







GHANA 2010 AND 2021 POPULATION AND HOUSING CENSUS

# WATER REPORT





THE COORDINATED PROGRAMME OF ECONOMIC AND SOCIAL DEVELOPMENT POLICIES 2017-2024

AN AGENDA FOR JOBS: CREATING PROSPERITY AND EQUAL OPPORTUNITY FOR ALL



TRANSFORMING OUR WORLD
THE 2030 AGENDA FOR SUSTAINABLE
DEVELOPMENT

## **ADMINISTRATIVE MAP OF GHANA**



#### **FOREWORD**

The Ghana 2021 Population and Housing Census (PHC) was conducted to provide updated demographic, social and economic data for research, policy and planning to support national development activities. The PHC also helps to track the implementation of national, continental, and global development goals, such as The Coordinated Programme of Economic and Social Development Policies (2017-2024), An Agenda for Jobs: Creating Prosperity and Equal Opportunity for All; AU Agenda 2063: The Africa We Want; and Transforming Our World: The 2030 Agenda for Sustainable Development.

As Ghana's first fully digital census, the 2021 PHC was able to present the country and the global community with timely data within three months of exiting the field. The report highlights the resourcefulness of the census, which is the only national data collection exercise that can provide the lowest levels of disaggregation to support decentralised decision making across the nation. The Water Report presents a comparative analysis of the 2021 and 2010 PHC using the Housing module of both the 2010 and 2021 PHC questionnaires.

The Water Report has details of Households' Main Sources of Drinking Water, Households with source of drinking water on premises, Average Time Spent by Households without drinking water on premises to Access Drinking Water, and Households that Use Improved Water as Main Sources of Drinking Water by region, district, and type of locality.

This publication generally targets Government Ministries, Departments, and Agencies (MDAs), Metropolitan, Municipal and District Assemblies (MMDAs), development partners, civil society organisations (CSOs), private sector, researchers, and the general public. The report particularly seeks to provide basic data to MMDAs to assist them achieve their core function as stipulated in the 1993 Local Government Act (Act 462) — that is, to aid decentralised planning and provision of public services in all districts for the development of local economies. This is important because the 2021 PHC realigned with the 2010 PHC provides the first set of comparative official statistics on the recently created regions and districts.

The central premise of the Sustainable Development Goals, which is to "leave no one behind," requires disaggregated data to inform settlement arrangements, identify areas of sub-national disparities and make vulnerable groups more visible to decision makers. This report thus sets the tone for further analysis of disaggregated indicators on sources of water used by households.

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We are also indebted to our partners and collaborators, notably the United Nations Population Fund (UNFPA), United Nations International Children's Emergency Fund (UNICEF), World Bank, European Union (EU), International Organisation for Migration (IOM), United Nations Development Programme (UNDP), United Nations Economic Commission for Africa (UNECA), United Kingdom Office for National Statistics (ONS), Statistics Denmark, Geo-Referenced Infrastructure and Demographic Data for Development (GRID3), Jospong Group of Companies, IPMC Ghana, telecommunication companies, CalBank, Windy Lodge Beach Resort, and tertiary institutions for their technical, logistic, financial support, publicity, education, and advocacy campaigns that led to the effective and efficient management of the census processes.

GSS also appreciates the contributions of the general public, the media, all census officials and field officers for ensuring a successful enumeration.

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#### ABBREVIATIONS AND ACRONYMS

CSOs Civil society organisations
EC Electoral Commission

EU European Union

GES Ghana Education Service
GoG Government of Ghana

GRID3 Geo-Referenced Infrastructure and Demographic Data for

Development

GSS Ghana Statistical Service

IOM International Organisation for Migration

IT Information Technology

MDAs Ministries, Departments, and Agencies

MMDAs Metropolitan, Municipal and District Assemblies

NCCE National Commission for Civic Education
ONS United Kingdom Office for National Statistics

PHC Population and Housing Census SDGs Sustainable Development Goals

UNICEF United Nations International Childrens Emergency Fund

UNDP United Nations Development Programme

UNECA United Nations Economic Commission for Africa

UNFPA United Nations Population Fund

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PHC Population and Housing Census SDGs Sustainable Development Goals

UNICEF United Nations International Childrens Emergency Fund

UNDP United Nations Development Programme

UNECA United Nations Economic Commission for Africa

UNFPA United Nations Population Fund

CSOs Civil society organisations EC Electoral Commission

EU European Union

GES Ghana Education Service

GoG Government of Ghana

GRID3 Geo-Referenced Infrastructure and Demographic Data for

Development

GSS Ghana Statistical Service

IOM International Organisation for Migration

IT Information Technology

#### **CHAPTER ONE**

# 1. OVERVIEW OF USE OF WATER IN GHANA'S POPULATION AND HOUSING CENSUSES

#### 1.1. Background Information

Access to safe drinking water and sanitation is vital for promoting good health, well-being, and productivity, and it is universally acknowledged as a fundamental human right. The provision of adequate drinking water and sanitation services plays a crucial role in preventing the transmission of various diseases, including cholera, diarrhea, dysentery, hepatitis A, typhoid, and polio.

Water plays a crucial role in achieving sustainable development and addressing global challenges outlined in the United Nations' Sustainable Development Goals (SDGs). SDG 6 specifically emphasizes the importance of ensuring access to clean water and sanitation for all. Ghana, as a signatory to the SDGs, has aligned its national policies and strategies with the global agenda to address water-related issues comprehensively.

In addition to the SDGs, Ghana is committed to regional policies and frameworks that promote sustainable water management. The African Union's Agenda 2063, for instance, envisions a prosperous Africa founded on inclusive growth and sustainable development. Within this framework, equitable and sustainable use and management of water resources are essential for socio-economic development, regional cooperation, and environmental preservation.

At the national level, Ghana has formulated policies and strategies that prioritize water access, management, and sanitation. The Coordinated Programme of Economic and Social Development Policies (CPESDP) (2017-2024) serves as the foundation for Ghana's current growth and development agenda. Under this program, water and its management are recognized as vital components for human development, with linkages to other development priorities.

To assess the progress made in sanitation, this report also considers the indicators and benchmarks set by the Joint Monitoring Programme (JMP) for Water Supply, Sanitation, and Hygiene. The JMP, a collaboration between the World Health Organization (WHO) and the United Nations Children's Fund (UNICEF), provides a standardized framework for monitoring global progress in water and sanitation. By analyzing the JMP indicators, we can evaluate Ghana's performance and identify areas that require targeted interventions.

This report examines the water situation in Ghana through the lens of these global goals, regional policies, and national policies. By comparing the data from the 2010 and 2021 censuses, we can evaluate Ghana's progress in aligning with these frameworks and identify areas where further efforts are needed. The analysis delves into key indicators such as access to water sources for both drinking and domestic uses according to the water service levels, and time taken to collect water from source and return.

By highlighting the achievements, challenges, and areas for improvement, this report aims to contribute to evidence-based decision-making and policy formulation. The report serves as a valuable resource for stakeholders, policymakers, researchers, and organizations working towards sustainable water management and equitable access to water resources in Ghana. Ultimately, the findings presented herein will inform interventions and strategies to propel Ghana closer to achieving its water-related global, regional, and national targets.

#### 1.1.1. Rationale

This water report, which is a collaboration between Ghana Statistical Service (GSS) and UNICEF, aims to provide a comprehensive analysis of the current state of water in Ghana based on data from the 2010 and 2021 PHC. By examining the progress made, identifying gaps, and analysing the policies and strategies in place, we can develop targeted interventions and recommendations to accelerate progress towards achieving universal access to safe and sustainable water sources in Ghana.

Various projects have been implemented on water and sanitation interventions in targeted districts between the 2010 and 2021 intercensal period. The 2021 PHC provides basic data for evidence-based policy formulation, planning and monitoring of development goals. Comparative analysis of the 2010 and 2021 census data at the national, regional and district levels will provide credible country statistics to assess progress to inform sector policy and strategy, an immediate need for the final validation session for the water Financing Assessment. The Comparative analysis will provide the linkages of country data, particularly, the Census with JMP. Also the analysis will create sector awareness as there is limited understanding of the linkages between data generated by the GSS as country data and the data published by the JMP. The challenges caused by this limited understanding increased with the recent publication of the Census results and with the different classifications used for WASH coverage, particularly sanitation. There is an urgent need to have this clarified as soon as possible to ensure sector harmony in tracking progress.

In view of this, UNICEF is partnering with GSS to come up with statistics which conform to the JMP standards based on the last two censuses to monitor the intervention programmes at all levels. The specific activities to be undertaken have been outlined as follows:

- 1. Form a technical working group to review data, analyse trends, and identify lessons to be drawn.
- 2. Generate national, regional and district level data from the two censuses and prepare a report for sharing with the WASH team.
- 3. Convene a sector forum to share results in collaboration with UNICEF and MSWR to implement the dissemination plan.

The next sections present the Definition of Concepts, Highlights, Key Findings, Conclusion and Appendices.

### 1.2. Definition of Concepts

#### 1.2.1. Improved Water

Improved water refers to water source that is likely to be protected from outside contamination such as pipe borne water, borehole, tube well, protected well, rainwater, protected spring, bottled water, and sachet water.

#### 1.2.2. Basic Services - Drinking Water

This refers to the provision of improved sources of drinking water either in the dwelling/yard/plot or within 30 minutes round trip collection time.

#### 1.2.3. Limited Services - Drinking Water

This refers to the provision of improved sources of drinking water available beyond 30 minutes round trip collection time.

#### 1.2.4. Unimproved Water

Unimproved water refers to water whose source is not adequately protected from outside contamination, such as unprotected well, unprotected spring, tanker supply, vendor-provided, dugout, pond, lake, dam, canal, and river/stream.

#### **CHAPTER TWO**

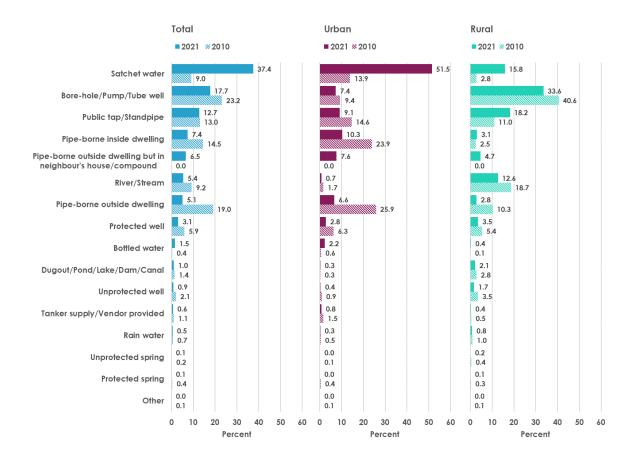
# 2. HIGHLIGHTS OF HOUSEHOLDS' MAIN SOURCES OF DRINKING WATER

The main source of drinking water for households in 2010 was pipe-borne of all types (46.5%) but sachet water (37.4%) in 2021. Use of all sources declined except sachet and bottled water in 2021.

Proportion of households that use sachet water increased more than four times between 2010 and 2021.

Proportion of households that used pipe-borne water increased from 23.8 percent in 2010 to 28.8 percent in 2021 in rural, but decreased by almost half over the same period in urban areas.

FIGURE 2.1: HOUSEHOLDS' MAIN SOURCE OF DRINKING WATER BY TYPE OF LOCALITY, 2010 AND 2021.



In Central, Greater Accra, Volta, Eastern and Ashanti regions, sachet water is the most used main source of drinking water by households, whiles the use of borehole/pump/tube well is dominant in 10 regions (See Figures 2.2 to 2.17).

The use of pipe-borne water as the main source of drinking water declined in 8 regions (Western, Central, Greater Accra, Volta, Eastern, Ashanti, Ahafo and Bono) and increased in 8 regions (Western North, Bono East, Oti, Northern, Savannah, North East, Upper East and Upper West) between 2010 and 2021.

In 2021, a relatively higher proportion of households used surface water as the main source of drinking water in seven regions (Savannah 27.8%, Northern 18.9%, Bono East 14.7%, Western North 13.2%, North East 12.1%, Oti 10% and Ahafo 7.9%)

FIGURE 2.2: HOUSEHOLDS' MAIN SOURCE OF DRINKING WATER IN WESTERN REGION BY TYPE OF LOCALITY; 2010 AND 2021.

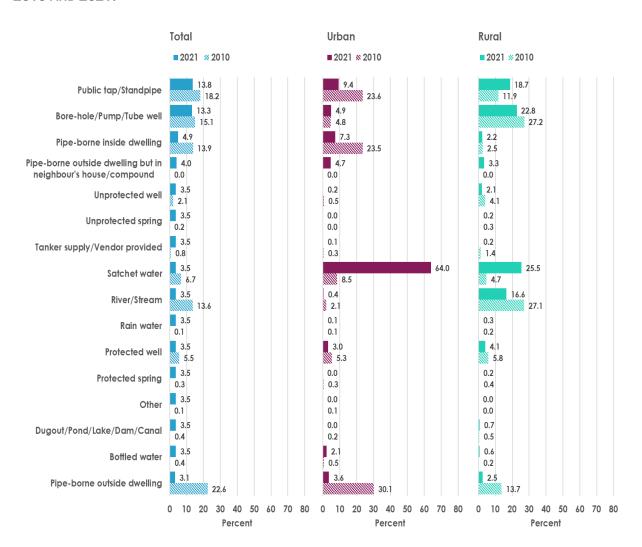


FIGURE 2.3: HOUSEHOLDS' MAIN SOURCE OF DRINKING WATER IN CENTRAL REGION BY TYPE OF LOCALITY; 2010 AND 2021

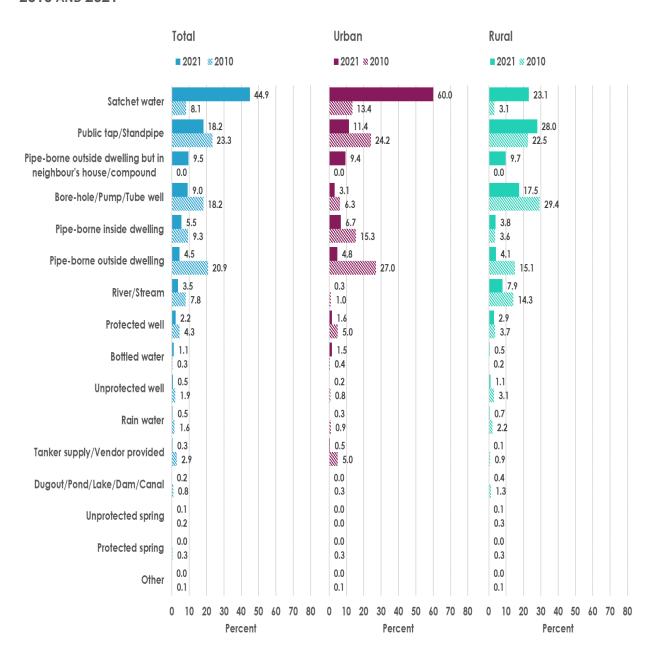


FIGURE 2.4: HOUSEHOLDS' MAIN SOURCE OF DRINKING WATER IN GREATER ACCRA REGION BY TYPE OF LOCALITY; 2010 AND 2021.

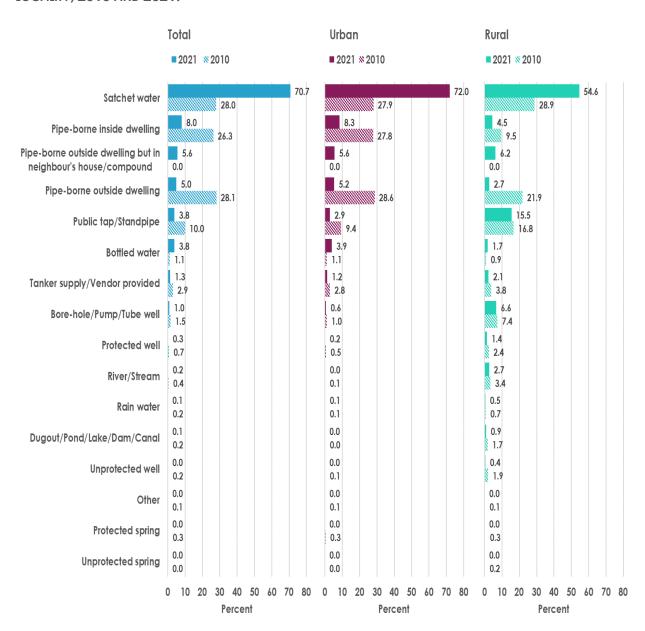


FIGURE 2.5: HOUSEHOLDS' MAIN SOURCE OF DRINKING WATER IN VOLTA REGION BY TYPE OF LOCALITY; 2010 AND 2021.

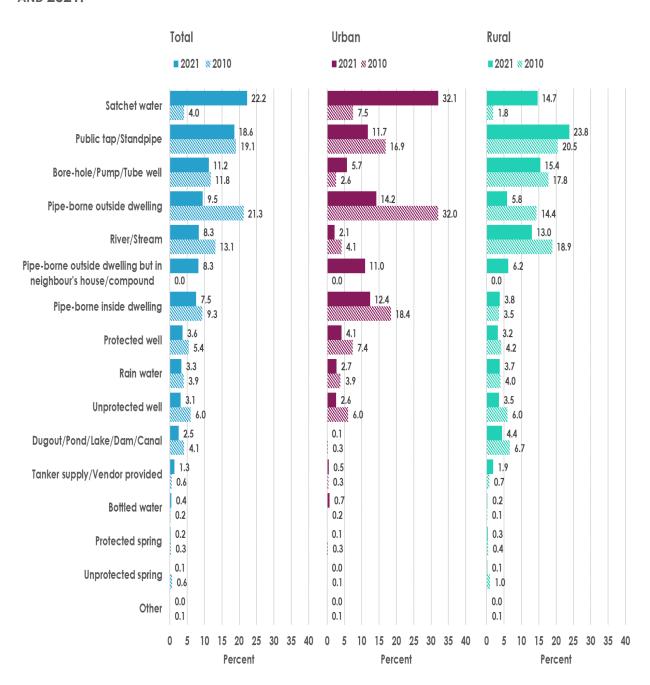


FIGURE 2.6: HOUSEHOLDS' MAIN SOURCE OF DRINKING WATER IN EASTERN REGION BY TYPE OF LOCALITY; 2010 AND 2021.

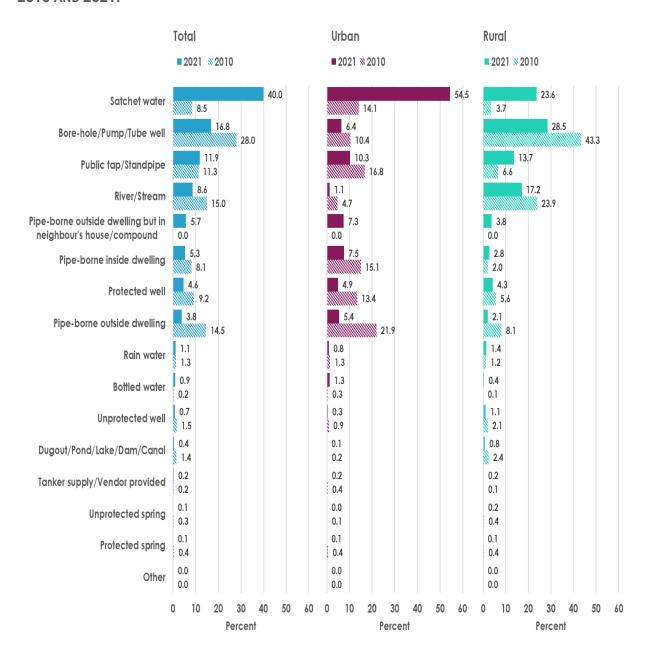


FIGURE 2.7: HOUSEHOLDS' MAIN SOURCE OF DRINKING WATER IN ASHANTI REGION BY TYPE OF LOCALITY; 2010 AND 2021.

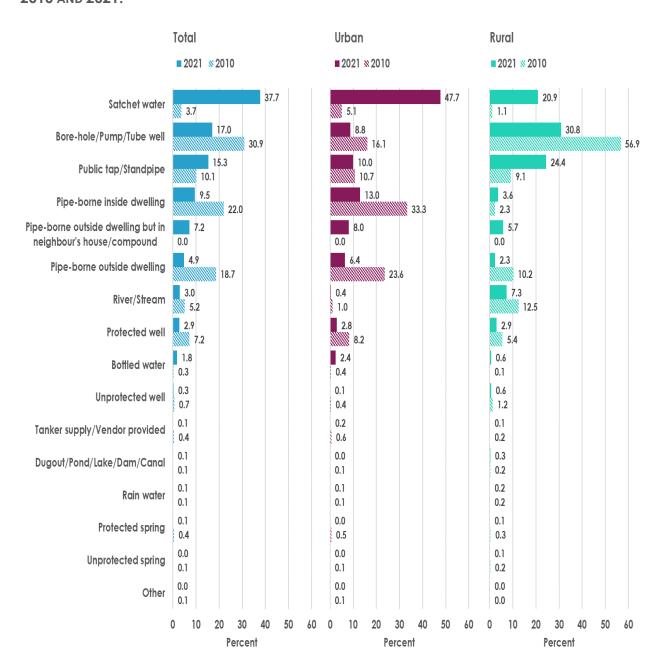


FIGURE 2.8: HOUSEHOLDS' MAIN SOURCE OF DRINKING WATER IN WESTERN NORTH REGION BY TYPE OF LOCALITY; 2010 AND 2021.

