



ORIGINAL RESEARCH PAPER

Environmental Science

WATER RESOURCE, NEEDS AND DEVELOPMENT

KEY WORDS: Resources, Biotic, A biotic, Management, Environment

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ABSTRACT

Water resources are sources of water that are potentially useful. India being an agricultural country, water has serviced as the most important resource for agriculture. Use of water includes agricultural, industrial, households, recreational and environmental activities. Drinking water supply and sanitation in India continue to be inadequate, despite longstanding effort by the various levels of government and communities at improving coverage. Investing in water is good business – improved water resources management and improved water supply and sanitation contributes significantly to increased production and productivity within economic sectors. The overall public and private investment needs for improved water supply and sanitation and improved water resources management are considerable.

A resource is a source or supply from which benefit is produced. An item becomes a resource with time and developing technology. Typically resources are materials, energy services, staff, knowledge or other assets that are transformed to produce benefits and in the process may be consumed or made unavailable.

Resources can be broadly classified on the basis of their availability they are renewable and non-renewable, on the basis of level of development and use, they can be classified as actual and potential, on the basis of origin they can be classified as biotic and a biotic and on the basis of their distribution they can be classified as ubiquitous and localized. Benefits of resource utilization may include increased wealth or wants, proper functioning of a system or enhanced wellbeing. From a human perspective a natural resource is anything obtained from the environment to satisfy human needs and wants.

Biotic natural resource also includes fossil fuels such as coal and petroleum which are formed from organic matter that has decayed. A biotic: These resources come from non-living and non-organic material. Examples of these resources include land, fresh water, air and heavy metals gold, iron copper silver etc. Resource have three main characteristics; utility, limited availability and potential for depletion or consumption.

Water resources

G.H, Huang and J, Xia, “Barriers to Sustainable Water-Quality Management”, Journal of Environmental Management, 61 (2001):19

Water resources are sources of water that are potentially useful. Use of water includes agricultural, industrial, households, recreational and environmental activities. All living things require water to grow and reproduce.

97% of the water on the earth is salt water and 3% is fresh water; slightly over two thirds of this is frozen in glaciers and polar icecaps. The remaining unfrozen fresh water is found mainly as ground water. With only a small fraction present above ground or in the air.

Fresh water is a renewable resource, yet the world’s supply of ground water is steadily decreasing with depletion occurring most prominently in Asia, South America and North America.

Importance of water resource in India

India being an agricultural country, water has serviced as the most important resource for agriculture. Next to China, India has second largest acreage of irrigated land in the world. In a

monsoon country with a characteristic dry season and variability of rainfall, mans ingenuity has long been exercised to reduce his dependence on nature. The story of water is the story of Indian civilization, indeed, all civilizations. Fifty centuries ago the Mohenjo-Daro civilization of Indus valley enjoyed the benefits of well-designed water supply and even public swimming pools and baths.

Modern civilization has increased the importance of water as a resource. Economic progress of India is not only tied with agricultural development, but also with industrial development for which requires hydel power, water for industry, and for domestic use in the ever-growing urban settlement.

Different types of fishes in other animals live in the sea water. Another wealth of the sea are minerals. Among them sodium chloride or edible salt, monazite, manganese nodule and magnesium are the most important. Sea is also a very important source of gas petroleum and renewable energy resources.

Water supply and sanitation in India

Drinking water supply and sanitation in India continue to be inadequate, despite longstanding effort by the various levels of government and communities at improving coverage. In 1980 rural water sanitation coverage was estimated at 1% and reached 21% in 2008. Also the share of Indians with access to improved the sources of water has increased significantly from 72% in 1990 to 88% in 2008. At the same time, local government institutions in charge of operating and maintaining the infrastructure are seen as weak and lack the financial resources to carry out their functions. In addition, only two Indian cities have continuous water supply and according to an estimate from 2008 about 69% of Indians still lack access to improved sanitation facilities. A study water Aid estimated as many as 157 million Indian living in urban areas, live without sanitation. India comes top for having greatest number of urban cities living without sanitation.

Water Resource And Economic Development

Better access to clean water, sanitation services and water management creates tremendous opportunity for the poor and is a progressive strategy for economic growth. Improved water supply and sanitation and improved water resources management boost countries' economic growth and contributes greatly to poverty eradication. The economic benefits of improved water supply and – in particular – sanitation far outweigh the investment costs, surprisingly good news for Northern and Southern decision makers who often view investments as mere costs. National economies are

more resilient to rainfall variability, and economic growth is boosted when water storage capacity is improved. Investing in water is good business – improved water resources management and improved water supply and sanitation contributes significantly to increased production and productivity within economic sectors.

The overall public and private investment needs for improved water supply and sanitation and improved water resources management are considerable. However, at the country level, meeting such investment challenges is highly feasible and within reach of most nations. The poor gain directly from improved access to basic water and sanitation services through improved health, averted health care costs and time saved. Good management of water resources brings more certainty and efficiency in productivity across economic sectors and contributes to the health of the ecosystem. Taken together, these interventions lead to immediate and long-term economic, social, and environmental benefits that make a difference to lives of billions of people.

CONCLUSION

The water resource has played a major role in past socio-economic development and will continue to be intimately related to human welfare in the future. Many current water problems demonstrate a need for improving existing relationships between the resource and human activity. Increased irrigation and improved operation of existing projects are viewed as an essential aspect of reducing hunger. Improvement in domestic water supplies and sanitation services is a basic component of programs to improve health and general living conditions. Reduction in loss of life and property from flooding and reduction in the occurrence of water-related diseases are essential components of welfare in many nations. Accompanying these material needs is increased recognition of the importance of natural environments as a contributor to psychological welfare as well as the basis of ecological stability on which human health ultimately depends. The fact that water resource conditions are complementary to many other development inputs indicates the ultimate futility of viewing water management in isolation and mandates a close relationship with many other socio-economic factors essential to the development process.

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