



Environment and the Impact on Healthy Living With Respect to Safe Water and Proper Sanitation

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Abstract

The importance of having access to adequate and safe water, for Healthy living has been recognized worldwide. The major purpose was to highlights human developmental efforts on accessibility, availability of water and implication for healthy living. According to the United Million Development Goal, 2.6 billion persons live without access to improve sanitation such as latrine and nearly 900 million persons lack sources of safe drinking water.

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Introduction

The environment is a very broad concept, but simply put and according to Webster's New Colligatiote Dictionary, "Environment is the aggregate of all external conditions and influences affecting the life and development of organisms". However, the quest for development and attempt to improve the general standard of living of its people, the governments of most developing countries have pursued various programmes which have had negative consequences on the environments. A major component of which is climate change, which is already having effect on the world's hydrological cycles.

Scientific assessments have revealed the large social and environmental foot print of intensive agricultural, industrial and household contribution to climate change and the degradation of natural resources through the loses of habitats, biodiversity and water

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scarcity (United Nation, 2010). The primary focus of this paper is to examine the issues of impact of these developmental efforts such as land use management, deforestation, intensive agriculture and industrialization on water accessibility, availability, quantity and quality with their implications for individual and community health.

Water, Sources of Water and Pollution

Over large part of the world human have inadequate access to portable water and therefore use sources contaminated with vectors, pathogens or inaccessible levels of toxins in suspended solids which could lead to wide spread of acute and chronic illness which is a major cause of death. It is in the light of this that the United Nation came up with millennium declaration of providing safe drinking water for all, In one of the United Nation reports it was revealed that over one billion people use potentially harmful sources of water, as a result the organization has as one of its targets to have the proportion of people without sustainable access to safe drinking water and basic sanitation reduced by 2015.

Water is life. It makes up about 60 – 70% of the weight in adults and more in children. It also makes up 70% of the earth surface. Water is a crucial component of metabolic processes and serves as solvent for many bodily solutes. An average adult human takes 2 lit/day, hence the requirement for adequate and good quality water.

Access to water is a basic human right and the struggle for same exist between communities and within household due to the increasingly scarcity. We all need water for use but with different interest and priorities. The use of water amongst other includes.

- a) Drinking b) Sanitation c) Livestock d) Gardening e) Fisheries f) small scale enterprises g) Cultural and h) Ceremonial uses – all of which are vital for health with potential conflicts arising from competing claims.

The sources of water are:-

- a) Rain fall b) Surface streams c) Ponds d) Lakes e) Wetlands f) Ground water g) Spring h) Mountainous Stream – all of which are subject of pollution through the following:-

1. **Intensive Agriculture:** - Intensive Agriculture involve mono-cropping with it attendance destruction of environment due to enormous amount of pesticides

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2. and chemicals use thus leaving the land with loads of chemicals. Industrial farming is also a kind of disaster when it comes to climate change.
3. **Deforestation:** - People overtime have seen forest as a source of alternative income and energy, therefore, trees are being cut down for sales and home use thus degrading the land and exposing the soil to erosion causing sedimentation, pollution and turbidity of water, making water unsuitable for human consumption.
4. **Land use:-** In addition to the above, changes in land use have contributed largely to change in river flow with increasing high runoff resulting into many downstream pollution with attendance poor quality of water.
5. **Industrialization and Domestic:** - Effluents from these sources are not often treated before they are discharged into bodies of water or land. Thus causing pollution with serious impact on the quantity and quality of water resources.

Challenges

The world's problems relating to water are well known. Statistics have revealed that thousands of children die before the age of 5 as a result of diseases caused by poor water quality. Some of these challenges can be classified as impacts below.

Health Concern

The Health problems associated with in adequate water supply, poor sanitation, and unsafe hygiene practices are enormous and are such as water borne disease, cholera, typhoid, helminthic, skin and eye infections, schistosomiasis, danque, yellow fever, skin diseases, diarrhea and malnutrition.

Social Impact

1. Fetching water is a time consuming activity. Children sometimes miss school because they have to fetch water and the old that cannot make the arduous trips down to stream have to pay others to get the water for them.
2. Much precious time is spent on trekking to stream to wash clothing and all of these results in reduced consumption and use of water.

3. Lack of water also limits the possibility of practicing of aquaculture and or processing of food product. This factor impact economic development in many parts of the world, mostly in developing countries.

Strategies for Management and Control of Water Use

Water resources are managed at different levels and scales from village to National level. The following strategies are considered:

1. A participatory planning and management programme must be put in place.
2. Sanitation is the hygienic means of promoting health through prevention of human contact with hazards of waste, which could be physical, biological chemical agents of diseases. Inadequate sanitation is a major cause of disease worldwide and improving sanitation is known to have a significant beneficial impact on health both on household and across communities. Therefore, there is need for stakeholder dialogues between villagers and government officials for the villagers to actually take responsibilities for sanitation.
3. The state department should be committed to repair of old and rusty pipes.
4. Local value knowledge and practices could be incorporated into natural resources management.
5. The state/local government should invest and provide water treatment plant and distribution system that will ensure adequate and quality water.
6. Current agro-cultural practices could be changed to improve the ground vegetation cover and reduce erosion which in turns reduce the regimenting load in the surface water.
7. The government should as a necessity plan public water scheme for multiple use and according to peoples priorities.
8. There should be multi-disciplinary approach to water resources management involving soil scientist, hydrologist, geographer etc.

9. Water quality should be frequently tested for Arsenic, coliform bacteria and nitrate before being distributed for public consumption.
10. There should be proper disposal of water and toxics e.g. provision of functional latrine.
11. There should be provision of simple kits checking the quality of water for the presence of harmful organisms.
12. Well water should be purified.
13. Change our habits.
14. Ponds, stream etc. should be treated as common properties.
15. Provision of alternative income source to reduce the rate of trees falling

Conclusion

According to the United Million Development Goal, 2.6 billion persons live without access to improve sanitation such as latrine and nearly 900 million persons lack sources of safe drinking water. Suffice is to say that an effective disease prevention strategy depends on addressing safe drinking water, sanitation and hygiene as the three most important conditions for keeping individual and communities healthy. They contribute to the prevention and control of diseases.

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