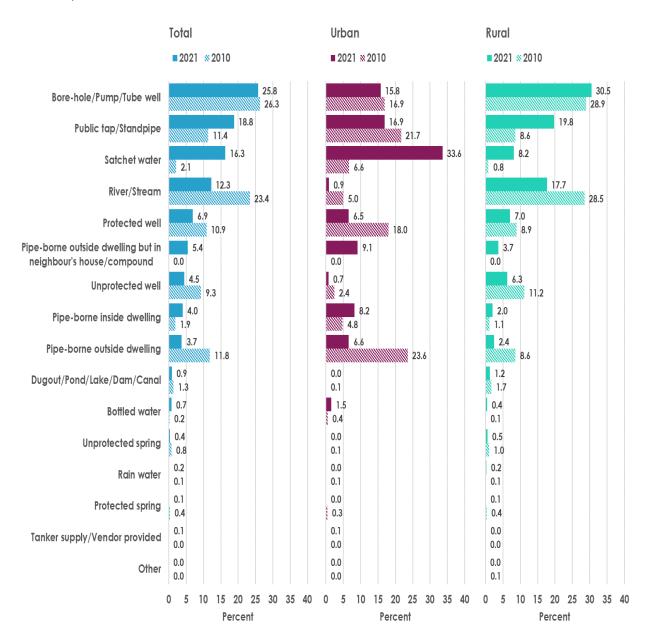


FIGURE 2.9: HOUSEHOLDS' MAIN SOURCE OF DRINKING WATER IN AHAFO REGION BY TYPE OF LOCALITY; 2010 AND 2021.

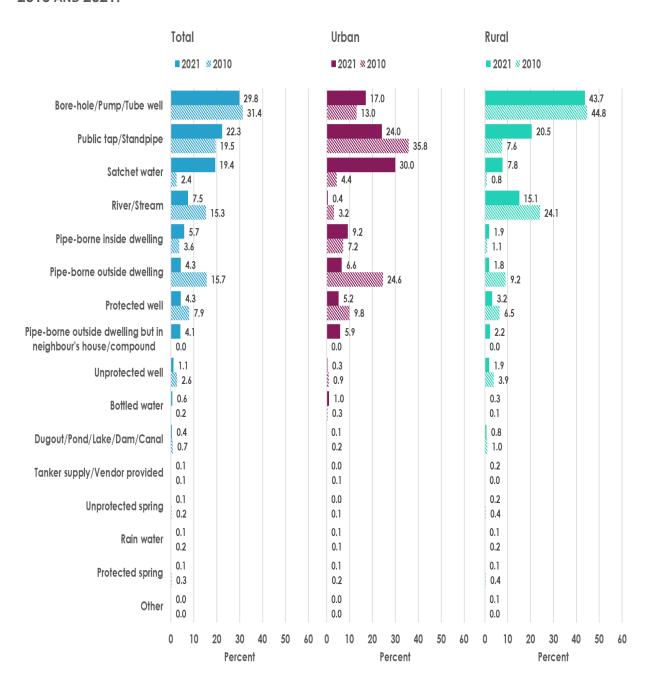


FIGURE 2.10: HOUSEHOLDS' MAIN SOURCE OF DRINKING WATER IN BONO REGION BY TYPE OF LOCALITY; 2010 AND 2021.

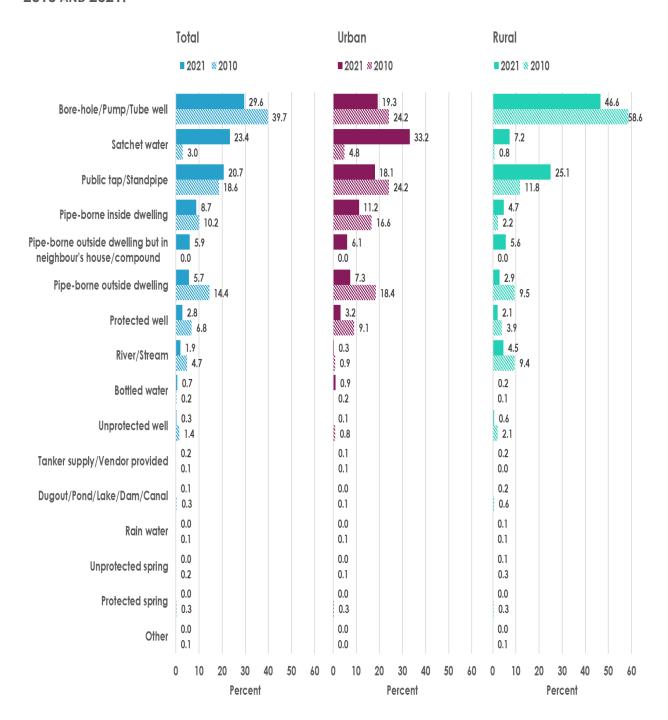


FIGURE 2.11: HOUSEHOLDS' MAIN SOURCE OF DRINKING WATER IN BONO EAST REGION BY TYPE OF LOCALITY; 2010 AND 2021.

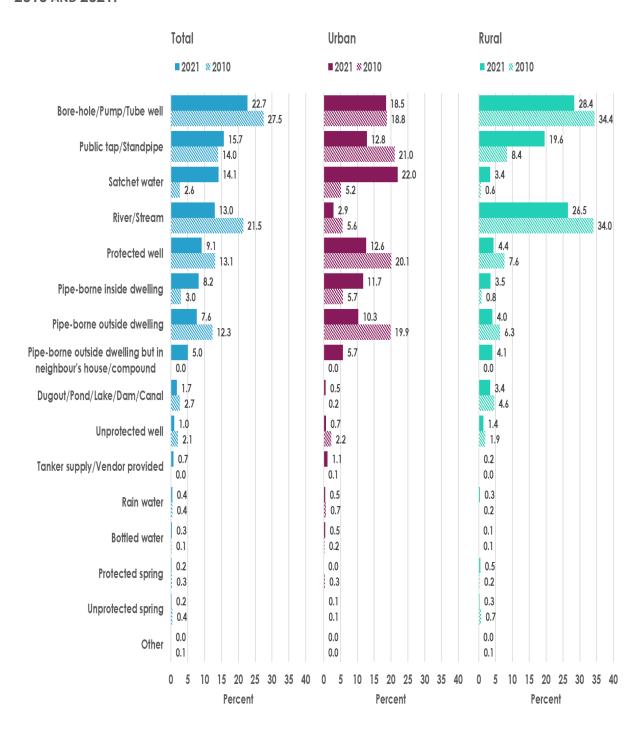


FIGURE 2.12: HOUSEHOLDS' MAIN SOURCE OF DRINKING WATER IN OTI REGION BY TYPE OF LOCALITY; 2010 AND 2021.

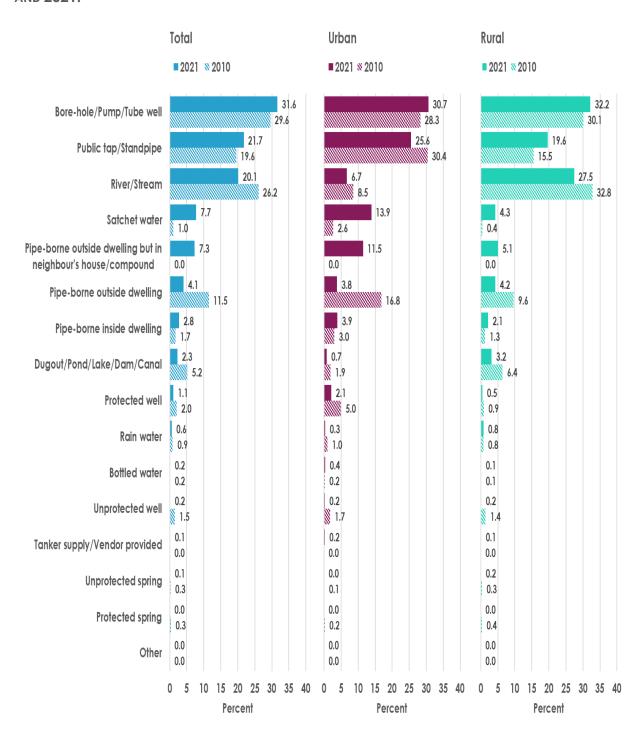


FIGURE 2.13: HOUSEHOLDS' MAIN SOURCE OF DRINKING WATER IN NORTHERN REGION BY TYPE OF LOCALITY; 2010 AND 2021.

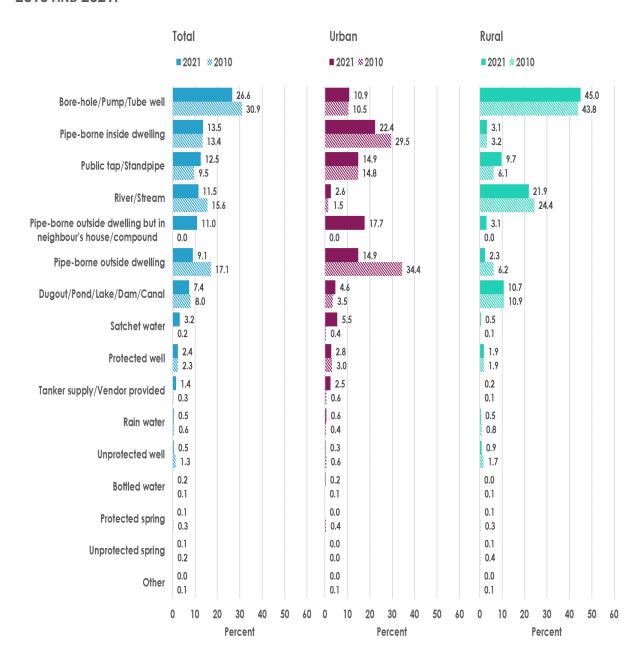


FIGURE 2.14: HOUSEHOLDS' MAIN SOURCE OF DRINKING WATER IN SAVANNAH NORTH REGION BY TYPE OF LOCALITY; 2010 AND 2021.

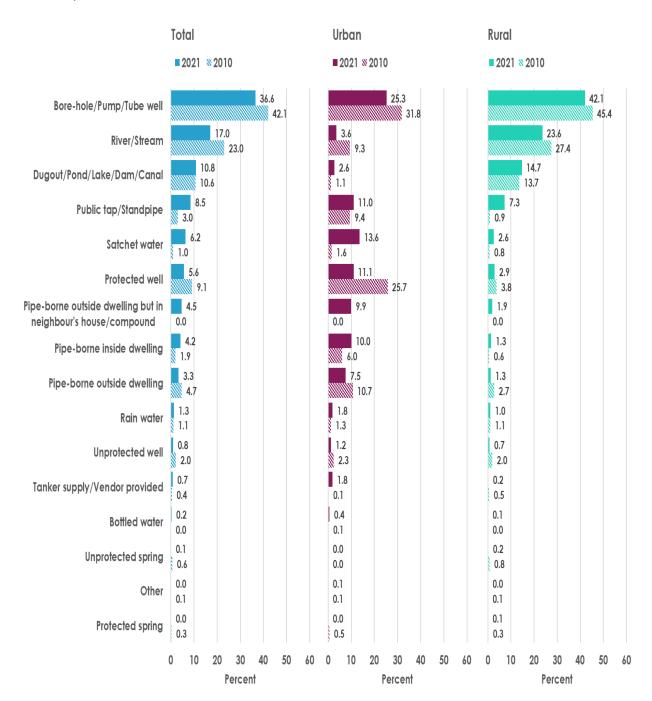


FIGURE 2.15: HOUSEHOLDS' MAIN SOURCE OF DRINKING WATER IN NORTH EAST REGION BY TYPE OF LOCALITY; 2010 AND 2021.

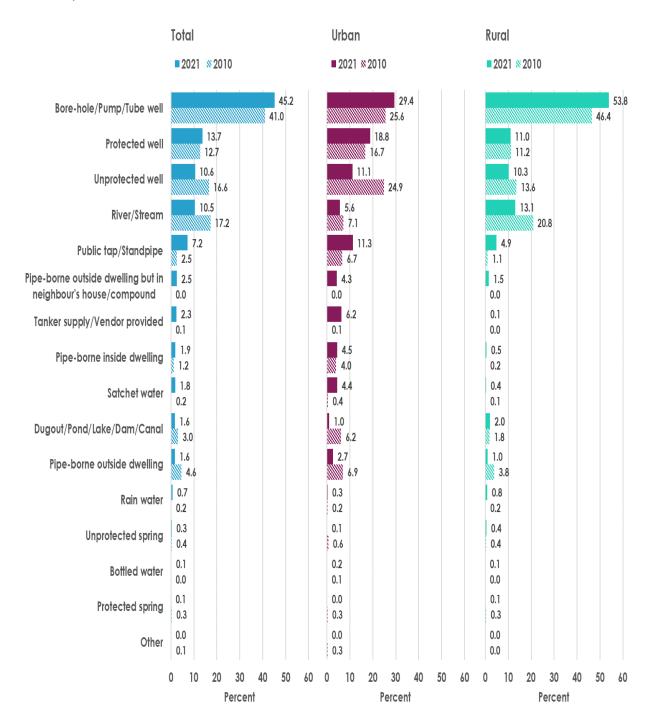


FIGURE 2.16: HOUSEHOLDS' MAIN SOURCE OF DRINKING WATER IN UPPER EAST REGION BY TYPE OF LOCALITY; 2010 AND 2021.

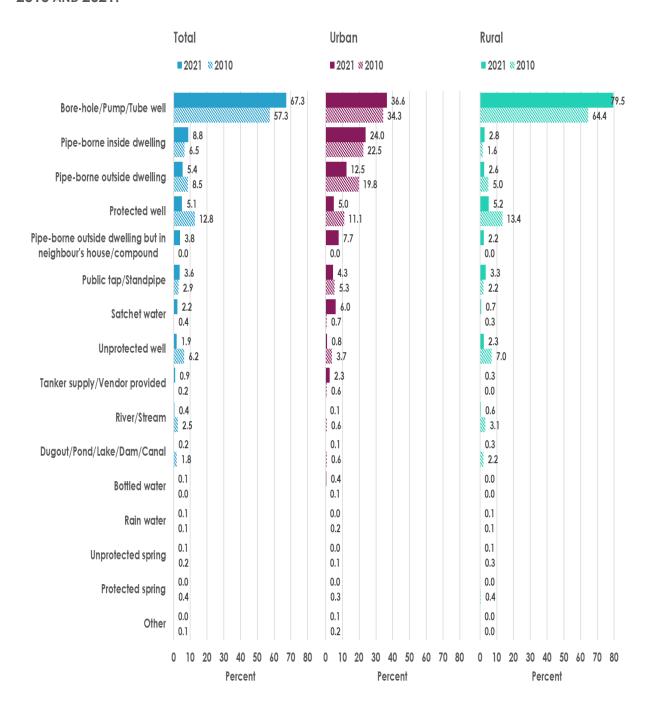
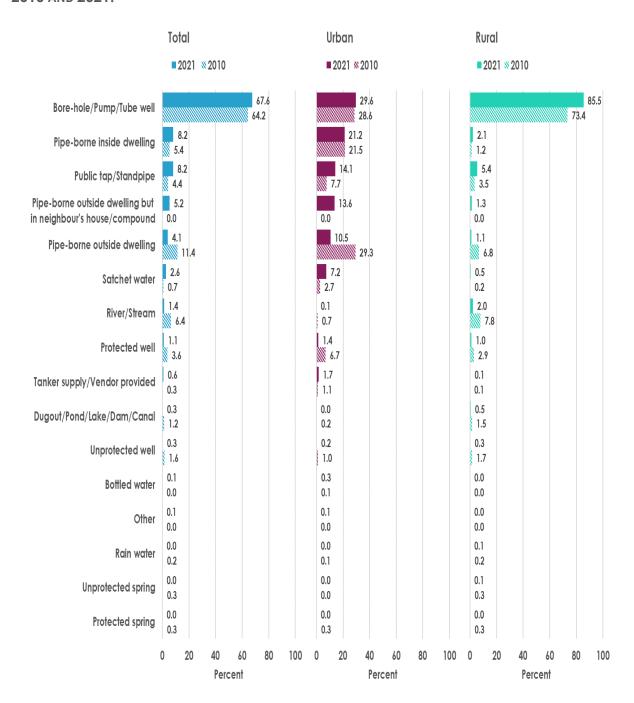


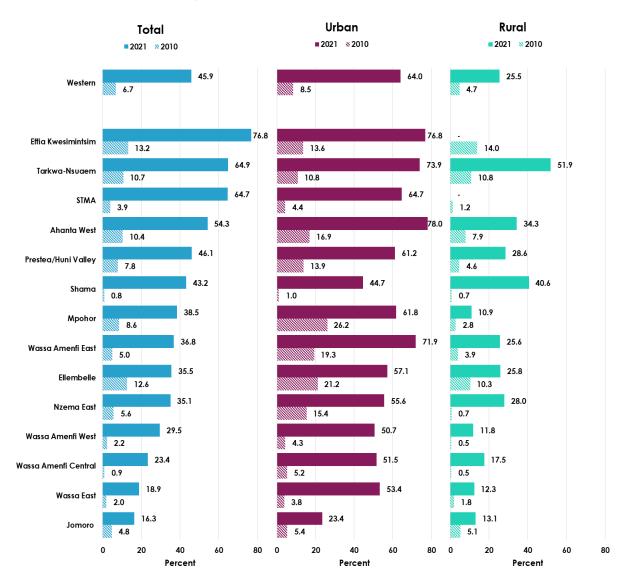
FIGURE 2.17: HOUSEHOLDS' MAIN SOURCE OF DRINKING WATER IN UPPER WEST REGION BY TYPE OF LOCALITY; 2010 AND 2021.



Proportion of households that use sachet water as the main source of drinking water in Western Region increased by 39.2 percentage points between 2010 and 2021. The increase is reflected in all districts, with Effia Kwesimintsim recording the highest percentage points of 63.6.

Proportion of urban households using sachet water as the main source of drinking water in 2021 is twice (2.5) that of the rural with remarkable urban/rural variations across the districts.

FIGURE 2.18: HOUSEHOLDS THAT USE SACHET AS MAIN SOURCE OF DRINKING WATER IN WESTERN REGION BY TYPE OF LOCALITY AND DISTRICTS, 2010 AND 2021.

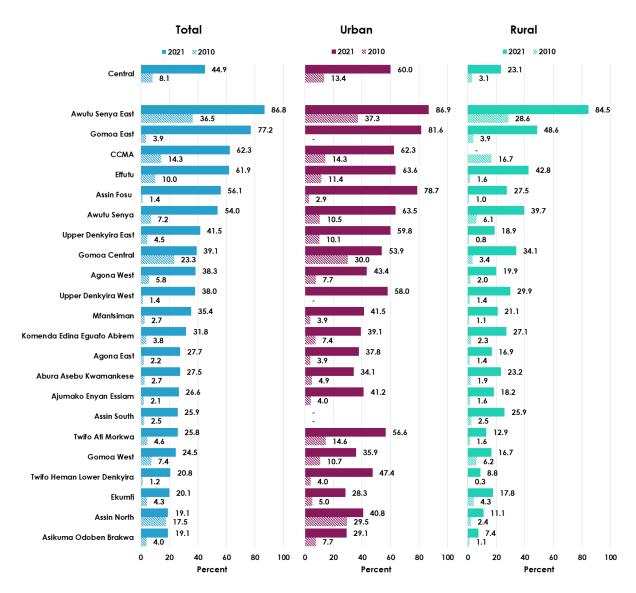


Proportion of households using sachet water as the main source of drinking water in Central Region increased by 36.8 percentage points between 2010 and 2021 and is reflected in all the districts, with Assin Fosu recording the highest percentage increase of 40.1 points.

Households using sachet water in rural areas increased by 7.5 fold between 2010 and 2021 while that of urban increased by 4.5 fold.

Proportion of households using sachet water in urban areas in the region is as twice (2.6 times) that of the rural within the same period.

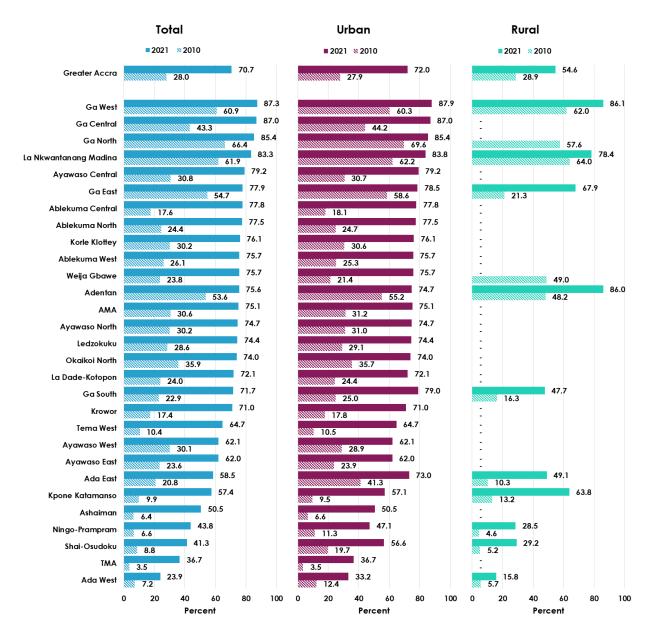
FIGURE 2.19: HOUSEHOLDS THAT USE SACHET AS MAIN SOURCE OF DRINKING WATER IN CENTRAL REGION BY TYPE OF LOCALITY AND DISTRICTS; 2010 AND 2021.



