

Using Flood as a Resource for Sustainable Energy

Running Title: Sustainable Energy System

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Abstract: Now world has become a Global Village due to advance communication technology in different sectors of our life and we are moving ahead so fast as we've never been before, with this super fast enhancement in our technology system we are also inviting Natural Disaster and one of the most frequent is "Flood". This paper is about the things which we can or we should do to avoid flood and it's effect, moreover we should use it for our sustainable energy system if we'll be able to do so then it will not only change the Nation's economic condition but will also increase the life expectancy of people living near river and other water bodies.

1. Introduction

All this technological enhancement are still lacking something when it comes to fight against Natural Hazards, even though we manage to know mandatory details about any hazard however we fail when it comes to save lives and resources of our country, every year this happens and get repeated, instead of solving it, Government give huge amount of money to the effected state which isn't wrong but also not the right solution. Hence, for solving this specific problem multiple solutions are listed in different sections of this paper. Basic ideas are converted into text in this paper few are being used and few are not so the main point of writing this paper is to show the options available to us to solve the problem of flood and use it as a resource if these ideas are converted into action either directly or by modifying it as per the requirement.

Operations with Water to Avoid Flood

We know the causes of flood, so here everything is water and there are many things which can be done with water apart from the basic need of fulfilling the thirst and those are -

- a) When water is converted into steam this produces electricity after passing through steam turbines. This steam is also used for -Drying i.e. to remove the moisture from the products, Humidification in low humid area and many more things are done by the use of steam. Now, why we should convert water into steam? Answer is because, this will reduce the amount of water from getting collected at one place and taking form of flood.
- b) Water Harvesting is done in different parts of country but it is not actively working or implemented where large amount of rainfall takes place so there should be strict rules and regulations to be set for practicing the technology of water harvesting by government, as we know not only our country but the whole world is facing the shortage of water for the survival so we should take important step like this to minimize this problem. Why water harvesting? Because this will again reduce the water which gets collected and takes the form of flood.
- c) Artificial Glaciers has been made in Phyang in Ladakh to solve the shortage of water in summer for the farmers and villagers. So taking this as an excellent example for water saving we should initiate this kind of process more to save more water in the desired resions. Now again, Why Artificial Glaciers?

Because this is also going to store water which may take the form of flood at that instant if not stored for using it when required.

How to perform the operation on water

Now we know, what are the things which can be done with water but the problem is 'how we are going to do it?' so in this section possibilities are listed which, when performed will fulfill the requirements of above.

- a) For converting water into steam we have to heat it so there are three ways to transfer heat to water- 1.Conduction 2.Convection 3.Radiation we can use any of these but the problem is How? First, if we make multiple station for converting water into steam within the city as there are number of mobile towers, we will be able to produce large amount of sustainable energy and at the same time we will again reduce the water level at the dams which will reduce the risk of flood. Second, instead of making multiple station in cities and towns we can do the same thing at the dam i.e. to convert water into steam, now this may sound crazy, impractical and thousand of question may arise but in today's era every thing is possible and the issue of flood is more dangerous then this idea.
- b) For storing water there are many methods but there are many water absorbing materials which can be used for storing water in large quantities because these materials can store 300 to 800 times of it's weight. We should take every action to avoid flood no matter what the action is.
- c) We should increase the use of rain water in our day to day life for example use of canals from rain water should be constructed and transfer of goods should be done through deep canals this will reduce the traffic problems on road and also the maximum amount of rain water will get used in canals which will be joining different states and cities.

So far, operation and how to perform operation has been discussed but the most important part is "Money" since no project is complete without cost estimation is done.

Every year more than \$40billion damage is caused by flood worldwide, according to the organisation for economic cooperation and Development. This is the damage which occurs to the nation along with this many people die every year and if we calculate the price of one death then it will be the lives of 8 people as one can donate their body parts after death which can save upto 8 lives and can enhance 100 lives according to American Transplant Foundation. Now i don't think there is any need to calculate the minimum budget for

solving the catastrophic flood because the savings which we will have cannot be compared with the investment which will be done on the technology to implement it.

2. Conclusion

At last, what matters is the upliftment of society, Nation and the life style of human beings which SES is mandatory than anything else and if we will solve the flood problem then this will definitely save our mother planet Earth either directly or indirectly.