

GEOG 371 Rural Water Supply and Sanitation

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Mid-term Q(2)

Write an essay about the formal efforts of providing rural water supply that started in the 1960s and show the benefits generated by the provision of water supply to the rural areas of the developing countries? Give 4 examples from peer reviewed journals.

- Availability of water supply is the main factor behind human settlement and the distribution of population.
- Human being used to be hunters and gatherers and they were in a continuous move searching for food.
- However, during the Neolithic time 3,000 years ago, people settled near water sources and they started to grow crops.
- That was a turning point in the history of human being which is followed by the growth of civilizations.
- **Human settlements and population distribution before the 1960s**
- Before the 1960s which is considered the official beginning of the provision of water supply for the developing countries, people (farmers and herders) settle near small water sources.
- As a result, they are distributed in a wide area and found in small groups. In many cases they migrate other places fetching for water after the dry up of these sources.
- In general, people suffered in getting water.
- Sources of small water points include: natural ponds, intermittent and seasonal streams, springs and shallow hand-dug wells
- **Drilling of boreholes and construction of artificial ponds (hafirs)**
- Since availability of water supply is the main factor of development, the United Nation started the first official program of development for the developing countries in the 1960s.
- The decade of the 1960s was considered the first formal international development effort
- The program is called United Nation Development Program (UNDP).
- One of the main aims of this program is to provide safe drinking water for the people of the developing countries mainly in the rural areas.
- Improvement of water supply in the developing countries took two forms.
- These are drilling of boreholes and construction of artificial ponds (hafirs)
- **Drilling of boreholes**
- Since water supply is an important part of development, the international community in the 1960s helped the developing countries with finance, technology and training.
- However, thousands of boreholes were drilled through technical revolution in the decade of the 1960s onwards.
- As a result, tens of thousands of liters have become available daily in each water yard where we find boreholes.

- Borehole is a well of more than 60 meters deep.
- As a result, 1960s was considered the first formal international development effort with the establishment of the United Nations Development Program (UNDP).
- **Construction of artificial ponds (hafirs)**
- In areas where there is a basement complex, artificial ponds (hafirs) have been constructed by the Governments, using heavy earth-moving machinery.
- Basement complex is a geological formation which is known to be poor aquifers.
- Poor aquifers mean poor or no groundwater.
- Therefore, artificial ponds are constructed as a sort of rainwater harvesting.
- Hand-dug wells were dug in some areas of the basement complex since they provide few amounts of water supply.
- **Benefits of provision of rural water supply**
- Provision of rural water supply generated many benefits for the rural people and the process of development in general. These include:
 - 1-Settlement and increase of population around water points so that they can be provided with social services such education and health services.
 - 2- Enhance development through change from subsistence to commercial economy since both farmers and herders are considered a subsistence economy.
 - However, the development of commercial production also encouraged settlement of the nomads through the establishment of organized markets
 - 3- People from different tribal background will interact together at the water points and exchange ideas and knowledge in terms of production and marketing.
 - 4- Safe water supply will reduce water-borne diseases such as diarrhea, cholera and dysentery.