

WHEN THE WELL IS

DRY, WE KNOW THE

IMPORTANCE OF WATER

Outline:-

- I- Introduction.
- II- Current situation of water in Pakistan.
- III- Causes of Water Crisis in Pakistan
 - A- Excessive and Inefficient use of water.
 - B- No further dams construction since 1980.
 - C- There is no perfect system of storage for rain and freshwater.
 - D- Inefficient use of water in agricultural field also contributes a significant role in water crisis.
 - E- There is no conservation strategy of fresh water drowning in sea and ocean.

- F- Dams are not working properly because of siltation of sand and mud.
- G- Political instability also contributes towards water crisis as frequently changing governments do not focus on water conserving policy or strategy.
- H- Industries play a crucial role because they not only use a significant amount of water but also through their chemical waste into river, stream or fresh water.

IV- Significance of Water :-

- A- Agricultural field cannot run without water.
- B- Industries require water as their raw material.
- C- Water is essential for generating hydroelectricity.
- D- Water is also necessary to maintain homeostasis in human and animal body.
- E- Marine and Aquatic life cannot live anymore without water.
- F- Plants require water for their survival.

V- Strategies to conserve water :-

- A- There is a dire need to construct dams especially many small dams.
- B- There must be introduced the drip irrigation system in agricultural field.
- C- Water should be recycled and reuse after passing through filtration plant.
- D- The two existing dam's capacity should be increased by removing siltation.
- E- There should be arranged seminars to make the people aware ^{of importance} of water.
- G- People must be educated through social media to conserve water.
- H- Government should take serious step in regards of water conservation.

VI- Conclusion.

"A man can live without love but he cannot live without water."

Water is considered as the essential component of ~~our~~ an individual's life. An individual cannot imagine life without water. Although 71% of the earth is consisted of water but all this water is not for use. Only 3% of this water is confer as the freshwater that is drinkable. But now this 3% water is tossing day by day and it will be finished one day if this water is not conserve. There are many causes of water crisis i.e excessive and inefficient use of water for domestic, agricultural and industrial purposes. The ineligibility of Dams to conserve 100% water of their capacity because of the siltation of mud and sand. There is no regular and strict policies toward excessive use of water. Insufficient dams for storage of water. and no conservation strategy for the freshwater and rainwater. Water is very important in every field



of life no matter it is agricultural field or industrial field, energy production field or botanical field. Water is necessary for plants, animals, marine and aquatic life. There should follow some authentic and quick strategies to conserve water, such as to introduce the drip irrigation system in agricultural field, increase the capacity of dams, recycling of clean water for reuse, construction of small and large dams, and serious policies are being made by government to conserve water.

Pakistan is suffering a critical a dire situation in case of water crisis.

"Pakistan is the 5th most at risk country in case of water crisis."

World Bank

There is only 107 cc of water remaining in Pakistan. Pakistan is called "water stressed country" by U.N. Pakistan should consider its situation very deeply.

There are many causes of water crisis. First and foremost cause of water crisis is the excessive and inefficient use of water. Running tap when not in use is the main example of this situation.

"Don't waste water, if you were at running stream"

Holy Prophet (P.B.U.H)

People usually forget to turn off the tap after use and the fresh water keeps on flowing and mixing with unhygienic water.

Only two main dams 'Tarbela and Mangla' were constructed before 1980. There is no progress of construction of dams since 1980 that is also a glooming picture of Pakistan. These two dams are not enough to store water for long term use.

There is no appropriate system of storage of rain and freshwater. In the monsoon duration, a heavy amount of water flows down the earth in the form of rain but this water is not conserved

for future use rather this heavy amount of water caused flood to most part of the country. Moreover freshwater flows and ultimately fell into oceans and the sea but there is also no conserving mechanism for that water so, that is the reason that why water level is going down day by day.

Minimum amount of dams that are present in Pakistan are not working properly because of siltation of mud and sand over the basin of the dams. This reason also contributes to the cause of water crisis in Pakistan. Siltation level of Tarbela dam is recorded at 35% and that of Mangla dam is recorded at 25%. It means that these dams are not working properly.

Political instability also contributes towards the conservation of water because of the frequently changing governments bring frequently changing policies and strategies. But if the policies are not proposed then they these policies are not accepted by the opposition. Thus the

instability of government poses a severe threat to the water conservation strategy and policy.