Use of sachet water as the main source of drinking water among households increased between 2010 and 2021 in all the districts in Greater Accra Region, with TMA recording the highest of 33.2 percentage points increase.

The increase is reflected in both urban and rural aeras, with 44.1 and 25.7 percentage points increase respectively between 2010 and 2021.

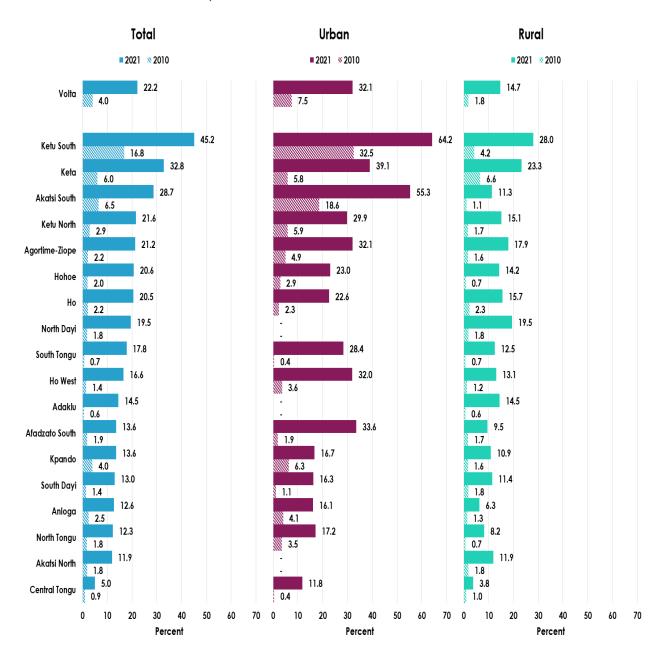
FIGURE 2.20: HOUSEHOLDS THAT USE SACHET AS MAIN SOURCE OF DRINKING WATER IN GREATER ACCRA REGION BY TYPE OF LOCALITY AND DISTRICTS, 2010 AND 2021.



Proportion of households using sachet water as the main source of drinking water in Volta Region increased by 5.6 fold between 2010 and 2021, with South Tongu District having the highest increase of 25.4 fold.

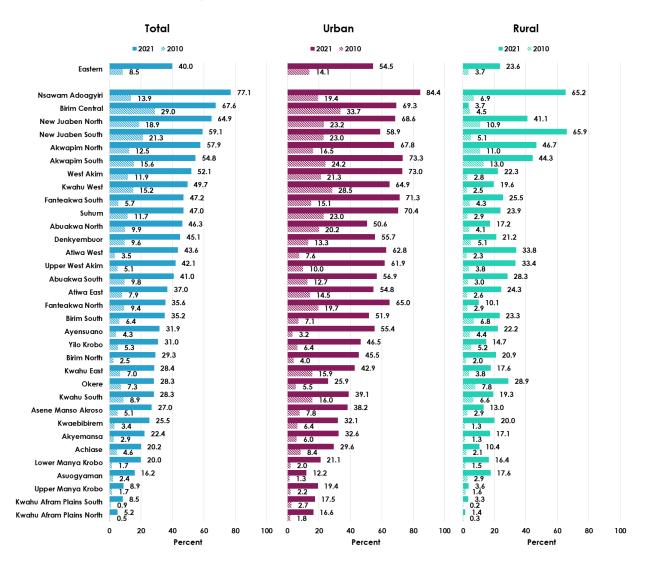
Use of sachet water among rural households increased by 8.2 fold while that of urban increased by 4.3 fold in the region between 2010 and 2021.

FIGURE 2.21: HOUSEHOLDS THAT USE SACHET AS MAIN SOURCE OF DRINKING WATER IN VOLTA REGION BY TYPE OF LOCALITY AND DISTRICTS; 2010 AND 2021.



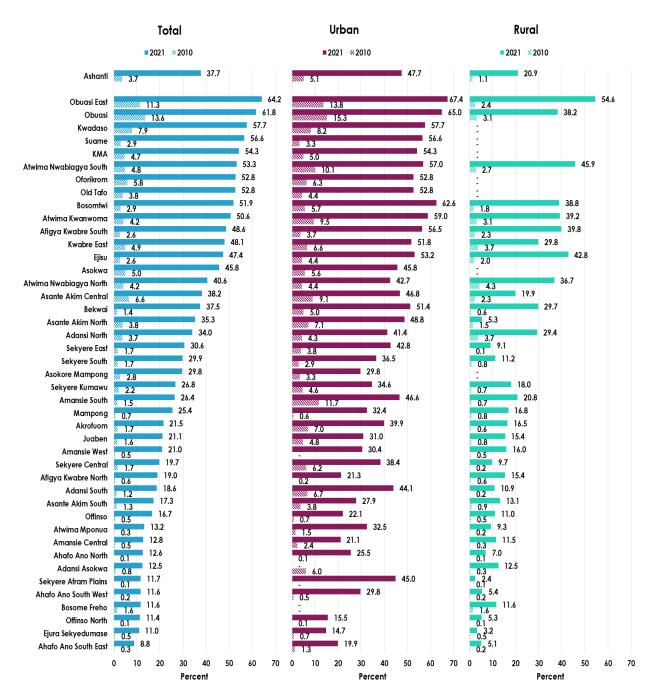
Use of sachet water as the main source of drinking water in Eastern Region increased by 31.5 percentage points between 2010 and 2021; and the increase is reflected in all the districts in both urban and rural areas except Birim Central where the rural proportion in 2010 (4.5%) is slightly higher than that of 2021 (3.7%).

FIGURE 2.22: HOUSEHOLDS THAT USE SACHET AS MAIN SOURCE OF DRINKING WATER IN EASTERN REGION BY TYPE OF LOCALITY AND DISTRICTS, 2010 AND 2021.



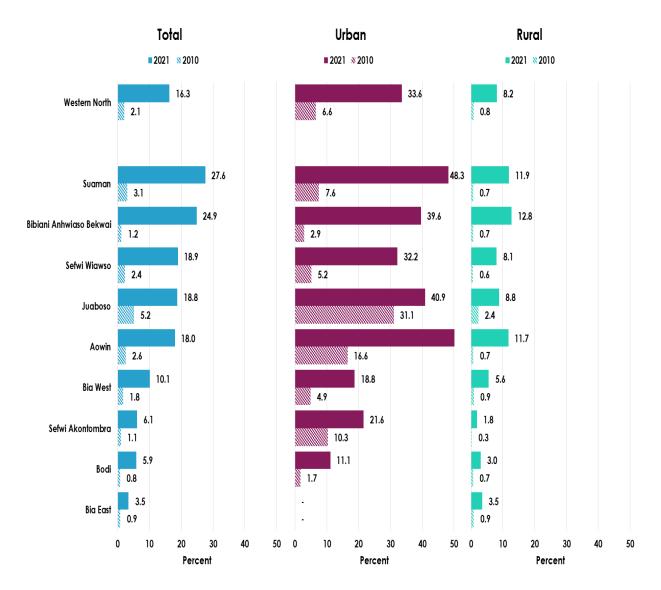
Proportion of households using sachet water as the main source of drinking water in Ashanti Region increased by 34.0 percentage points between 2010 and 2021; and the increase is reflected in all the districts in both urban and rural areas. However, the proportion in the urban is more than twice (2.3) that of the rural within the same period.

FIGURE 2.23: HOUSEHOLDS THAT USE SACHET AS MAIN SOURCE OF DRINKING WATER IN ASHANTI REGION BY TYPE OF LOCALITY AND DISTRICTS; 2010 AND 2021.



Proportion of households using sachet water as the main source of drinking water in Western North Region increased as much as 7.8 times between 2010 and 2021. The increase in the use of sachet water is reflected in all the districts in both urban and rural areas but is more pronounced among urban households (33.6%) than the rural (8.2%) within the same period.

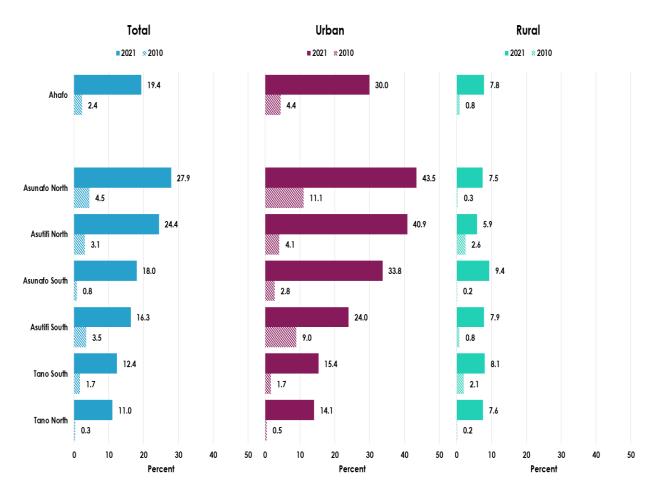
FIGURE 2.24: HOUSEHOLDS THAT USE SACHET AS MAIN SOURCE OF DRINKING WATER IN WESTERN NORTH REGION BY TYPE OF LOCALITY AND DISTRICTS, 2010 AND 2021.



Proportion of households using sachet water as the main source of drinking water in Ahafo Region increased by 17.0 percentage points between 2010 and 2021, with Tano North District increasing by 36.7 fold.

Proportion of urban households using sachet water in 2021 is almost 4 times (3.8) that of rural areas.

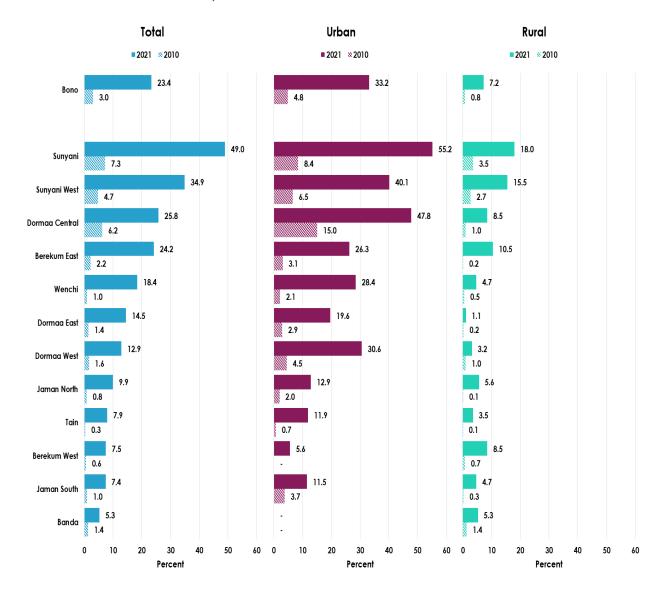
FIGURE 2.25: HOUSEHOLDS THAT USE SACHET AS MAIN SOURCE OF DRINKING WATER IN AHAFO REGION BY TYPE OF LOCALITY AND DISTRICTS; 2010 AND 2021.



Households using sachet water as the main source of drinking water in Bono Region increased by 20.4 percentage points between 2010 and 2021.

Urban households using sachet water is almost 5 times (4.6) that of rural areas in 2021.

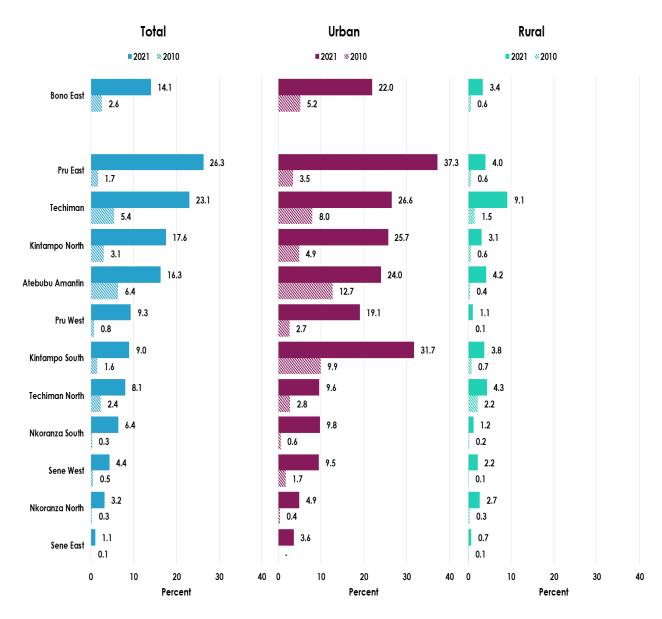
FIGURE 2.26: HOUSEHOLDS THAT USE SACHET AS MAIN SOURCE OF DRINKING WATER IN BONO REGION BY TYPE OF LOCALITY AND DISTRICTS; 2010 AND 2021.



Proportion of households using sachet water as the main source of drinking water in Bono East Region increased by 5.4 fold between 2010 and 2021, with Pru East District having the highest percentage points increase of 24.6.

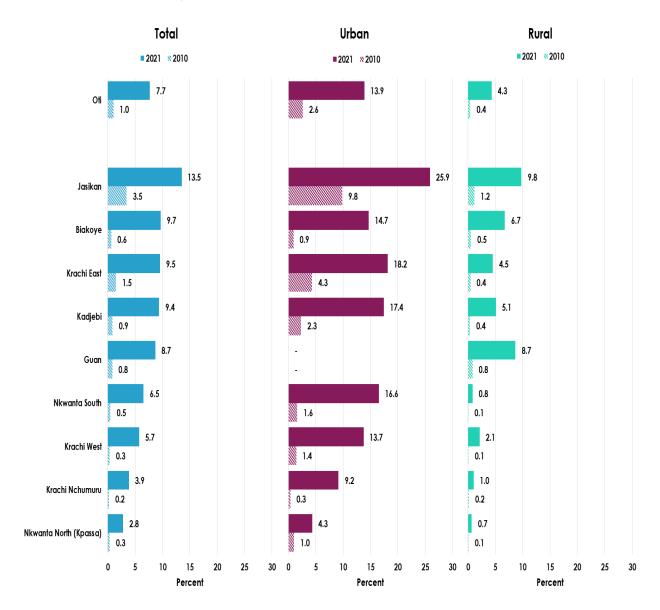
Proportion of households using sachet water in urban areas is 6.5 times that of rural areas in 2021

FIGURE 2.27: HOUSEHOLDS THAT USE SACHET AS MAIN SOURCE OF DRINKING WATER IN BONO EAST REGION BY TYPE OF LOCALITY AND DISTRICTS; 2010 AND 2021.



Proportion of households using sachet water as the main source of drinking water in Oti Region increased by 6.7 percentage points between 2010 and 2021, with Jasikan District recording the highest margin of increase of 10.0 percentage points.

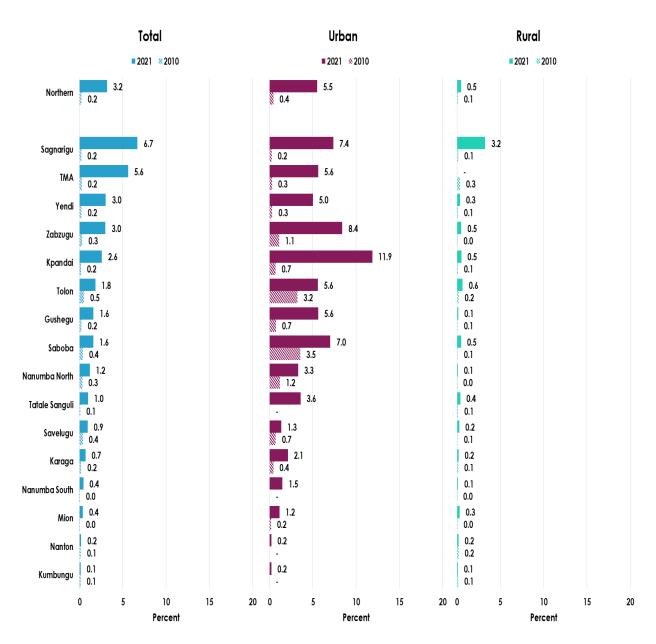
FIGURE 2.28: HOUSEHOLDS THAT USE SACHET AS MAIN SOURCE OF DRINKING WATER IN OTI REGION BY TYPE OF LOCALITY AND DISTRICTS; 2010 AND 2021.



Proportion of households using sachet water as the main source of drinking water in Northern Region increased from 0.2 percent in 2010 to 3.2 percent in 2021.

The increase is reflected in all districts, with Sagnarigu and Temale Metropolitan Assembly recording 6.5 and 5.4 percentage points respectively between 2010 and 2021.

FIGURE 2.29: HOUSEHOLDS THAT USE SACHET AS MAIN SOURCE OF DRINKING WATER IN NORTHERN REGION BY TYPE OF LOCALITY AND DISTRICTS; 2010 AND 2021.

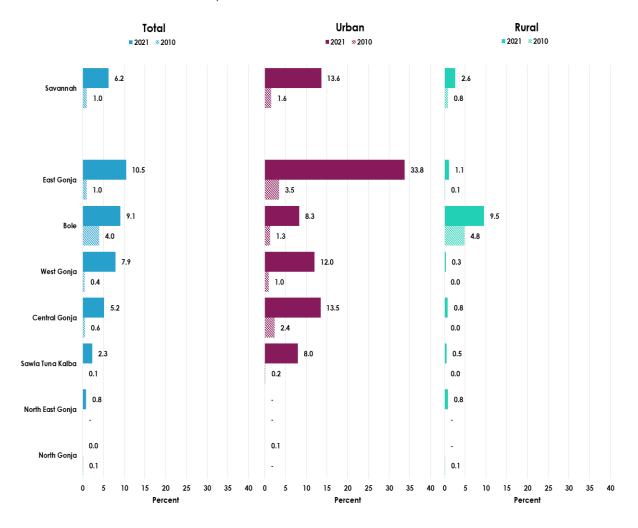


Proportion of households using sachet water as the main source of drinking water in Savannah Region increased from 1.0 percent in 2010 to 6.2 percent 2021.

The increase is reflected in all the districts except North Gonja where it decreased from 0.1 in 2010 to 0.0 percent 2021.

Proportion of urban households using sachet water in the region is 5.2 times of rural in 2021

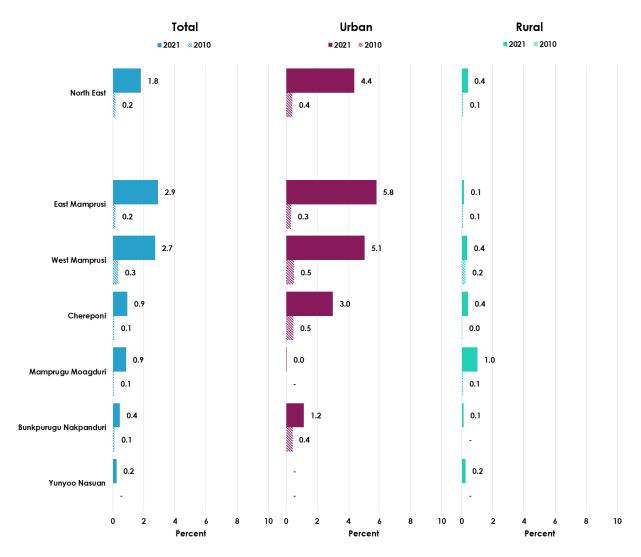
FIGURE 2.30: HOUSEHOLDS THAT USE SACHET AS MAIN SOURCE OF DRINKING WATER IN SAVANNAH REGION BY TYPE OF LOCALITY AND DISTRICTS, 2010 AND 2021.



Proportion of households using sachet water as the main source of drinking water in North East Region increased from 0.2 percent in 2010 to 1.8 percent in 2021.

The proportion of households increased 11 fold in the urban areas and 4 fold in the rural areas within the same period.

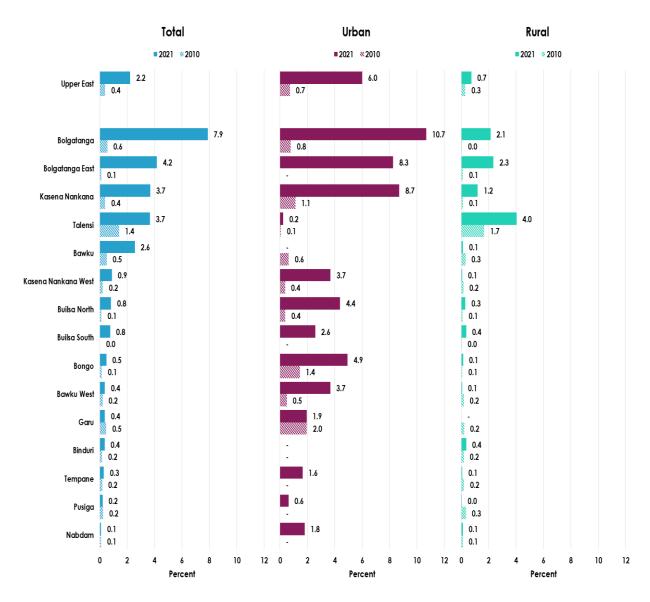
FIGURE 2.31: HOUSEHOLDS THAT USE SACHET AS MAIN SOURCE OF DRINKING WATER IN NORTH EAST REGION BY TYPE OF LOCALITY AND DISTRICTS; 2010 AND 2021.



Proportion of households using sachet water as the main source of drinking water in Upper East Region increased from 0.4 percent in 2010 to 2.2 percent in 2021.

The increase in the proportion of households using sachet water is reflected in all the districts and in both urban and rural areas, but was more pronounced in the urban areas with 5.3 percentage points increase compared to the rural with 0.4 percentage points within the same period.

