells, we are constantly emptying the natural water table. Due to the laying of concrete work in the cities, the possibility of rainwater seeping into the ground is becoming less likely.

The system of collecting rainwater is four thousand years old. Today, this technique can be revived again on the basis of scientific standards. Following are the methods of recharging ground water: –

- Recharge pit
- Recharge trench
- Recharge trenchless bore-well
- Ponds and pools
- Surface water storage through small check dams

This technique relies on local hydrogeology. It is advised to adopt any method of recharging ground water. Thousand gallons water falls on the earth every year in the rainy season, which is wasted and run through the sewers and drains. By adopting the method of rainwater harvesting, thousand liters of water can be stored in the ground water reservoirs as future capital.

Water Conservation Measures should be taken by Farmers

- 1. Irrigate the crops by making beds.
- 2. Ensure irrigation channels.
- Adopt drip method for irrigation of horticulture and sprinkler method for crops.

- 4. Give water in the gardens in the morning and evening so that the loss from evaporation can be reduced.
- 5. Sow such crops in water deficient areas which require less water.
- 6. Let the water of the field be recharged in the field by strengthening and raising the ridges of the fields.

Water Conservation in Industry and Business Sector

- 1. Purify the water used in industries and reuse it.
- 2. Treat water used in water parks and hotels and use it again and again.
- 3. Big buildings like hotels, private hospitals, nursinghomes and industries etc. should adopt rain water harvesting methods.

Benefits of Underground Water Recharge

- 1. The annual rate of groundwater level degradation can be reduced.
- 2. It increases the ground water availability and satisfies the demand of drinking water.
- 3. Under-ground aquifer (geological water bed) can be revived.

Some Precautions to Keep the RainWater PollutionFree

- Only the water collected from the roofs should be connected directly to the aquifer.
- 2. Recharge pit / trench methods should be encouraged as far as possible.
- 3. At the recharge points, no pollutant should be stored.
- 4. Roofs should be kept clean and no chemicals, insecticides should be stored there.

- 5. With the construction of rainwater harvesting and recharge system, plantation should be done in the area around it.
- 6. Contour bonding and plantation work should be done on a large scale in small hills and forest area.
- 7. Re-silting and repairing of available conventional water resources should be done.
- 8. Dry wells should be cleaned and used as a recharge system.

Conclusion

Ground water is found in the pores or cracks of the rock beneath many surfaces of the soil. In terms of utility, ground water is more important than surface available potable water resources. About eighty percent of India's villages are dependent on ground water for agriculture and drinking water, and the matter of fact is that ground-water is rapidly shrinking its existence in the world. This situation is terrible in many developing countries, where the water level is decreasing by about three meters per year, and in India the situation is also not better.