On the other hand, industries not only use water as raw material rather they contribute in polluting the fresh, clean and drinkable water by adding chemical pollutants and industrial waste into rivers. This cause a water crisis level high and also poses a severe threat to marine and aquatic life. The gills of fish can clog due to increased concentration of Aluminium and death may occur. Moreover, industries use a large amount of water as their raw material.

Almost 80% of Pakistan's economy depends on water. Water plays a significant and crucial role in almost every field of life. For example, in case of agricultural field, the crops like rice, sugarcane, cotton, carrot etc. cannot grow in the absence of water. So, to strengthen the economy of developing countries like Pakistan, it is essential to maintain

The agricultural field and agricultural field require water. So, water is essential and integral part of agriculture.

Water is used as raw material in industries for example sugar industry and other mills. So, if water or sufficient amount of water is not present then industry of Pakistan like developing countries cannot run and become a burden over economy.

Hydroelectric Power Generator generates energy with the help of moving water. If water is not sufficient then how can turbine run and how the electricity can be produced. In CPEC, there are three to four hydroelectric projects that are purely based on the presence of water. So, it is confirmed that hydroelectric power is generated just because of water. So here is also 'water' a crucial factor for development and progress.

Homeostasis is maintained just because of presence of water. Water plays an important role in body of warm-blooded animals. It regulates the temperature. It

maintain the salt concentration in body. It helps many chemical reactions in body to occur. It is an essential part of body components i.e. brain, cell, kidney, blood etc. So, it is proved that water is essential for body and also to maintain the homeostasis level of the body.

Marine and aquatic life such as fishes, shark, whale, marine plants like water lily and other cannot live without water. To conserve the marine life, water must be conserved. These aquatic fishes and plants also die in polluted water. So, it is necessary to conserve the clean and fresh water.

Plants require water for the production of glucose in the process of photosynthesis. If water is not present then plants will not be able to live and die soon. Moreover, plants also transpire water.

"Transpiration is necessary evil for plants"

Punjab Textbook of Biology (Class XII)

There are some strategies that must have to be followed to save and conserve clean and freshwater. First and foremost need is the construction of dams. These dams should range from small to large. It is better to construct many small dams at different places rather to construct a single large dam. So that, the storage capacity might be increased.

Introduction of drip irrigation system can also prove to be beneficial in conserving the water. In this system, every plant will get water of its need. So there will be no loss of water as in the case of flooded farms. This will not only conserve water but also this technique can grow a healthier plant.

Another strategy that is put forward by some analysts is that there should be a recycling process of clean and unpolluted water by passing through the filtration plant so that this water can be reused again for washing, agricultural and industrial purposes if not for drinking purposes.

Another important step that is needed to put forward is the removal of siltation from dams. As it is discussed already that Tarbela and Mangla dams are 35% and 25% siltated respectively. So, there should be followed some technique to increase the capacity of water storing within these dams.

'Water is very significant'. This concept should be made common. Government should conduct seminar and convene the masses to attend the seminar. In this seminar, there should be a discussion on the topic of "Water Crisis and its Conservation Technique".

Social media application and channels can also play their role by playing the advertisement of importance of water. There is a dire need to educate people through social media or other coverage channel to conserve water. Water must be used in a sustainable water.

"We are the last generation to step against the climate change"

Kofi Annan

Governments should take serious steps to conserve water. They should devise some strategies to conserve water. They should impose ban on excessive use of water. They should also think serious about the pollution of water that destroy the quality of drinking water and make it unfit for use.

It is concluded that water is very important part of an individual's life, agriculture, industry, marine life, aquatic plants, ~~ham~~ maintenance of homeostasis, energy production, and many more. The water becomes diminishing day by day due to anthropogenic activities such as excessive and insufficient use of clean and fresh water, flooded farm, no dams further constructed since 1980, no conservational strategy of flowing fresh water, inefficiency of dams, political instability and bad governance play crucial role in deficiency and loss of fresh water. Some strategies and viable techniques must be followed to conserve water such as Government should

take serious steps against the conservation of water and it should make some policies regarding this. Masses must be educated through social media, Television, Radio, Facebook, Instagram, YouTube etc. Seminars should be conducted to increase the awareness of importance of water. Capacity of existing dams should be come into focus. Recycling of clean water for the purpose of ^{laundry} washing, agricultural, industrial fields and construction of small and large dams can be effective techniques to manage the crisis of water.