FIGURE 2.32: HOUSEHOLDS THAT USE SACHET AS MAIN SOURCE OF DRINKING WATER IN UPPER EAST REGION BY TYPE OF LOCALITY AND DISTRICTS; 2010 AND 2021.



Proportion of households using sachet water as the main source of drinking water in Upper West Region increased from 0.7 percent in 2010 to 2.6 percent in 2021.

The increase in the proportion of households using sachet water is reflected in all the districts and in both urban and rural areas, but the proportion in the urban is 15 times that of rural.

FIGURE 2.33: HOUSEHOLDS' THAT USE SACHET AS MAIN SOURCE OF DRINKING WATER IN UPPER WEST REGION BY TYPE OF LOCALITY AND DISTRICTS; 2010 AND 2021.

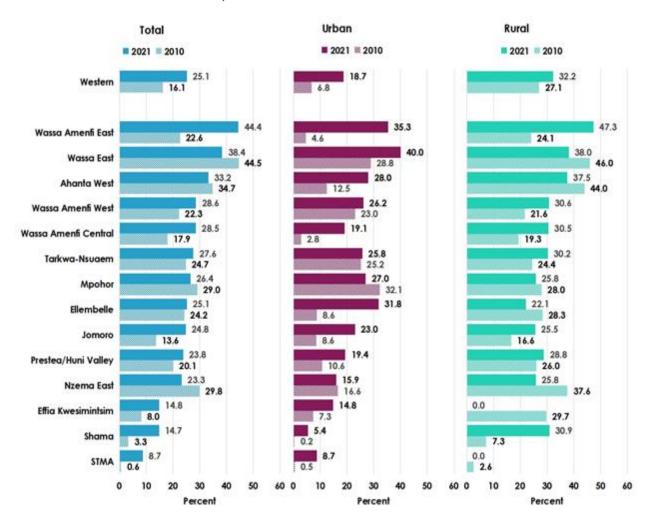


Proportion of households using borehole as the main source of drinking water in Western Region increased from 16.1% in 2010 to 25.1% in 2021.

The increase is higher in urban areas than rural areas within the same period.

Use of borehole in all districts increased except Wassa East, Ahanta West, Mpohor, and Nzema East where it decreased by at least 1.5 percentage points between 2010 and 2021

FIGURE 2.34: HOUSEHOLDS THAT USE BOREHOLE AS MAIN SOURCE OF DRINKING WATER IN WESTERN REGION BY TYPE OF LOCALITY AND DISTRICTS; 2010 AND 2021.

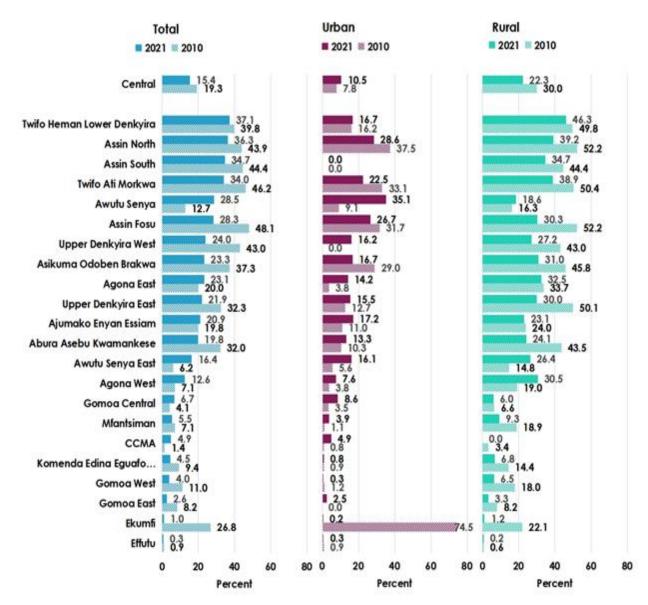


Use of borehole as the main source of drinking water among households in Central Region reduced by 3.9 percentage points between 2010 to 2021.

In rural areas, the proportion of households using borehole decreased from 30.0 percent in 2010 to 22.3 percent in 2021.

Proportions of households using borehole as the main source of drinking water reduced in fourteen districts from 2010 to 2021, with Assin Central recording the highest percentage points decrease (19.8%).

FIGURE 2.35: HOUSEHOLDS THAT USE BOREHOLE AS MAIN SOURCE OF DRINKING WATER IN CENTRAL REGION BY TYPE OF LOCALITY AND DISTRICTS; 2010 AND 2021.

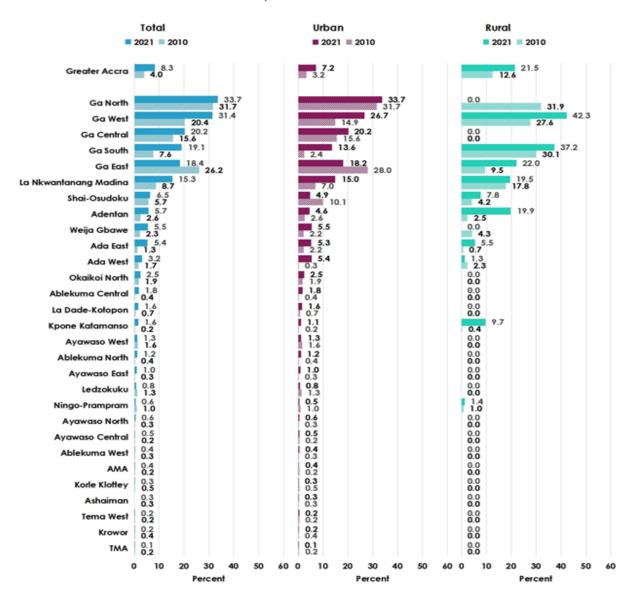


The proportion of households in Greater Accra Region using borehole as the main source of drinking water in 2010 (4.0%) doubled in 2021 (8.3%).

Seven districts had a decline in the proportion of households using borehole as the main source of drinking water from 2010 to 2021, with Ga East District recording the highest decline of 7.8 percentage points within the same period.

The pattern is the same for urban areas, with Ga East District recording the highest decrease. However, in the rural areas Ga East recorded an increase of 12.5 percentage points from 2010 to 2021.

FIGURE 2.36: HOUSEHOLDS THAT USE BOREHOLE AS MAIN SOURCE OF DRINKING WATER IN GREATER ACCRA REGION BY TYPE OF LOCALITY AND DISTRICTS; 2010 AND 2021.

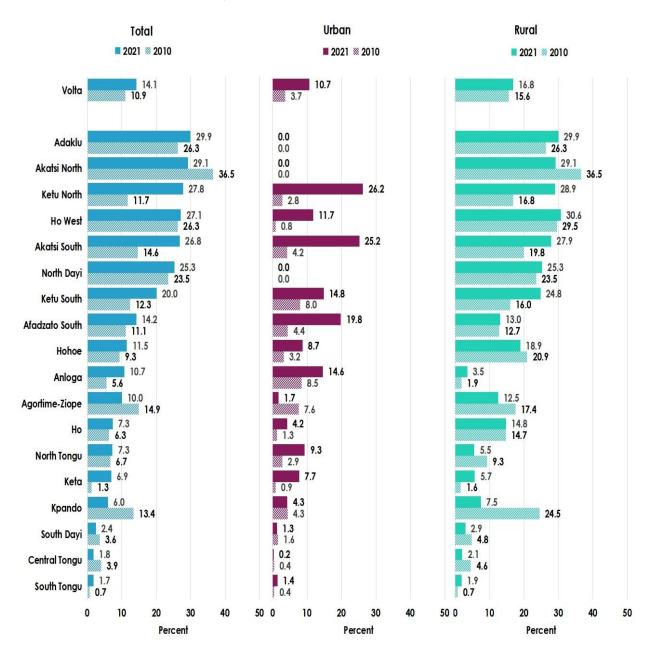


Proportion of households in Volta Region using borehole as the main source of drinking water increased from 10.9 percent in 2010 to 14.1 percent in 2021.

The increase is reflected in both rural and urban areas within the same period.

Use of borehole among households increased in all districts except Akatsi North, Agortime Ziope, Kpando, South Dayi and Central Tongu.

FIGURE 2.37: HOUSEHOLDS THAT USE BOREHOLE AS MAIN SOURCE OF DRINKING WATER IN VOLTA REGION BY TYPE OF LOCALITY AND DISTRICTS; 2010 AND 2021.

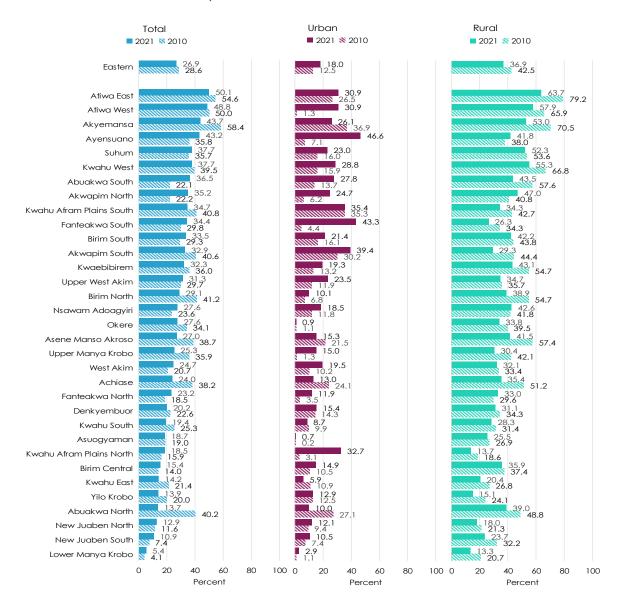


Proportion of households using borehole as the main source of drinking water in Eastern Region declined by 1.7 percentage points between 2010 and 2021.

Use of borehole increased by 5.5 percentage points in the urban areas and reduced by 5.6 percentage points in the rural areas between 2010 and 2021

Proportion of households using borehole as the main source of drinking water declined in seventeen districts between 2010 and 2021; and the decline is 3 fold in Abuakwa North within the same period

FIGURE 2.38: HOUSEHOLDS THAT USE BOREHOLE AS MAIN SOURCE OF DRINKING WATER IN EASTERN REGION BY TYPE OF LOCALITY AND DISTRICTS; 2010 AND 2021.

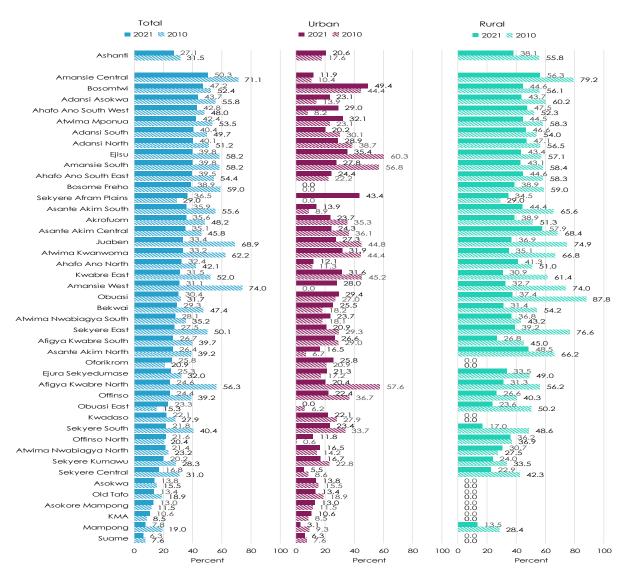


Use of borehole as the main source of drinking water among households in Ashanti Region decreased from 31.5 percent in 2010 to 27.1 percent in 2021.

Proportion of households using borehole in urban areas increased by 3 percentage points and reduced by 17.7 percentage points in the rural areas within the same period.

Proportion of households that use borehole as the main source of drinking water declined in all districts except Sekyere Afram Plains, Oforikrom and Obuasi East between 2010 and 2021

FIGURE 2.39: HOUSEHOLDS THAT USE BOREHOLE AS MAIN SOURCE OF DRINKING WATER IN ASHANTI REGION BY TYPE OF LOCALITY AND DISTRICTS; 2010 AND 2021.



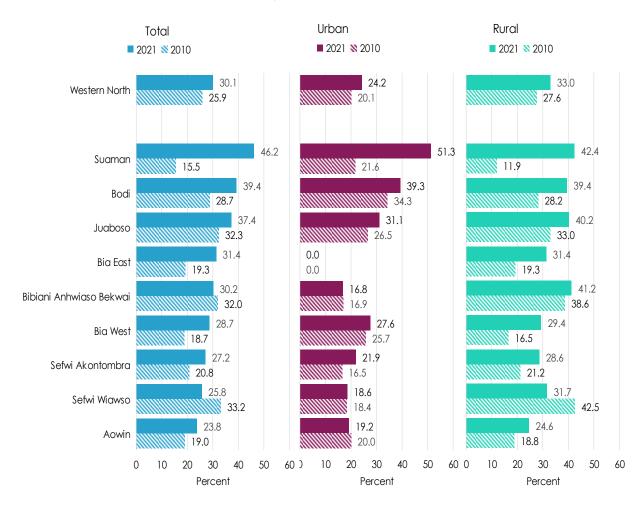
Proportion of households using borehole as the main source of drinking water in Western North Region increased by 4.2 percentage points between 2010 and 2021.

The increase is reflected in both rural and urban areas within the same period.

Use of borehole as the main source of drinking water increased in six districts with Suaman District recording a threefold increase between 2010 and 2021.

Proportion of households using borehole as drinking water in Suaman District increased by 2 fold and 3.5 fold in both urban and rural areas respectively, between 2010 and 2021.

FIGURE 2.40: HOUSEHOLDS THAT USE BOREHOLE AS MAIN SOURCE OF DRINKING WATER IN WESTERN NORTH REGION BY TYPE OF LOCALITY AND DISTRICTS; 2010 AND 2021.



Use of borehole as the main source of drinking water by households in Ahafo Region increased from 31.0 percent in 2010 to 33.9 percent in 2021.

The increase is reflected in both urban and rural areas within the same period.

Tano South and Asutifi South recorded a decline in the proportion of households using borehole as the main source of drinking water by 4.6 and 3.1 percentage points respectively between 2010 and 2021.

FIGURE 2.41: HOUSEHOLDS USE OF BOREHOLE AS MAIN SOURCE OF DRINKING WATER IN AHAFO REGION BY TYPE OF LOCALITY AND DISTRICTS; 2010 AND 2021.

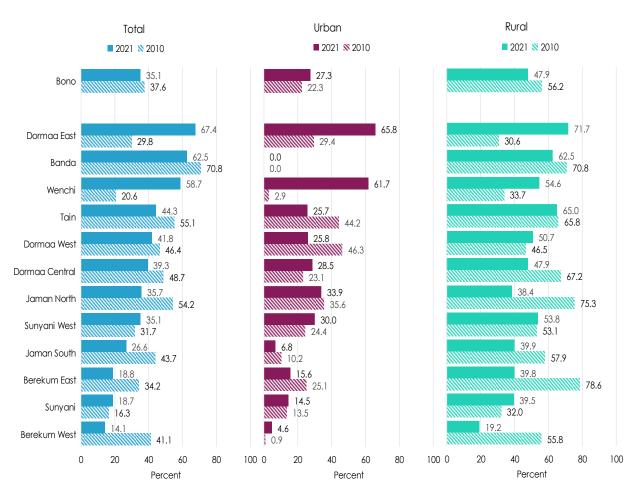


Use of borehole as the main source of drinking water in Bono Region declined by 2.5 percentage points between 2010 and 2021.

Proportion of households using borehole as the main source of drinking water in the urban areas increased by 5 percentage points while it declined by 8.3 percentage points in the rural areas within the same period.

Four districts (Dormaa East, Wenchi, Sunyani West, and Sunyani Municipal) recorded increases in the proportion of households using borehole as a main source of drinking water, with Wenchi recording the highest increase of 38.1 percentage points between 2021 (58.7%) and 2010 (20.6%).

FIGURE 2.42: HOUSEHOLDS USE OF BOREHOLE AS MAIN SOURCE OF DRINKING WATER IN BONO REGION BY TYPE OF LOCALITY AND DISTRICTS; 2010 AND 2021.

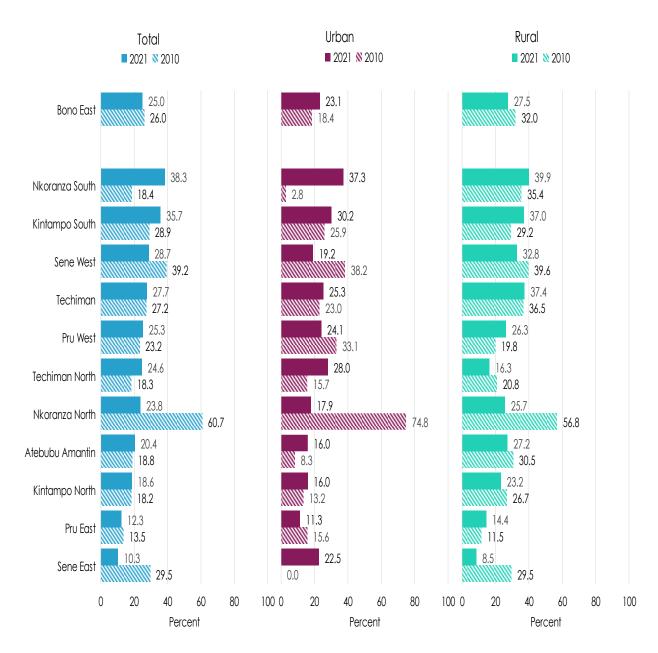


Proportion of households that use borehole as the main source of drinking water in the Bono East Region declined by 1 percentage point between 2010 and 2021.

Use of borehole among households increased by 4.7 percentage points in the urban areas and declined by 4.5 percentage points in the rural areas from 2010 to 2021.

Proportion of households using borehole in Nkoranza North declined in the urban and rural areas by 4.1 folds and 2.2 folds respectively, between 2010 and 2021.

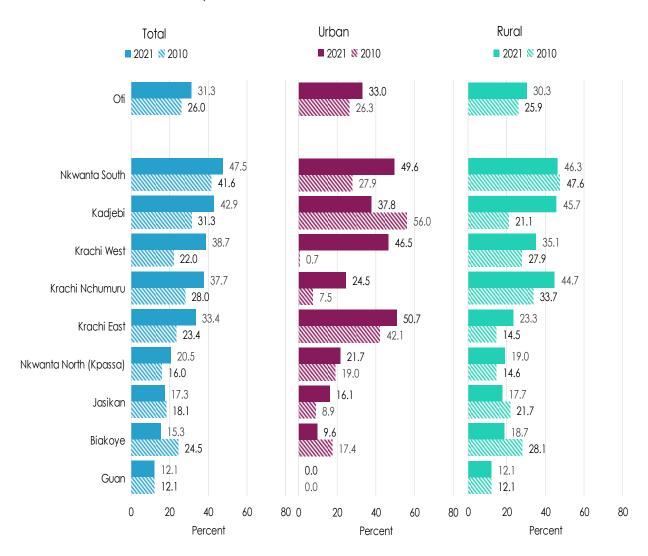
FIGURE 2.43: HOUSEHOLDS USE OF BOREHOLE AS MAIN SOURCE OF DRINKING WATER IN BONO EAST REGION BY TYPE OF LOCALITY AND DISTRICTS; 2010 AND 2021.



Use of borehole in Oti Region as the main source of drinking water increased from 26.0 percent in 2010 to 31.3 percent in 2021.

Proportion of households using borehole as the main source of drinking water in Krachi West increased by 66.7 times in the urban areas and 1.2 times in the rural between 2010 and 2021.

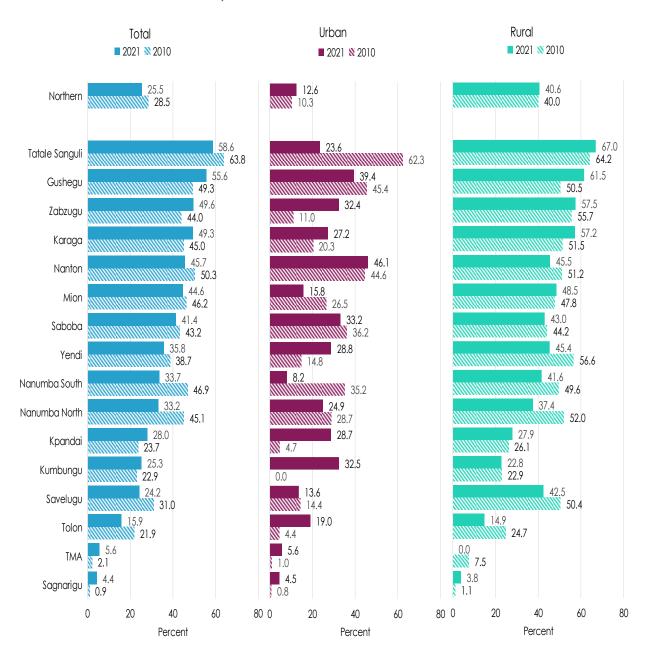
FIGURE 2.44: HOUSEHOLDS' USE OF BOREHOLE AS MAIN SOURCE OF DRINKING WATER IN OTI REGION BY TYPE OF LOCALITY AND DISTRICTS; 2010 AND 2021.



Use of borehole as the main source of drinking water among households in Northern Region decreased from 28.5 percent in 2010 to 25.5 percent in 2021, while marginal increases of 2.3 and 0.6 percentage points were recorded in urban and rural areas respectively.

Proportion of households using borehole as drinking water increases in seven districts which are Gushegu, Zabzugu, Karaga, Kpandai, Kumbungu, TMA and Sagnerigu.

