

EXECUTIVE SUMMARY

The Royal Audit Authority (RAA) had conducted the “Performance Audit on Provision of Drinking water in Thimphu Municipality” as mandated by the Constitution of the Kingdom of Bhutan and Audit Act of Bhutan 2006. The audit was conducted following Performance Audit Guidelines, which is in line with the International Standards of Supreme Audit Institutions (ISSAIs). The objective of the audit was to ascertain the efficiency and effectiveness of Thimphu Municipality in providing safe, adequate, reliable and equitable drinking water to the beneficiaries. To meet this objective, the RAA had adopted the following major researchable questions:

- i. Are drinking water sources identified and do the identified sources meet the demand of residents of Thimphu Municipality?
- ii. Are the residents of Thimphu Municipality provided with equitable and sufficient drinking water?
- iii. Is drinking water provided in Thimphu Municipality safe for human consumption?

The Performance Audit was conducted in the areas falling under the jurisdiction of Thimphu Thromde and the period covered was from 2010 to 2016. Although the principal agency was Thimphu Thromde, the audit team had also visited Ministry of Works and Human Settlement (MoWHS), National Environment Commission Secretariat (NECS) and Ministry of Health (MoH) for additional information. A survey on adequacy of water supply and efficiency of Thimphu Thromde in providing water related services was carried out with the residents of Thimphu Municipality.

In Bhutan, providing access to safe drinking water to all citizens is regarded as an important element not only because of abundant availability of water but also to achieve Bhutan’s goal of Gross National Happiness (GNH). It is also enshrined as an individual’s right in the Water Act of Bhutan 2011 stating, “Every individual shall have access to safe, affordable and sufficient water for basic human needs”.

Further, Thimphu, being the capital city of the country, has almost 20% of the country’s population and 90% of the population of Thimphu has piped water connection. Nevertheless, the rapid urbanization of the city and population growth pose challenges for efficient water supply system in the Municipality leading to inadequate and unequal distribution of water and huge wastage of water in the water distribution network system.

The positive accomplishments included the existence of the Water Act of Bhutan 2011, Water Regulation of Bhutan 2014, Bhutan Drinking Water Quality Standard 2016, and Water Safety Plan (WSP) to guide all relevant stakeholders in managing water resources efficiently and effectively at the National as well as local level.

Notwithstanding the positive accomplishments, some of the deficiencies and lapses are summarized below:

1. The water supply by zone shows that there is unequal distribution of water and water shortages at ground in certain areas.

2. Irregularities in water distribution network such as illegal tapping, water connection bypassing water meter, approval of water connection from transmission lines, provision of more than one water connection per dwelling, water supply diverted to community water tank were noted.
3. During the period 2010-2011 to 2015-2016 revenue amounting to Nu. 28.49 million were lost as a result of loss of water in the water distribution network system.
4. Water charges were never imposed and collected by the Thromde for the water supplied from Megaypang water treatment plant to Babesa, Lungtenphu and Olakha as of June 2017 causing a loss of revenue amounting to Nu. 20.37 million.
5. Many residents in Thimphu Municipality are still using water supply from private and community water sources, despite the Water Regulation of Bhutan 2014 requiring the Thromdes water supply system to be the only source of potable water supply system within the Municipality's jurisdiction unless this is technically not feasible.
6. Although presence of faecal coliform was noted during water quality testing, testing was not carried out on regular basis, which may result in outbreaks of water borne diseases. Moreover, Thimphu Thromde had never tested water quality in schools and institutes, though the nature of the consumer warrants so.
7. Despite significant lapse of time, the master plan for national drinking water is not yet formulated to identify available options to guarantee that there is sufficient quantity and quality of water for future generations.
8. Thimphu Thromde had not instituted monitoring system for supervision of the water network system. The absence of monitoring system had led to huge loss of water, water revenue and interruption in water supply.

Based on the audit findings, the RAA has provided 15 recommendations that are aimed at improving management of drinking water in Thimphu Municipality.

Despite having strong legal framework on water resources management and also adequate drinking water at source, the RAA observed several management deficiencies in the provision of drinking water in Thimphu Municipality, where improvements are desirable. Thimphu Thromde being the main agency in provision of drinking water in Thimphu Municipality should formulate appropriate strategies, make effective decisions and institute systems and processes to provide safe, adequate, reliable and equitable drinking water to its population.