

II RURAL WATER DEVELOPMENT IN KENYA : A  
CASE STUDY OF VIHIGA DIVISION, KAKAMEGA DISTRICT

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JANE IMUNGU AKELOLA

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A B S T R A C T

The last fifteen years have witnessed increasing attention being focused by the Kenya Government on the needs of the rural areas in the country in an effort to raise rural standards of living as part of the overall strategy for economic development. As part of the new emphasis, the improvement of the health of the rural population through the provision of clean water has been identified as an essential component. To this end, the Kenya Government has undertaken as its national policy, the eventual provision of piped water supplies to the entire population in the country, by the year 2000. This is a major undertaking, since the rural population accounts for over 80% of the total population in Kenya.

This study concerns itself with a detailed examination of some of the problems likely to be encountered by the Government in its attempt to implement the implied policy declaration, to provide "piped water for all". The study accepts the basic assumption that effective design and development of water supply projects in the rural areas of Kenya is an essential constituent for stimulating the economic development of these areas. The success of such projects is dependent upon many considerations, which are closely linked with efforts at raising rural living standards.

Vihiga Division of Kakamega District was selected because it was regarded as being ideal for the study. Although it is located in a wet part of Kenya, it has a very high rural population density (about 1000 per square kilometre) and an equally rapid population growth rate of 4.1 percent per annum. It has been assumed that the population issue is bound to manifest itself in the provision of rural water supplies in the Division. The main objective of this study was to derive a general theory on the fundamental concepts of water supply development in Vihiga Division. In this context, the general null-hypothesis investigated states that environmental and socio-economic factors do not significantly affect water supply development in Vihiga Division.

Regression analysis was used on part of the data collected in the field, covering factors impinging upon rural water supply development. Statistically significant relationships were found to exist when socio-economic data such as household population, education, distance to and from water source, per capita water consumption, and time taken to fetch water, were regressed.

The study also includes an investigation into selected environmental factors influencing water development. It revealed that Vihiga Division has



many natural advantages. For example; it has good aquifers and ample natural sources of water supply. However because of the high population density most of these sources are liable to pollution, thereby posing a clear health hazard. It is for this reason that treated water supplies are necessary.

Unfortunately treated supplies require piped connections to communal points or to individual households. It is expensive to supply each family with individual connections and a majority of the rural people cannot afford to pay for them. The high cost of pipes and fittings is therefore a major hinderance to the provision of piped water supplies to rural families. These and other findings suggest that economic considerations constitute a major problem in the provision of piped water supplies not only in Vihiga Division, but in many similarly affected areas of rural Kenya.

It is concluded that any efforts to quicken the pace of rural water supply development, must address itself particularly to the question of rural incomes. Development planners will also need to evaluate the present strategies used to supply piped water to rural areas and suggest cheaper alternatives. The value of self-help in the achievement of water development targets needs to be emphasised, as the current level of participation in Vihiga Division is rather low.

Recommendations for further research include the need for a study of the efficiency with which the current water supply projects are executed, particularly in relation to cost and level of utilisation. It is also recommended that a detailed perception study be carried out to establish the circumstances under which rural families will readily switch from natural sources to piped water supplies.