FIGURE 2.45: HOUSEHOLDS' USE OF BOREHOLE AS MAIN SOURCE OF DRINKING WATER IN NORTHERN REGION BY TYPE OF LOCALITY AND DISTRICTS; 2010 AND 2021.

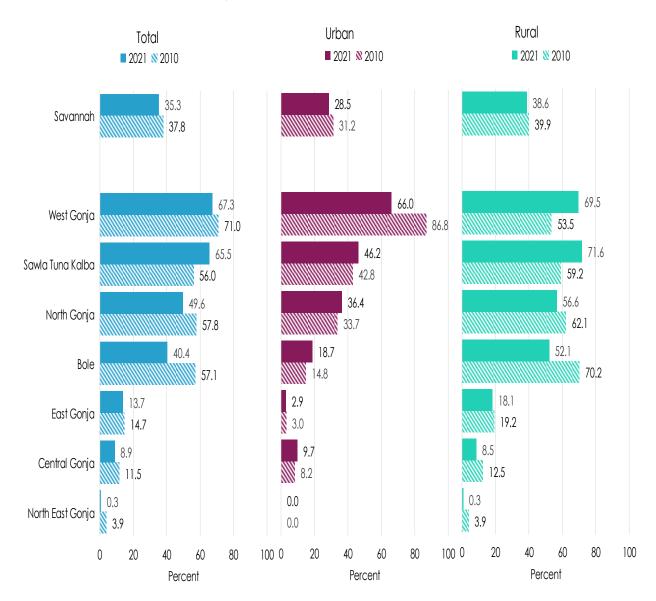


Use of borehole as the main source of drinking water in Savanna Region declined by 2.5 percentage points from 2010 to 2021.

Proportion of households using borehole as the main source of drinking water in all districts declined except Sawla Tuna Kalba between 2010 and 2021.

Use of borehole in urban and rural Sawla Tuna Kalba increased by 3.4 and 12.4 percentage points respectively, between 2010 and 2021.

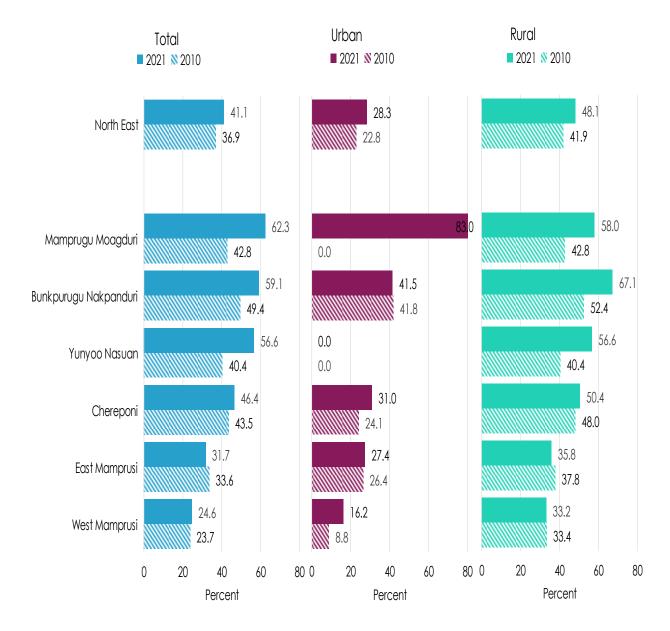
FIGURE 2.46: HOUSEHOLDS USE OF BOREHOLE AS MAIN SOURCE OF DRINKING WATER IN SAVANNAH REGION BY TYPE OF LOCALITY AND DISTRICTS; 2010 AND 2021.



Proportion of households using borehole as the main source of drinking water in North East Region increased by 4.2 percentage points between 2010 and 2021.

Mamprugu Moagduri District recorded the highest percentage increase (19.5%) among households using borehole as source of drinking water between 2010 and 2021.

FIGURE 2.47: HOUSEHOLDS' USE OF BOREHOLE AS MAIN SOURCE OF DRINKING WATER IN NORTH EAST REGION BY TYPE OF LOCALITY AND DISTRICTS 2010 AND 2021.

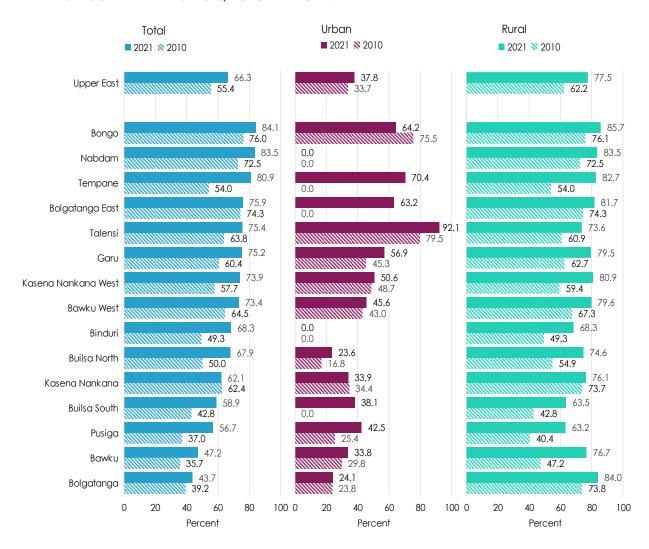


Use of borehole as the main source of drinking water among households in Upper East Region recorded an increase from 55.4 percent to 66.3 percent between 2010 and 2021.

There were increases in both urban and rural areas by 4.1 and 15.3 percentage points respectively over the period.

All districts except Kasena Nankana recorded an increase of proportion of households using borehole as the main source of drinking water from 2010 and 2021.

FIGURE 2.48: HOUSEHOLDS' USE OF BOREHOLE AS MAIN SOURCE OF DRINKING WATER IN UPPER EAST REGION BY TYPE OF LOCALITY AND DISTRICTS: 2010 AND 2021.

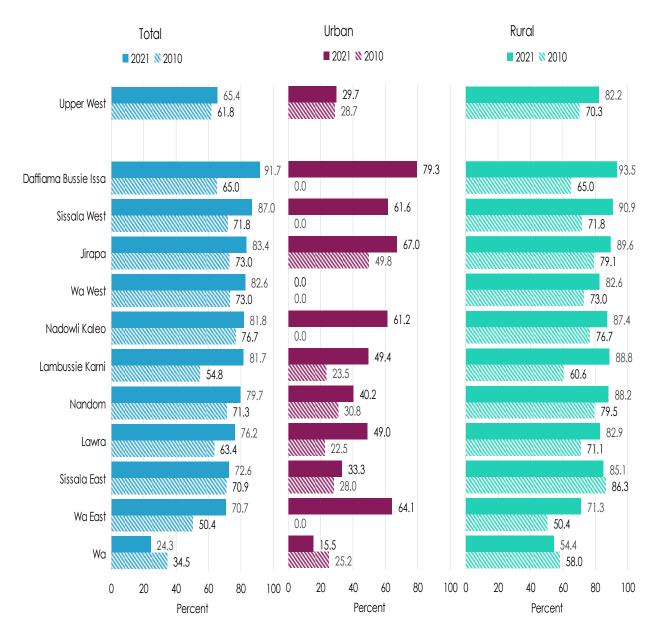


Proportion of households using borehole as the main source of drinking water in Upper West Region declined by 3.6 percentage points between 2010 and 2021

All districts recorded an increase in the proportion of households using borehole as the main source of drinking water except Wa Municipal from 2010 to 2021.

Use of borehole increased in all urban districts except Wa Municipal while in rural areas, there was an increase in all districts except Wa Municipal and Sissala East.

FIGURE 2.49: HOUSEHOLDS' USE OF BOREHOLE AS MAIN SOURCE OF DRINKING WATER IN UPPER WEST REGION BY TYPE OF LOCALITY AND DISTRICTS; 2010 AND 2021.

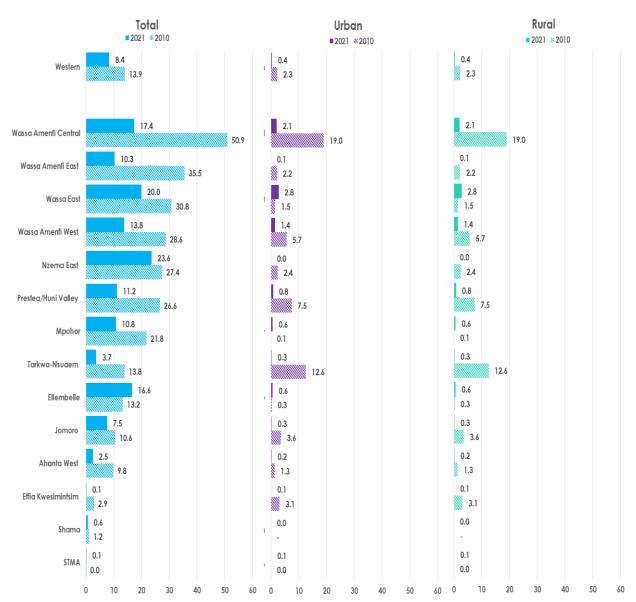


Use of surface water as the main source of drinking water among households in Western Region reduced by 5.5 percentage points between 2010 and 2021.

The use declined in rural areas by 10.3 percentage points, and 1.9 percentage points in the urban areas within the same period.

Proportion of households using surface water as the main source of drinking water reduced in all districts except Ellembelle where there was an increase from 13.2 percent in 2010 to 16.6 percent in 2021.

FIGURE 2.50: HOUSEHOLDS THAT USE SURFACE WATER AS THE MAIN SOURCE OF DRINKING WATER IN WESTERN REGION BY TYPE OF LOCALITY, REGION AND DISTRICTS, 2010 AND 2021.

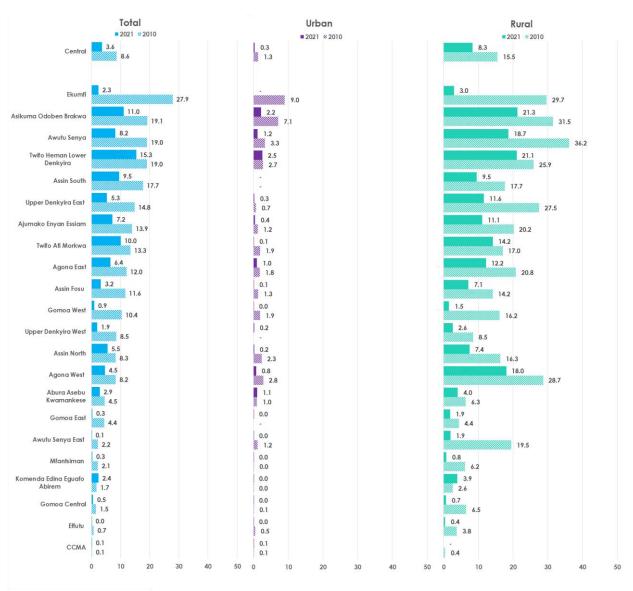


Use of surface water by households as the main source of drinking water in Central Region reduced more than half from 8.6 percent in 2010 to 3.6 percent in 2021.

Proportion of households using surface water as the main source of drinking water reduced in all districts except Komenda Edina Eguafo Abrem (KEEA) municipal.

The decline is more than 12 folds in Ekumfi, whereas it increased 1.4 times in KEEA.

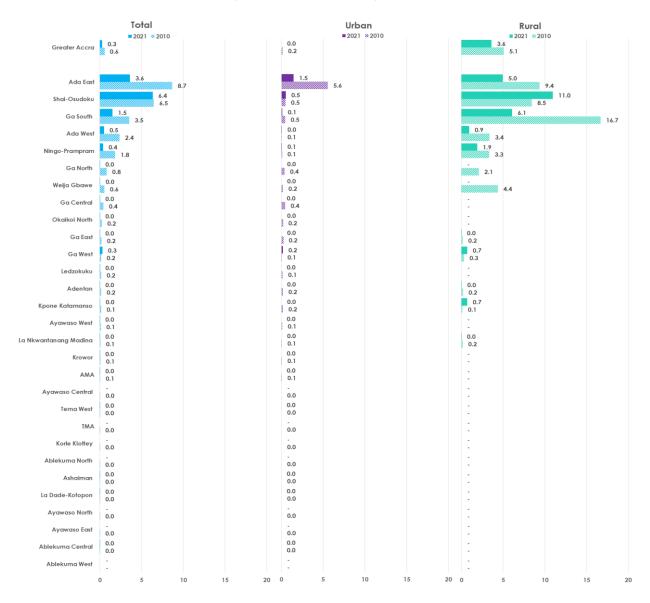
FIGURE 2.51: HOUSEHOLDS THAT USE SURFACE WATER AS THE MAIN SOURCE OF DRINKING WATER IN CENTRAL REGION BY TYPE OF LOCALITY, REGION AND DISTRICTS, 2010 AND 2021.



Proportion of households that use surface water as the main source of drinking water in Greater Accra Region reduced from 5,856 (0.6%) in 2010 to 4,924 (0.3%) in 2021.

Use of surface water as the main source of drinking water by households increased in rural Shai-Osudoku from 8.5 percent in 2010 to 11.0 percent in 2021; while there was a decline from 16.7 percent to 6.1 percent in Ga South within the same period.

FIGURE 2.52: HOUSEHOLDS THAT USE SURFACE WATER AS THE MAIN SOURCE OF DRINKING WATER IN GREATER ACCRA REGION BY TYPE OF LOCALITY, REGION AND DISTRICTS, 2010 AND 2021.

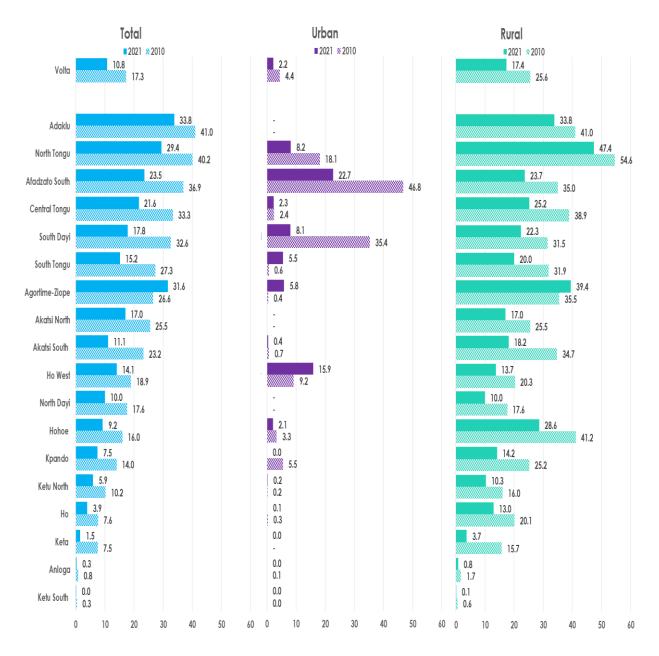


Proportion of households using surface water as the main source of drinking water in Volta Region declined from 17.3 percent in 2010 to 10.8 percent in 2021.

Use of surface water among households reduced in all districts except Agortime-Ziope, where there was an increase of 5 percentage points between 2010 and 2021

The increase in Agortime-Ziope is reflected in both rural and urban areas.

FIGURE 2.53: HOUSEHOLDS THAT USE SURFACE WATER AS THE MAIN SOURCE OF DRINKING WATER BY TYPE OF LOCALITY, REGION AND DISTRICTS, 2010 AND 2021 – VOLTA.

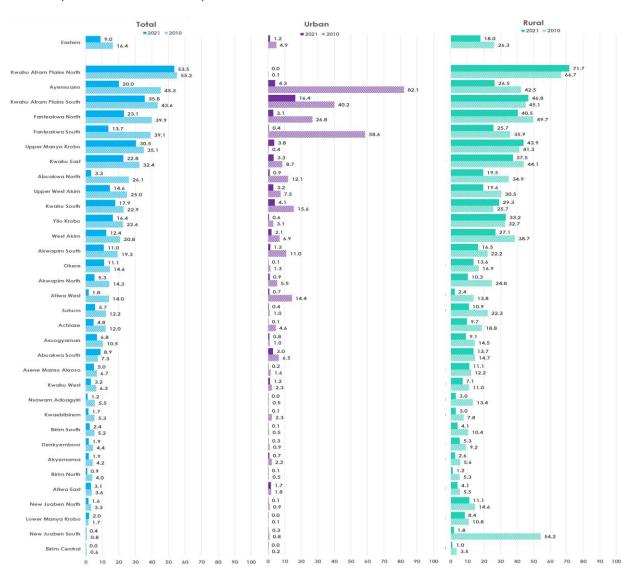


Proportion of households that use surface water as the main source of drinking water in Eastern Region reduced from 16.4 percent in 2010 to 9.0 percent in 2021.

More than half (53.5%) of the households in Kwahu Afram Plains North use surface water as their main source of drinking water in 2021.

Seven out of ten (71.7%) households in the rural areas use surface water as their main source of drinking water in 2021; increasing from 66.7 percent in 2010.

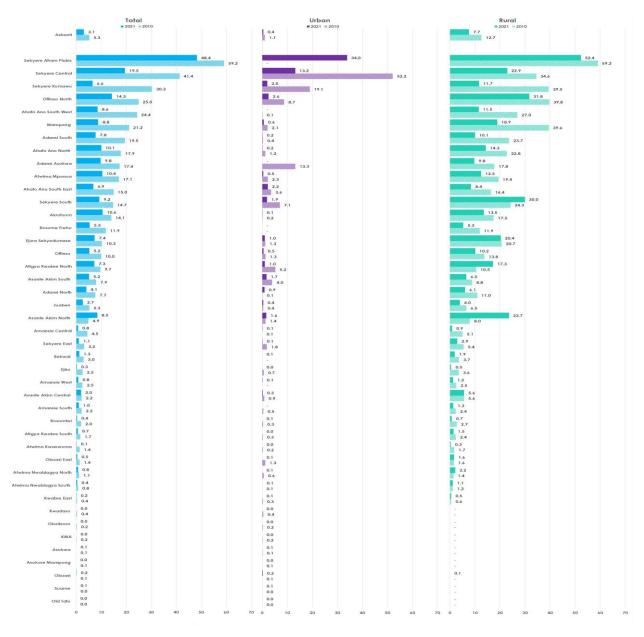
FIGURE 2.54: HOUSEHOLDS THAT USE SURFACE WATER AS THE MAIN SOURCE OF DRINKING WATER BY TYPE OF LOCALITY, REGION AND DISTRICTS, 2010 AND 2021 – EASTERN.



Proportion of households in Ashanti Region that use surface water as the main source of drinking water declined from 5.3 percent in 2010 to 3.1 percent in 2021; with Sekyere Afram Plains recording the highest (48.4%) decline.

In rural Sekyere Afram Plains, more than half of the households use surface water as the main source of drinking water in both 2010 and 2021.

FIGURE 2.55: HOUSEHOLDS THAT USE SURFACE WATER AS THE MAIN SOURCE OF DRINKING WATER BY TYPE OF LOCALITY, REGION AND DISTRICTS, 2010 AND 2021 – ASHANTI.

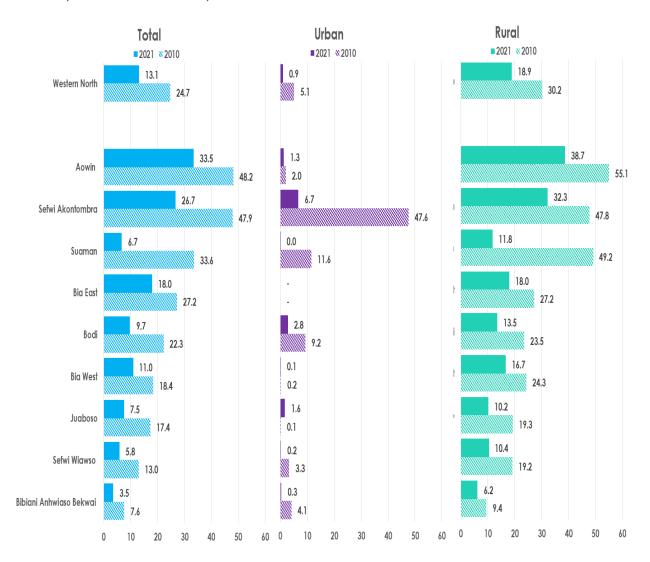


Proportion of households that use surface water as the main source of drinking water in Western North Region reduced by 11.6 percentage points between 2010 and 2021.

The reduction is reflected in all districts with the highest in Suaman (26.9 percentage points).

Sefwi Akontombra District recorded the highest decline in the urban areas (40.9 percentage points) and Suaman District the highest in the rural areas (37.4 percentage points) within the same period.

FIGURE 2.56: HOUSEHOLDS THAT USE SURFACE WATER AS THE MAIN SOURCE OF DRINKING WATER BY TYPE OF LOCALITY, REGION AND DISTRICTS, 2010 AND 2021 – WESTERN NORTH.

