


# Chapter 30

## Water and Sanitation Infrastructure Access in Selected Rural Communities


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### ABSTRACT

*Access to potable water and sanitation promotion is critical to public health and community development. The rural communities of Garatu and Gidanmangoro were selected for a comparative investigation of the challenges households faced in accessing water and sanitation facilities. The study used primary data collected through survey questionnaire administration. Findings revealed that many of the respondents are female. In Garatu, 79%, and Gidanmangoro, 56%, have access to boreholes, while no residents of the two communities have access to the pipe water. The results also indicated that only about 17% of respondents have access to a water closet facility. The study revealed that the challenges associated with access to water and sanitation facilities include slow pace of domestic and commercial activities, household children absence or lateness to school, water unaffordability, and social friction and quarrels resulting from the long queue at the water point. It is recommended that attention be placed upon potable water facilities to improve household access in rural communities.*

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## **INTRODUCTION**

In the past few decades, water and sanitation have received policy attention by regional and international organizations such as the African Union and the United Nations (ECA, 2000; Hope et al., 2020). Access to water and sanitation was a central theme of the Millennium Development Goals (MDG) (1990 to 2015) of the United Nations (UNICEF/WHO, 2006). Even the active agenda of the Sustainable Development Goals (SDG) has it as one of the exclusive goals pertinent to reaching the envisaged sustainable human settlement. In essence, access to water and sanitation is seen as a human right that should be accessible to everyone, irrespective of gender or race (UN-Habitat, 2010).

However, the inaccessibility to potable water and securely managed sanitation infrastructure worldwide is alarming, having a greater magnitude in Africa (Montgomery & Elimelech, 2007; Mutschinski & Coles, 2021). For example, the WHO/UNICEF (2019) estimated that 2.2 billion and 4.2 billion of the world population have no access to safe water facility and secure sanitation infrastructure, respectively. In many African countries, like Nigeria, one-third of the people in most communities are denied their human right to access water and sanitation (WHO, 2019). However, the implications of its inaccessibility cannot be overemphasized. Different empirical investigations have associated the inaccessibility with possible health issues (like Diarrheal, Schistosomiasis, Intestinal helminths, etc.) and economic burden (Yasin et al., 2015; Aketch et al., 2016; Hope et al., 2020).

The burden of inadequate water and sanitation infrastructure is most severely felt by women and girls in developing countries (Fink et al., 2011; Assefa et al., 2021; UNICEF, 2021). This may be because they are saddled with the responsibility to collect water in 8 out of 10 households (UNICEF/WHO, 2017). Also, it is expedient to note that women have a hygienic obligation during menstruation, childbirth, and pregnancy, which require access to water. Unsafe sanitary practices, besides the health implications, expose them to the risk of being attacked or assaulted (UN-Habitat, 2021). These threats, perhaps, have influenced the submission of earlier empirical studies on the gender dimension of water and sanitation access. For instance, Bayu et al. (2020) examined unequal access to sanitation from the lens of governance. They suggested that the influence of social and political dimension in water governance can be observed to increase women's entry in developing nations. Pouramin et al. (2020) submitted that policy attention to address water and sanitation inequities could lessen disease and infection burden, will and significantly aid reaching the SDGs 3, 5 and 6. This can be reinforced by Ivens (2008) and UNICEF (2021), who submitted that attention to addressing gender disparity in water and sanitary access would economically benefit women and girls. Hennegan et al. (2018) reported that sanitation determines the choice of menstrual management made by women in Kaduna city, Nigeria. These, however, highlight the importance and need for women to have adequate access to safe water and secure sanitation to upscale their comfort.

Consequently, it is expedient to state that few studies in the gender dimension of access to essential services have been explicitly focused on rural communities. Therefore, this paper explores and contributes to knowledge on access to water and sanitation infrastructure in the selected rural communities of Minna, Nigeria. The communities (Garatu and Gidanmangoro) are within the peri-urban-rural corridor of Minna, Niger State, Nigeria (Sanusi and Akande, 2020). Iterating the environmental shocks in Minna, Idowu et al. (2020) wrote that spatial challenges, which included limited access to water and sanitation facilities, are standards in peri-urban areas such as Garatu and Gidanmangoro communities of Minna. Adeleye et al. (2014) reported that water queues and increasing travel distance to the nearest potable water source are common in Minna, Northern Nigeria. The author presented that few households connected to public

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