

ABSTRACT

Providing A Water Supply To New And Underserved Communities In Trinidad

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There are many places in Trinidad, which either have no water supply or an inadequate supply. Approximately ninety (90) percent of the population has access to a treated water supply and the remaining ten (10) percent do not enjoy that luxury. They have to depend on rainwater or rivers and ponds. Approximately eighteen (18) percent of the 90% population receives a twenty four (24) hours, seven (7) day week treated water supply while the remaining seventy two (72) percent has an inadequate supply.

In light of the foregoing, this project will identify the affected areas, and recommend development programs and strategies to bring about the delivery of a reliable supply of potable water to the communities, in a short time frame and within minimal cost. Some benefits that will be derived from this study are improved cleanliness, reduction of health problems associated with water diseases, reduced environmental pollution and an improved way of living.

The Water and Sewerage Authority has the responsibility for the development of a National Water Supply System in Trinidad and Tobago.

The assumption therefore can/will be made that the Authority has prioritized the development of water supply systems to the extent that by 2020 all communities will be properly served by a reliable water service.

The 2020 vision is one articulated by the Government of Trinidad and Tobago, who is a major stakeholder in the Authority. Communities identified as being affected by poor water supply service will be assessed within the context of this vision. It is therefore the intention of the author to address this vision with the alleviation of water problems to rural communities.

Although, focus by the Authority may be on achieving the stated vision by the installation of additional pipelines and booster stations, there are other problem areas to be considered. These are aged pipelines and infrastructure that have passed their maximum service life period, the

problem of leaks and “unaccounted for” water and the uncontrolled consumption of treated water.

The project will first look at the history of the Authority from its inception in 1965 to its present situation. It will also look at the production and the supply of water, in addition to the structure of the Board and the tariff system in place.

This project will consider an alternative method of recovering water and utilization of this recovered water for the use of supplying the underserved communities. It will look at the recovering of the 40% to 50% of water lost to leaks and misused by the customers. The project will suggest a method of first identifying the areas where the water is lost and then a method of repairing the leaks or replacing lines and using conservation of water. It will also look at the constraints and restrictions that the Authority experiences, an alternative supply and the cost involved.

At the end of the project, one would realize that the option presented pertaining to identifying the leaks and correcting them, and the teaching of the population about water conservation will go a long way in reaching the vision of the Water and Sewerage Authority.

Keywords: Mark Anthony Govia; Access to treated water supply; Delivery of reliable supply of potable water to communities; 2020 vision; Aged pipelines and infrastructure; “Unaccounted for” water; Leaks; Tariff; Recovered water; Water conservation.