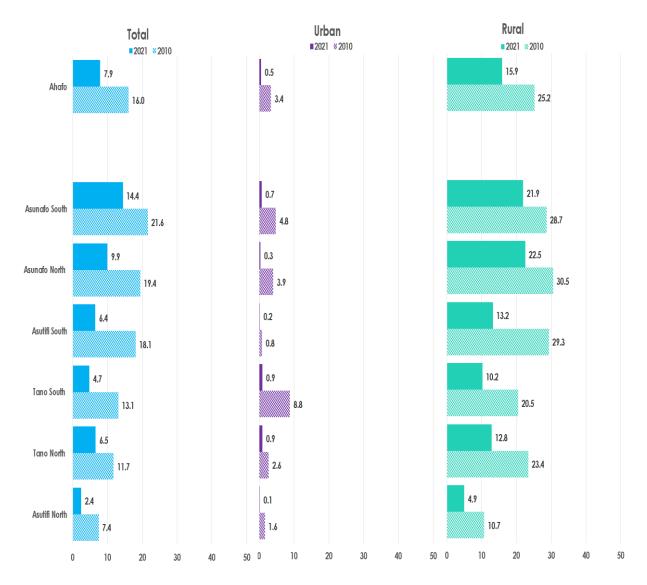


Use of surface water as the main source of drinking water declined twofold in Ahafo Region, from 16.0 percent in 2010 to 7.9 percent in 2021.

The reduction is reflected in all districts with Asutifi South having the highest of 11.7 percentage points within the same period.

Higher proportion of households in rural areas (15.9%) use surface water as their main source of drinking water than urban (0.5%) in 2021.

FIGURE 2.57: HOUSEHOLDS THAT USE SURFACE WATER AS THE MAIN SOURCE OF DRINKING WATER BY TYPE OF LOCALITY, REGION AND DISTRICTS, 2010 AND 2021 – AHAFO.

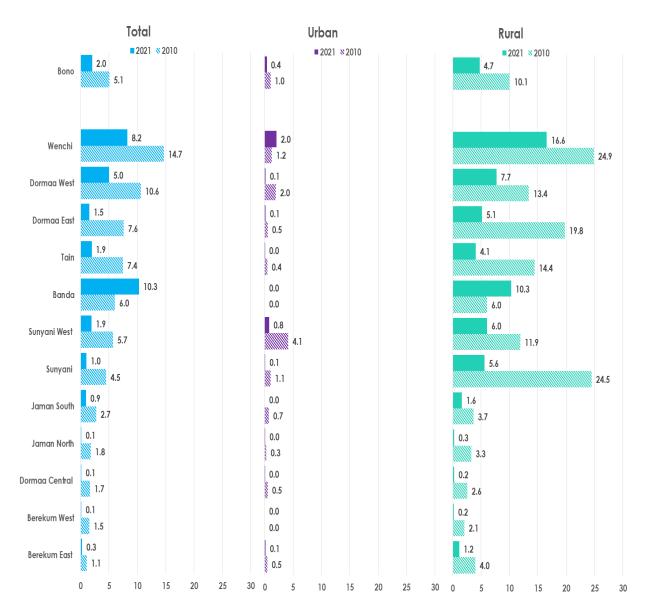


Proportion of households that use surface water as the main source of drinking water in Bono Region declined 2.6 times (5.1% to 2.0%) between 2010 and 2021

The decline is reflected in all districts except Banda where it increased by 4.3 percentage points (From 6.0% to 10.3%).

Use of surface water by households increased in urban Wenchi areas from 1.2 in 2010 to 2.0 in 2021; while there was a decline by 4.5 fold in rural areas in Sunyani Municipal within the same period

FIGURE 2.58: HOUSEHOLDS THAT USE SURFACE WATER AS THE MAIN SOURCE OF DRINKING WATER BY TYPE OF LOCALITY, REGION AND DISTRICTS, 2010 AND 2021.



Proportion of households in Bono East that use surface water as the main source of drinking water decreased by 9.4 percentage points between 2010 and 2021.

Use of surface water by households declined in all districts except Sene East, Pru East, and Atebubu Amantin Municipal from 2010 to 2021.

More than six-in-ten (62.3%) households in Sene East use surface water as the main source of drinking water in 2021.

FIGURE 2.59: HOUSEHOLDS THAT USE SURFACE WATER AS THE MAIN SOURCE OF DRINKING WATER BY TYPE OF LOCALITY, REGION AND DISTRICTS, 2010 AND 2021 – BONO EAST.



Use of surface water as the main source of drinking water in Oti Region decreased from 31.3 percent in 2010 to 22.5 percent in 2021.

Proportion of households that use surface water as the main source of drinking water increased in all urban districts except Krachi West District, and Jasikan District in rural areas between 2010 and 2021.

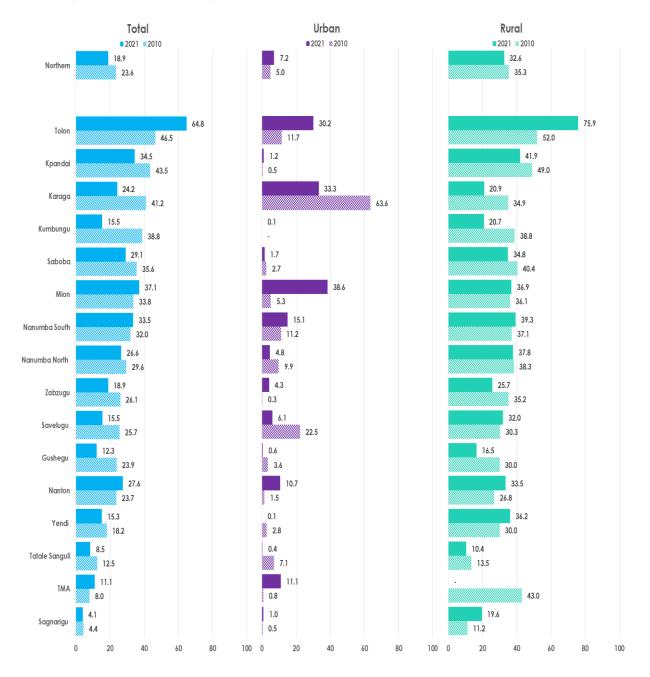
FIGURE 2.60: HOUSEHOLDS THAT USE SURFACE WATER AS THE MAIN SOURCE OF DRINKING WATER BY TYPE OF LOCALITY, REGION AND DISTRICTS, 2010 AND 2021 – OTI.



Use of surface water as the main source of drinking water decreased in all districts in the Northern Region between 2010 and 2021 except Tolon, Mion, Nanumba South, and Nanton; with the increase more than 1.4 times in Tolon.

Seven out of ten (75.9%) households in rural Tolon District use surface water as the main source of drinking water in 2021.

FIGURE 2.61: HOUSEHOLDS THAT USE SURFACE WATER AS THE MAIN SOURCE OF DRINKING WATER BY TYPE OF LOCALITY, REGION AND DISTRICTS, 2010 AND 2021 – NORTHERN.

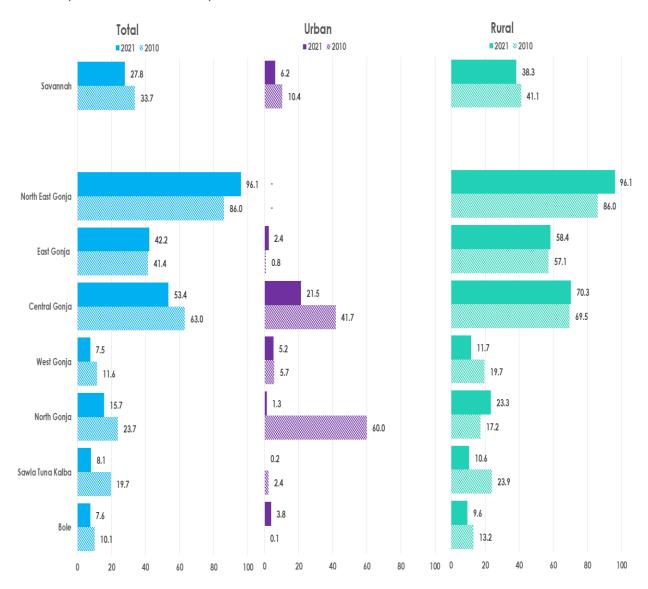


Proportion of households in Savannah Region that use surface water as the main source of drinking water reduced by 5.9 percentage points between 2010 and 2021.

All districts except North East Gonja and East Gonja Municipal recorded a decline in the use of surface water as the main source of drinking water from 2010 to 2021.

Almost all (96.1%) households in North East Gonja District use surface water as the main source of drinking water.

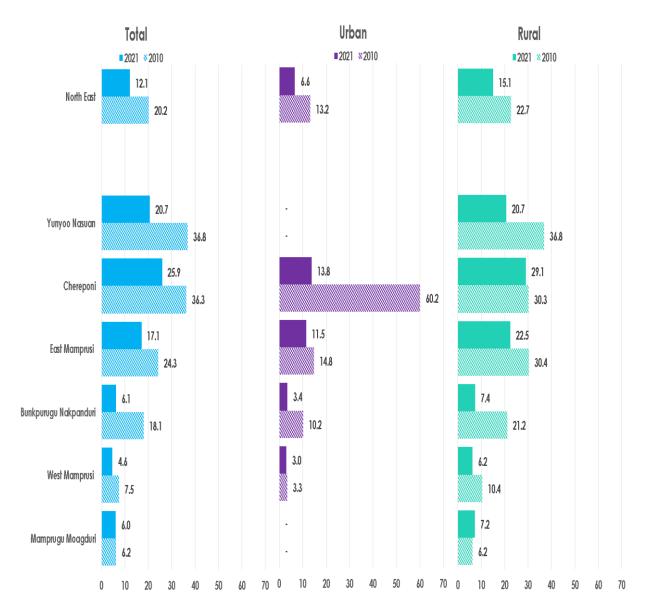
FIGURE 2.62: HOUSEHOLDS THAT USE SURFACE WATER AS THE MAIN SOURCE OF DRINKING WATER BY TYPE OF LOCALITY, REGION AND DISTRICTS, 2010 AND 2021 – SAVANNAH.



Proportion of households in North East Region using surface water as the main source of drinking water reduced by 8.1 percentage points between 2010 and 2021.

All districts recorded a decline in the use of surface water as the main source of drinking water with Chereponi experiencing a decrease of more than 4 times in urban areas between 2010 and 2021.

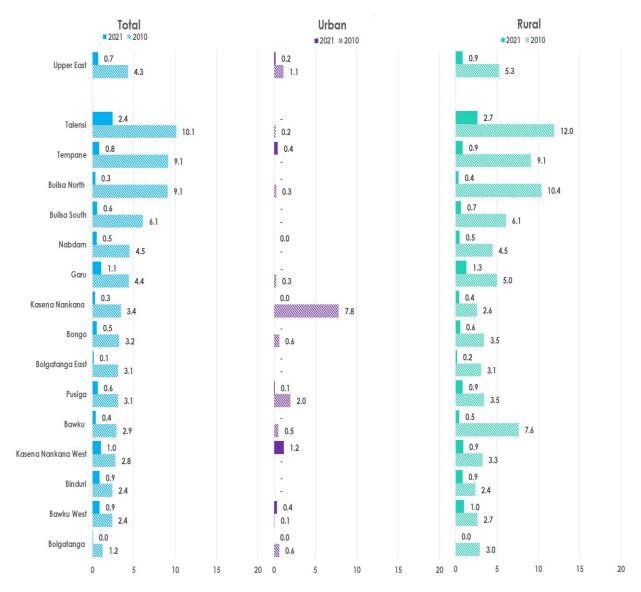
FIGURE 2.63: HOUSEHOLDS THAT USE SURFACE WATER AS THE MAIN SOURCE OF DRINKING WATER BY TYPE OF LOCALITY, REGION AND DISTRICTS, 2010 AND 2021 – NORTH EAST.



Proportion of households in Upper East Region that use surface water as the main source of drinking water declined by 3.9 percentage points from 2010 to 2021.

The decline is reflected across all districts with the highest of 8.7 percentage points in Builsa North Municipal.

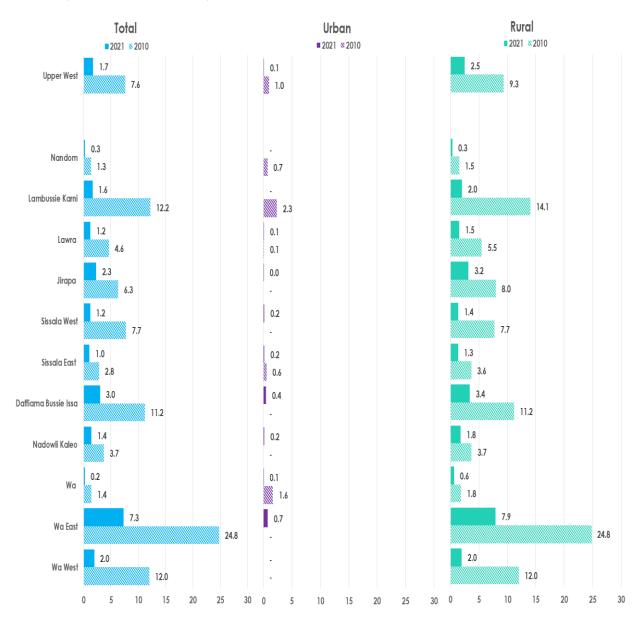
FIGURE 2.64: HOUSEHOLDS THAT USE SURFACE WATER AS THE MAIN SOURCE OF DRINKING WATER BY TYPE OF LOCALITY, REGION AND DISTRICTS, 2010 AND 2021 – UPPER EAST.



Proportion of households in four out of 11 districts (Wa East, Daffiama, Jirapa and Wa West) that use surface water as the main source of drinking water is higher than the regional average in 2010 (7.1%) and 2021(1.7%).

Use of surface water as the main source of drinking water in rural households declined in all districts, with a decrease of more than three times in Wa East (24.8% in 2010 and 7.9% in 2021)

FIGURE 2.65: HOUSEHOLDS THAT USE SURFACE WATER AS THE MAIN SOURCE OF DRINKING WATER BY TYPE OF LOCALITY, REGION AND DISTRICTS, 2010 AND 2021 – Upper West.

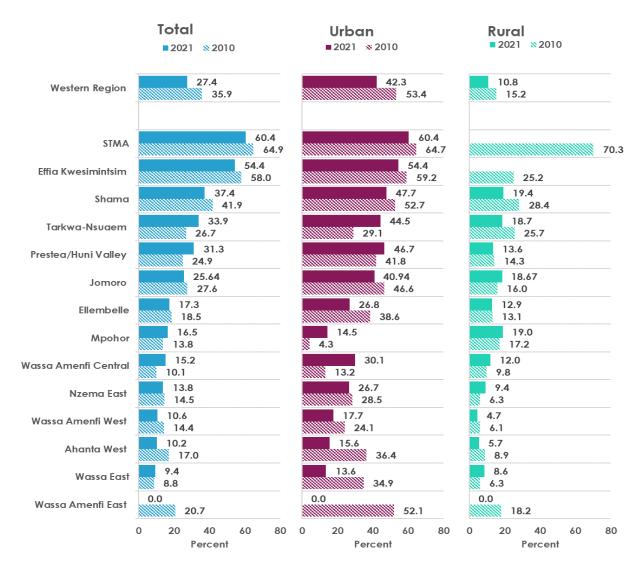


Household use of pipe-borne water in Western Region has declined by 8.5 percentage points from 35.9 percent in 2010 to 27.4 percent in 2021.

The decline is higher in urban (11.1%) which is 2.5 times that of rural areas (4.4%).

Nine out of fourteen districts recorded a decline in household use of pipe borne water, highest in Wassa Amenfi East which recorded almost a 100% change.

FIGURE 2.66:HOUSEHOLDS THAT USE PIPE-BORNE AS THE MAIN SOURCE OF DRINKING WATER BY TYPE OF LOCALITY, REGION AND DISTRICTS, 2010 AND 2021 – WESTERN.

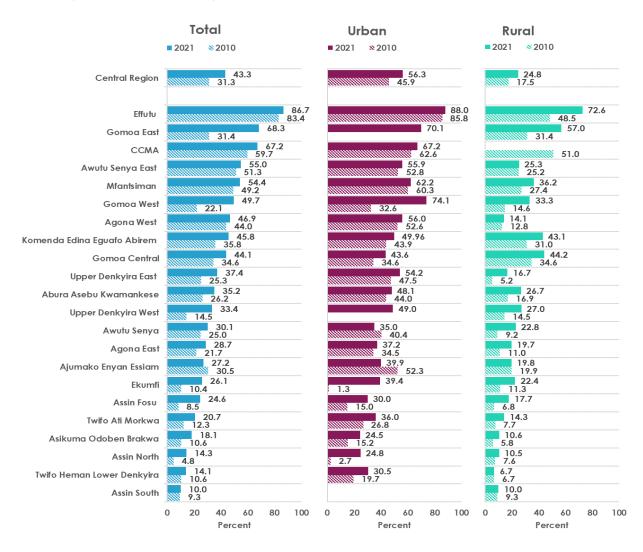


Pipe borne water usage in households has seen an increase in Central Region by 12 percentage points (31.3% in 2010 to 43.3% in 2021).

The rise in the use of pipe borne water is higher in urban (10.4%) than in rural areas (7.3%).

All districts recorded a rise in the use of pipe borne water with the exception of Ajumako Enyan Essiam District, which saw a decline of 3.3 percent (30.5% in 2010 to 27.2% in 2021).

FIGURE 2.67: HOUSEHOLDS THAT USE PIPE-BORNE AS THE MAIN SOURCE OF DRINKING WATER BY TYPE OF LOCALITY, REGION AND DISTRICTS, 2010 AND 2021 – CENTRAL.

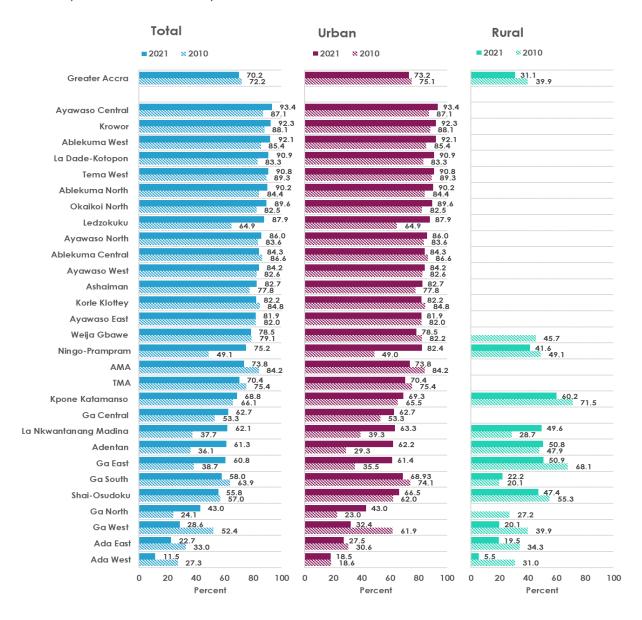


Household use of pipe borne water in Greater Accra Region has declined by 2.0 percentage points in the period of 2010 to 2021.

The rate of decline is higher in rural (8.8%) which is 4.6 times that of urban (1.9%) areas.

On the other hand, 18 out of 29 districts in the region recorded a rise in the use of pipe borne water with the highest in La Nkwantanang Madina (26.1 percentage points).

FIGURE 2.68: HOUSEHOLDS THAT USE PIPE-BORNE AS THE MAIN SOURCE OF DRINKING WATER BY TYPE OF LOCALITY, REGION AND DISTRICTS, 2010 AND 2021 – GREATER ACCRA.

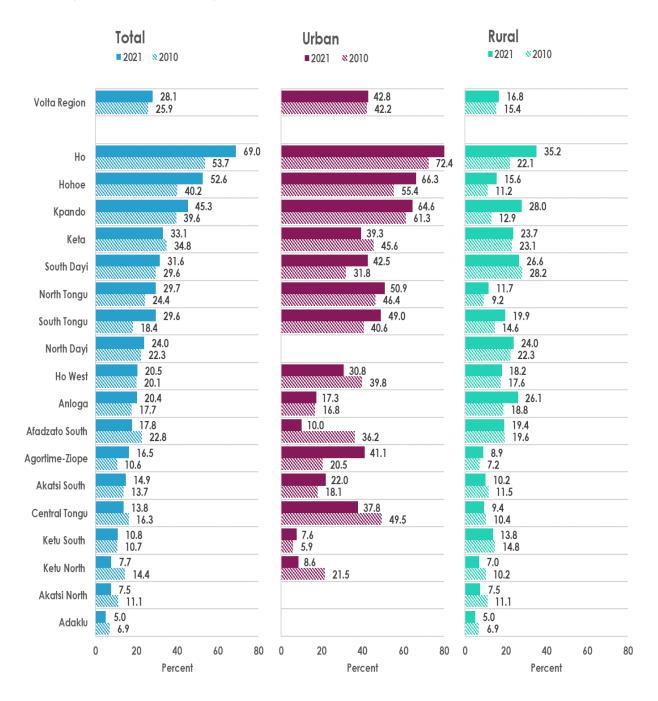


The use of pipe borne water by households in Volta Region has seen an increase by 2.2 percentage points between 2010 and 2021 (25.9% to 28.1% respectively).

The rise is higher in rural (1.4%) than in urban (0.6%), areas.

Rise in the use of pipe borne water was recorded in 12 districts; highest in Ho Municipal (15.3 percentage points).

FIGURE 2.69: HOUSEHOLDS THAT USE PIPE-BORNE AS THE MAIN SOURCE OF DRINKING WATER BY TYPE OF LOCALITY, REGION AND DISTRICTS, 2010 AND 2021 – VOLTA REGION.

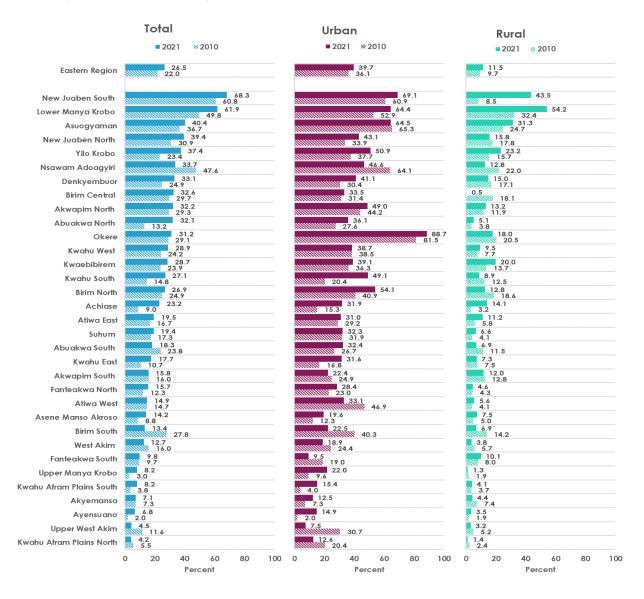


Household use of pipe-borne water in Eastern Region has increased by 4.5 percentage points between 2010 and 2021.

The increase is higher in urban (3.6%), which is 2 times that of rural areas (1.8%).

Twenty five districts recorded an increase in the use of pipe-borne water, highest in Abuakwa North (18.9%) while Fanteakwa North recorded a marginal decline of 0.1 percentage point

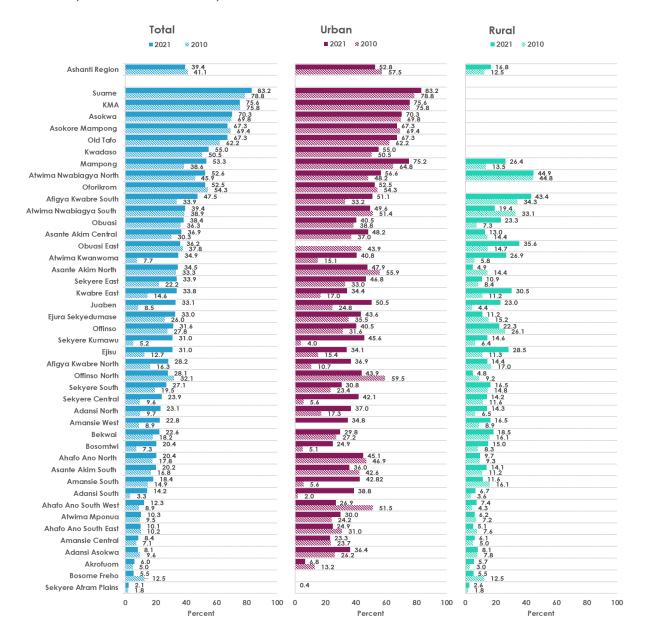
FIGURE 2.70: HOUSEHOLDS THAT USE PIPE-BORNE AS THE MAIN SOURCE OF DRINKING WATER BY TYPE OF LOCALITY, REGION AND DISTRICTS, 2010 AND 2021 – EASTERN REGION.



Pipe borne water usage in households has declined in Ashanti Region by 1.7 percentage points. While urban areas recorded a decline of 4.7 percentage points, rural areas recorded an increase of 4.3 percentage points.

Seven districts recorded a decline in the use of pipe-borne water, highest recorded in Bosome Freho District by 4.0 percentage points.

FIGURE 2.71:HOUSEHOLDS THAT USE PIPE-BORNE AS THE MAIN SOURCE OF DRINKING WATER BY TYPE OF LOCALITY, REGION AND DISTRICTS, 2010 AND 2021 – ASHANTI REGION.

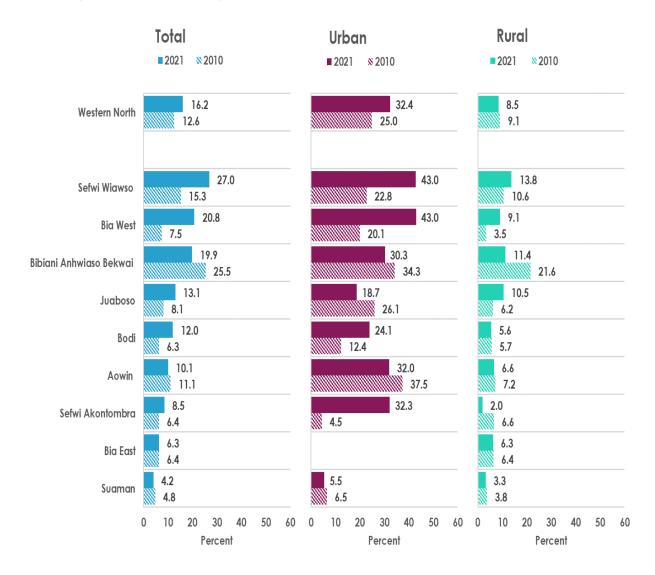


Use of pipe borne water by households in Western North Region increased by 3.6 percentage points between 2010 and 2021 (12.6% in 2010 to 16.2% in 2021).

Urban areas recorded a rise of 7.4 percentage points while rural areas experienced a decline of 0.6 percentage points.

More than half of the districts recorded a rise in the use of pipe borne water; highest in Bia West (11.7%) and Sefwi Akontombra (2.1%), the lowest.

FIGURE 2.72: HOUSEHOLDS THAT USE PIPE-BORNE AS THE MAIN SOURCE OF DRINKING WATER BY TYPE OF LOCALITY, REGION AND DISTRICTS, 2010 AND 2021 – WESTERN NORTH REGION.

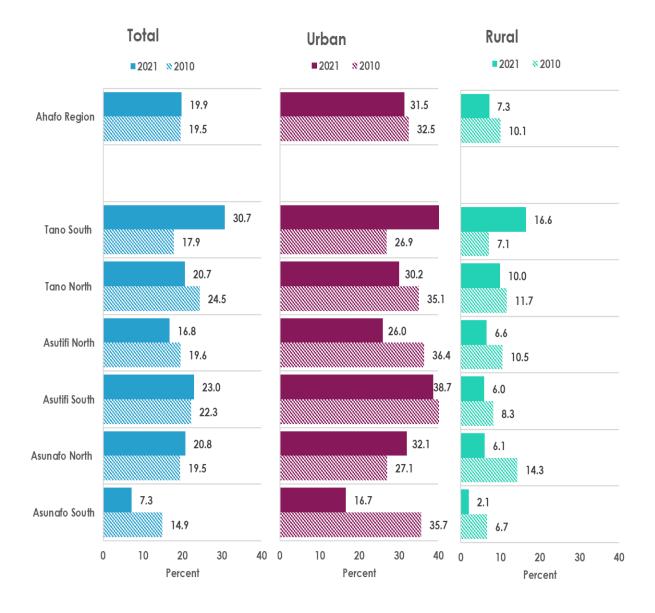


Pipe borne water usage in households has seen an increase in Ahafo Region by 0.4 percentage points between 2010 (19.5%) and 2021 (19.9%).

There is higher decline in rural (2.8%) which is 2.8 times that of urban, areas (1.0%).

Three districts recorded a decline in the use of pipe borne water; highest in Asunafo South (7.6%).

FIGURE 2.73: HOUSEHOLDS THAT USE PIPE-BORNE AS THE MAIN SOURCE OF DRINKING WATER BY TYPE OF LOCALITY, REGION AND DISTRICTS, 2010 AND 2021 – AHAFO REGION.

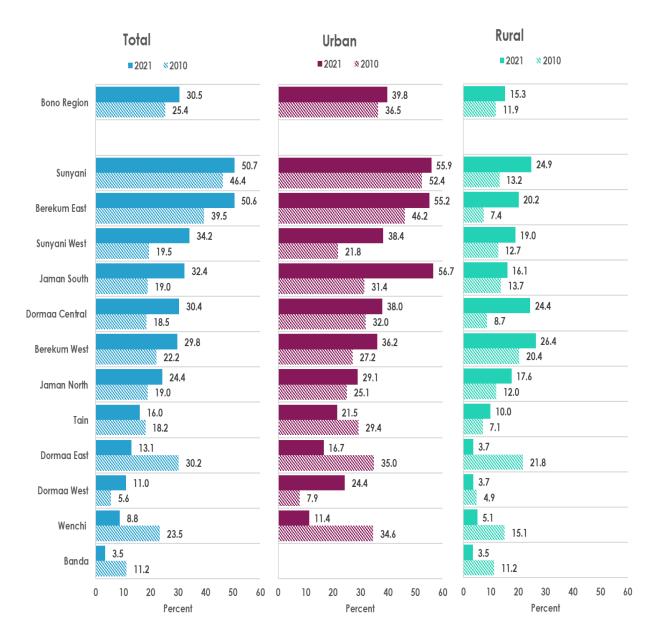


Household use of pipe borne water in Bono Region has increased by 5.1 percentage points between 2010 (25.4%) and 2021 (30.5%)

The decline is higher in rural (3.4%) than in urban (3.3%) areas.

Four districts recorded a decline in the use of pipe borne water, highest in Dormaa East by 17.1 percentage points

FIGURE 2.74: HOUSEHOLDS THAT USE PIPE-BORNE AS THE MAIN SOURCE OF DRINKING WATER BY TYPE OF LOCALITY, REGION AND DISTRICTS, 2010 AND 2021 – BONO REGION.

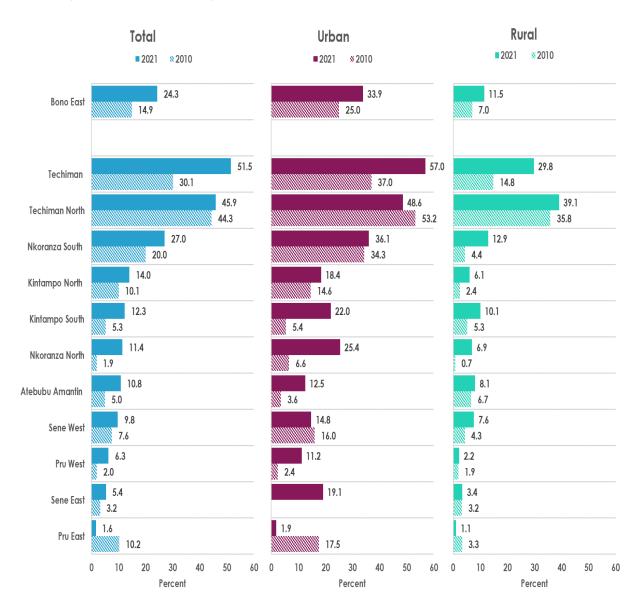


Household use of pipe borne water has increased by 9.4 percentage points between 2010 (14.9%) and 2021 (24.3%) in Bono East Region.

The increase is higher in urban (8.9%) than in rural (4.5%) areas.

All the districts recorded a rise in the use of pipe borne water between 2010 and 2021 with the exception of Pru East District which recorded a decline of 8.6 percentage points.

FIGURE 2.75: HOUSEHOLDS THAT USE PIPE-BORNE AS THE MAIN SOURCE OF DRINKING WATER BY TYPE OF LOCALITY, REGION AND DISTRICTS, 2010 AND 2021 – BONO EAST REGION.

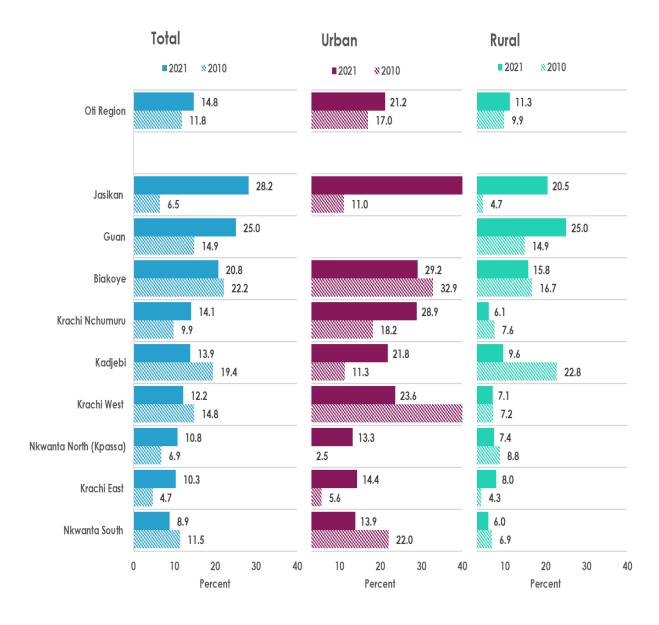


Pipe borne water usage in households has increased by 3.0 percentage points (11.8% in 2010 to 14.8% in 2021) in Oti Region.

The increase recorded in urban (4.2%) was more than twice that of rural (1.4%), areas.

More than half of the districts recorded an increase in the use of pipe borne water, highest in Jasikan by 21.8 percentage points.

FIGURE 2.76: HOUSEHOLDS THAT USE PIPE-BORNE AS THE MAIN SOURCE OF DRINKING WATER BY TYPE OF LOCALITY, REGION AND DISTRICTS, 2010 AND 2021 – OTI REGION.

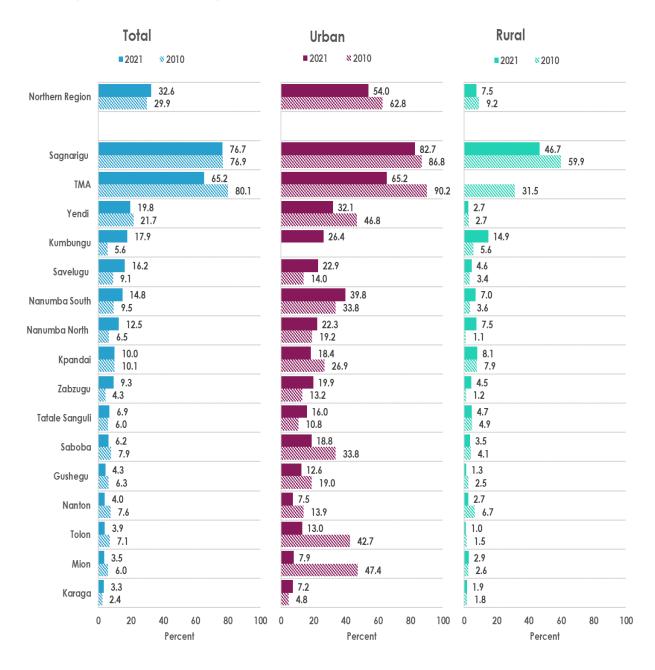


The use of pipe borne water by households in Northern Region has increased by 5.7 percentage points between 2010 and 2021 (26.9% in 2010 to 32.6% in 2021).

A decline in the use of pipe borne water was recorded in both urban (8.8%) and rural (1.7%) areas within the period.

Kumbungu District recorded the highest increase in the use of pipe borne water by 12.3 percentage points (5.6% in 2010 to 17.9% in 2021).

FIGURE 2.77: HOUSEHOLDS THAT USE PIPE-BORNE AS THE MAIN SOURCE OF DRINKING WATER BY TYPE OF LOCALITY, REGION AND DISTRICTS, 2010 AND 2021 – NORTHERN REGION.

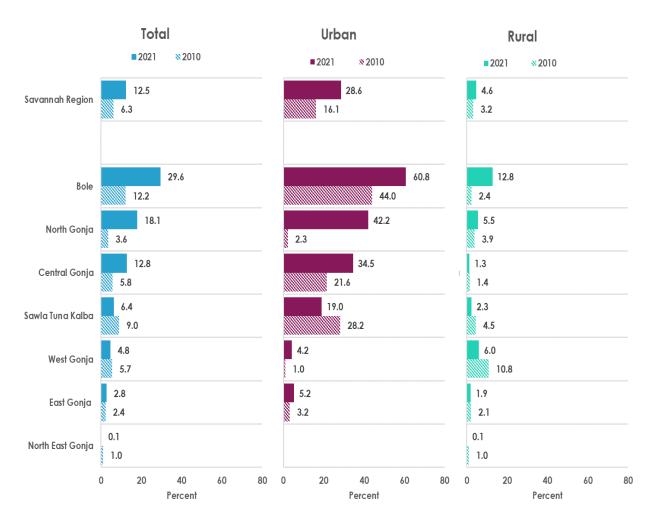


Household use of pipe borne water has increased by 6.2 percent (6.3% in 2010 to 12.5% in 2021) in Savannah Region.

Increase in the use of pipe borne water was recorded in both urban (12.5 percentage points) and rural (1.4 percentage points) areas.

Bole District recorded the highest increase by 17.4 percentage points with its urban and rural areas also increasing by 16.8 percentage points and 10.4 percentage points respectively.

FIGURE 2.78: HOUSEHOLDS THAT USE PIPE-BORNE AS THE MAIN SOURCE OF DRINKING WATER BY TYPE OF LOCALITY, REGION AND DISTRICTS, 2010 AND 2021 – SAVANNAH REGION.

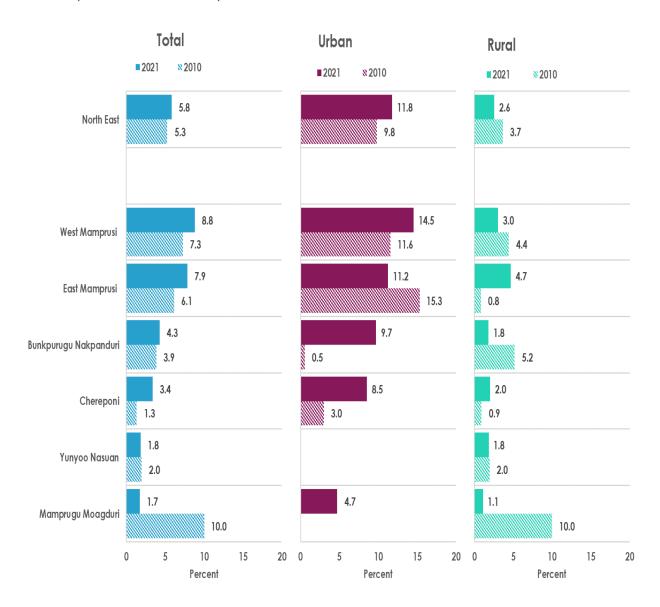


Household use of pipe borne water has increased marginally by 0.5 percentage points (5.3% in 2010 to 5.8% in 2021) in North East Region.

An increase was recorded in urban areas while there was a decline in rural areas by 2.8 and 1.1 percentage points respectively.

The increase in the use of pipe borne water was recorded in four districts, highest in Chereponi by 2.1 percentage points.

FIGURE 2.79: HOUSEHOLDS THAT USE PIPE-BORNE AS THE MAIN SOURCE OF DRINKING WATER BY TYPE OF LOCALITY, REGION AND DISTRICTS, 2010 AND 2021 – NORTH EAST REGION.

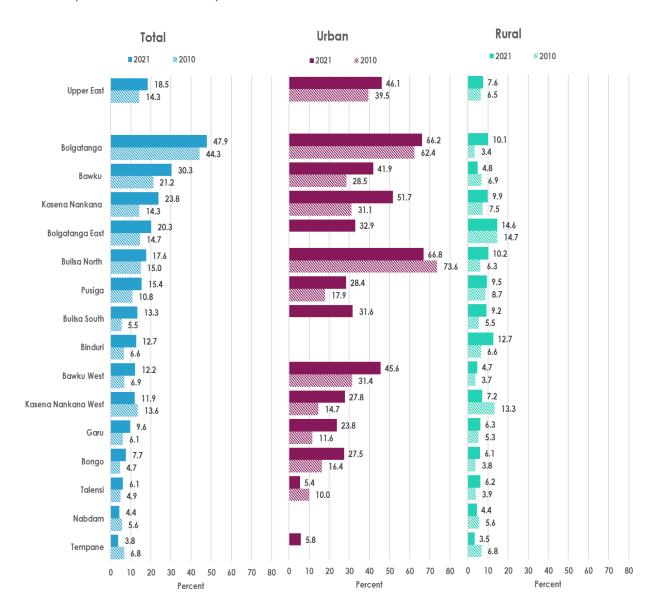


Pipe borne water usage in households has increased by 4.2 percentage points (14.3% in 2010 to 18.5% in 2021) in Upper East Region.

Increase in the use of pipe borne water recorded in urban (6.6 percentage points) is 6 times as much as in rural (1.1 percentage point) areas.

Three districts recorded a decline in the use of pipe borne water, highest in Kasena Nankana West by 1.7 percentage points.

FIGURE 2.80: HOUSEHOLDS THAT USE PIPE-BORNE AS THE MAIN SOURCE OF DRINKING WATER BY TYPE OF LOCALITY, REGION AND DISTRICTS, 2010 AND 2021 – Upper East Region.

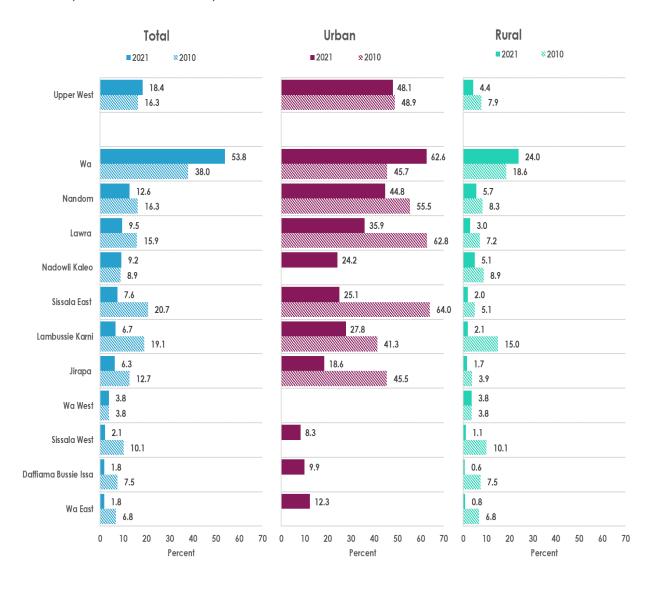


Household use of pipe borne water has increased by 2.1 percentage points (16.3% in 2010 to 18.4% in 2021) in Upper West Region.

A decline in the use of pipe borne water was recorded in both urban and rural areas by 0.8 and 3.5 percentage points respectively.

Eight out of 11 districts recorded a decline in the use of pipe borne water, with the highest in Sissala East by 13.1 percentage points.

FIGURE 2.81: HOUSEHOLDS THAT USE PIPE-BORNE AS THE MAIN SOURCE OF DRINKING WATER BY TYPE OF LOCALITY, REGION AND DISTRICTS, 2010 AND 2021 – Upper West Region.



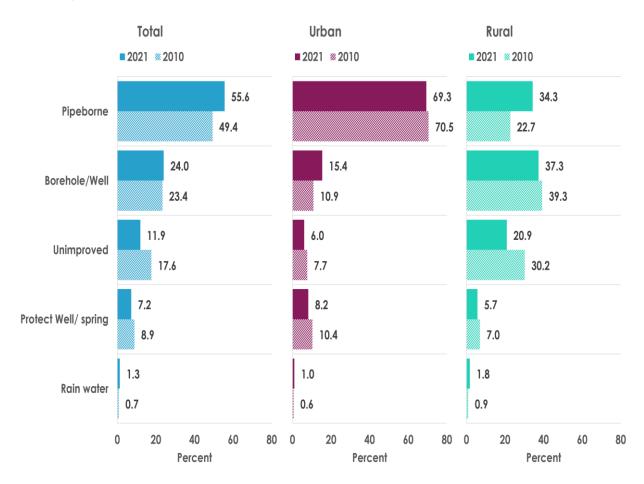
## **CHAPTER THREE**

## 3. HIGHLIGHTS OF HOUSEHOLDS MAIN SOURCES OF WATER FOR DOMESTIC PURPOSES

The proportion of households using unimproved water for other domestic purposes declined from 17.6 percent in 2010 to 11.9 percent in 2021. The reduction was more significant in rural areas, with a difference of 9.3 percentage points.

In 2010 and 2021, the proportion of households using borehole/well for other domestic purposes was more than double in rural areas (39.3%, 37.3%) compared to urban areas (10.9%, 15.4%).

FIGURE 3.1: MAIN SOURCE OF WATER USED BY HOUSEHOLDS FOR OTHER DOMESTIC PURPOSE BY TYPE OF LOCALITY, 2010 AND 2021.



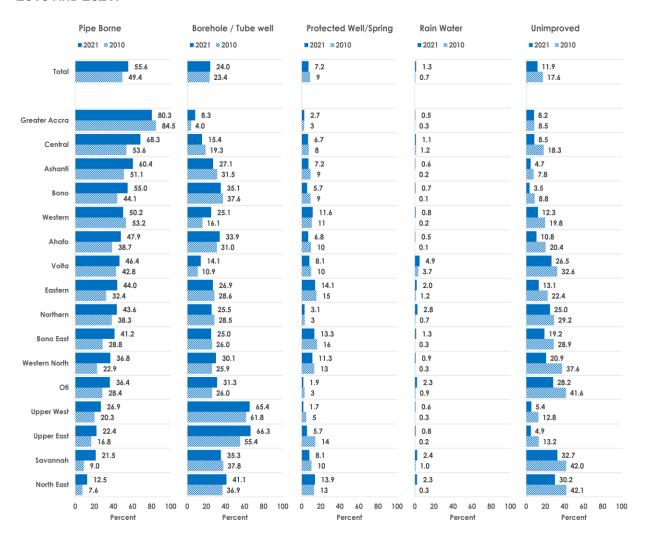
Use of pipe borne water for other domestic purposes by households in Ghana increased from 49.4 percent in 2010 to 55.6 percent in 2021; use of borehole/tube well also increased marginally by 0.6 percentage points.

Proportion of households using unimproved water for other domestic purposes reduced by 5.7 percentage points from 17.6 percent in 2010 to 11.9 percent in 2021.

All regions experienced an increase in the use of pipe-borne water for other domestic purposes over the period, but there were declines for Greater Accra (84.4% to 80.3%) and Western (53.2% to 50.2%) regions.

Proportion of households using unimproved water for other domestic purposes declined in all regions, with Greater Accra and Western North regions having the lowest and highest percentage point decreases of 0.3 and 16.8 respectively.

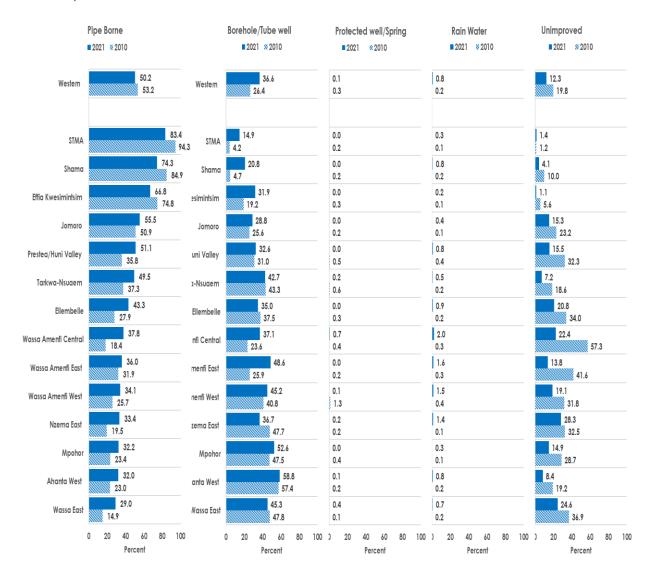
FIGURE 3.2: MAIN SOURCE OF WATER USED BY HOUSEHOLDS FOR OTHER DOMESTIC PURPOSE BY REGION, 2010 AND 2021.



Proportion of households using pipe-borne water for other domestic purposes, declined in 3 districts over the period (2010 to 2021) with a reduction of over 10 percentage points in STMA (10.9%) and Shama(10.5%) in Western Region.

Unimproved water usage for other domestic purposes decreased in all districts except STMA, with declines ranging from 27.8 to 4.2 percentage points in Wassa Amenfi Central and Nzema East respectively.

FIGURE 3.3: MAIN SOURCE OF WATER USED BY HOUSEHOLDS FOR OTHER DOMESTIC PURPOSE BY REGION AND DISTRICTS, 2010 AND 2021 – WESTERN.

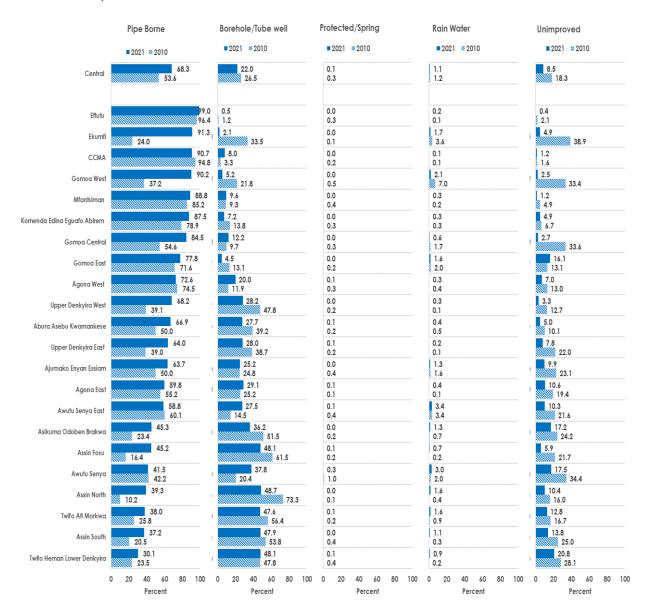


Except for four districts (CCMA, Awutu Senya East, Awutu Senya and Agona West), proportion of households using pipe-borne water for other domestic purposes in the Central Region increased in 2021 compared to 2010, with the highest in Effutu (99.0%) and lowest in Twifo Heman Lower Denkyera (30.1%)

Increment for Ekumfi and Assin North is over three times in 2021 than in 2010.

All districts experienced a decrease in using unimproved water for domestic purposes from 2010 to 2021 except Gomoa West where there was an increase from 13.1 percent in 2010 to 16.1 percent in 2021.

FIGURE 3.4: MAIN SOURCE OF WATER USED BY HOUSEHOLDS FOR OTHER DOMESTIC PURPOSES BY REGION AND DISTRICTS, 2010 AND 2021 – CENTRAL.

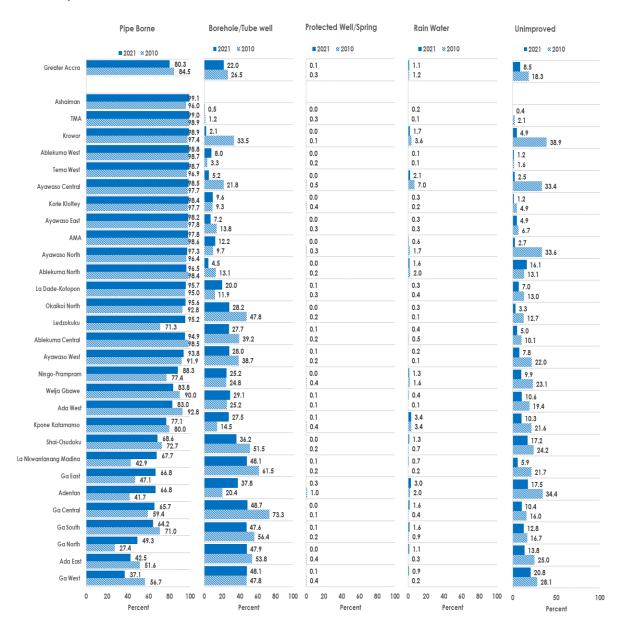


In 10 out of 31 districts in Greater Accra, proportion of households using pipe-borne water for other domestic purposes decreased in 2021 compared to 2010.

Ga West saw the largest reduction (19.6%) and AMA the smallest (0.8%).

In 9 districts, the proportion of households using unimproved water for other domestic purposes increased over the period 2010 to 2021.

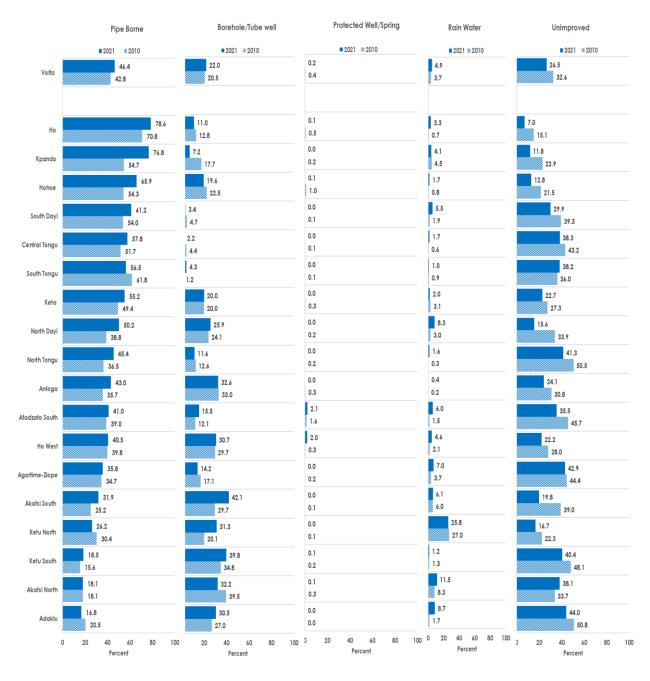
FIGURE 3.5: MAIN SOURCE OF WATER USED BY HOUSEHOLDS FOR OTHER DOMESTIC PURPOSE BY REGION AND DISTRICTS, 2010 AND 2021 – GREATER ACCRA.



More than 30.0 percent of households in all districts in Volta Region use pipe borne water for other domestic purposes in 2021 except Adaklu (16.8%), Akatsi North (18.1%), Ketu South (18.5%) and Ketu North (26.2%).

Between year 2010 and 2021, all districts experienced a decline in the proportion of households using unimproved water for other domestic purposes, except Akatsi North where there was an increase by 4.4 percentage points.

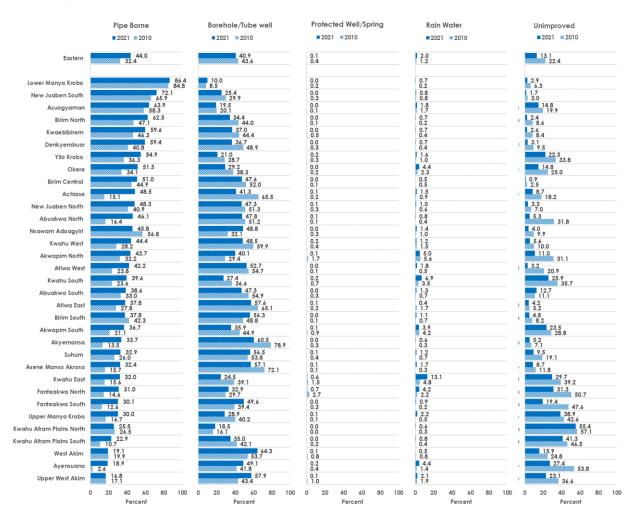
FIGURE 3.6: MAIN SOURCE OF WATER USED BY HOUSEHOLDS FOR OTHER DOMESTIC PURPOSES BY REGION AND DISTRICTS, 2010 AND 2021 – VOLTA REGION.



Except for five districts in Eastern Region, usage of pipe-borne water for domestic and other purposes increased across all other districts within the period 2010 to 2021, with reductions ranging from 33.4 percentage points in Achiase to 1.6 percentage points in Lower Manya Krobo.

Use of unimproved water for other domestic purposes decreased across all districts over the period 2010 to 2021 except for Abuakwa where there was an increase from 11.1 to 12.7 percent in 2010 and 2021 respectively.

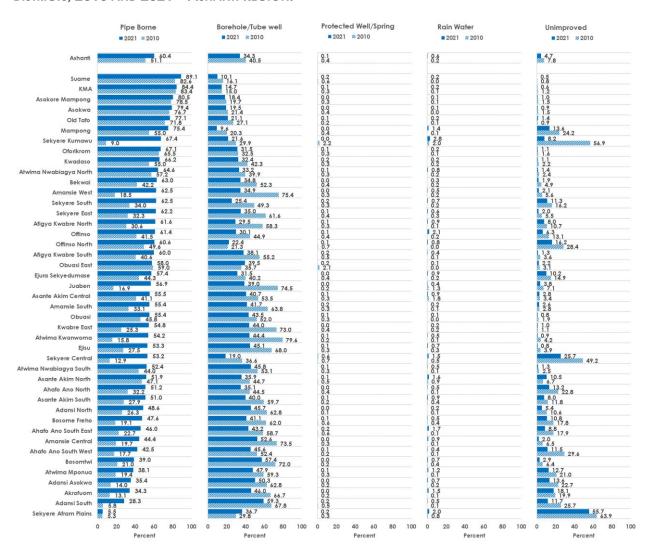
FIGURE 3.7: MAIN SOURCE OF WATER USED BY HOUSEHOLDS FOR OTHER DOMESTIC PURPOSE BY REGION AND DISTRICTS, 2010 AND 2021 – EASTERN REGION.



Except for Obuasi East, all districts in Ashanti Region witnessed an increase in the proportion of households using pipe-borne water for other domestic purposes between 2010 and 2021. Notably, Sekyere Kumawu saw a remarkable 7.5-fold increase.

Asante Akim North experienced an increase in the proportion of households using unimproved water for domestic purposes, rising from 6.7 percent in 2010 to 10.5 percent in 2021, while there was a reduction in all other districts.

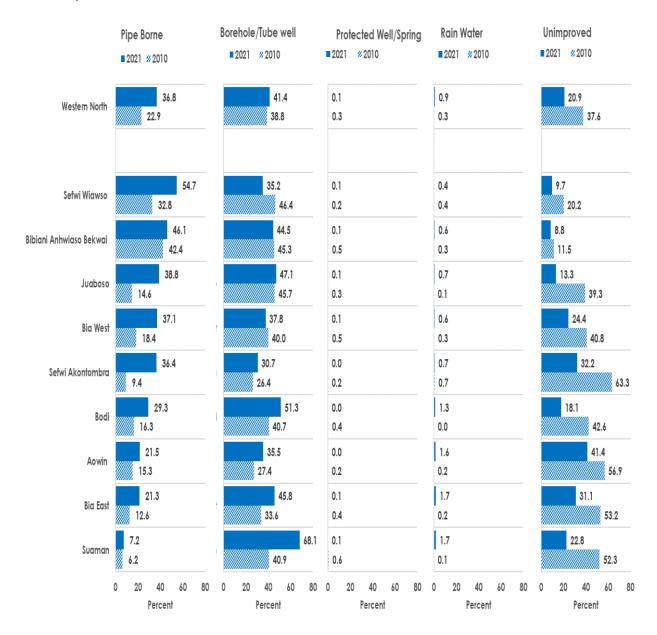
FIGURE 3.8: MAIN SOURCE OF WATER USED BY HOUSEHOLDS FOR OTHER DOMESTIC PURPOSE BY REGION AND DISTRICTS, 2010 AND 2021 – ASHANTI REGION.



Proportion of households using pipe-borne water for other domestic purposes increased across all districts from 2010 to 2021, ranging from 1.1 percentage points in Suaman District to 27.0 percentage points in Sefwi Akontombra.

Across all districts, there was a decrease in the proportion of households using unimproved water for domestic purposes. Sefwi Akontombra saw the highest reduction (31.4 percentage points), from 63.3 percent in 2010 to 32.2 percent in 2021.

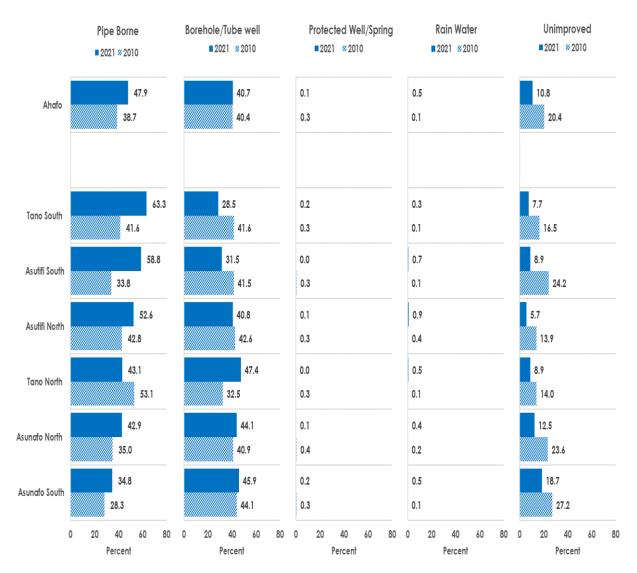
FIGURE 3.9: MAIN SOURCE OF WATER USED BY HOUSEHOLDS FOR OTHER DOMESTIC PURPOSE BY REGION AND DISTRICTS, 2010 AND 2021 – WESTERN NORTH REGION.



Proportion of households in Ahafo Region using pipe-borne water for other domestic purposes increased across all districts from 2010 to 2021, except for Tano North where there was a decrease from 53.1 percent in 2010 to 43.1 percent in 2021.

Use of unimproved water for other domestic purpose by households decreased across all districts from 2010 to 2021 with Asutfi South registering the highest reduction of 15.1 percentage points.

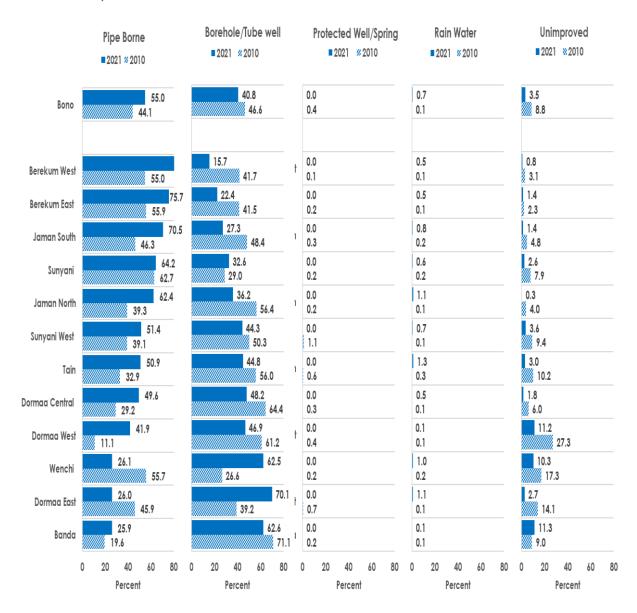
FIGURE 3.10: MAIN SOURCE OF WATER USED BY HOUSEHOLDS FOR OTHER DOMESTIC PURPOSES BY REGION AND DISTRICTS, 2010 AND 2021 – AHAFO REGION.



Between 2010 and 2021, the proportion of households using pipe-borne water for other domestic purposes in the Bono Region declined by 29.5 and 19.9 percentage points in Wenchi and Dormaa East districts, respectively, while other districts experienced increases.

Use of unimproved water for other domestic purposes reduced across all districts from 2010 to 2021 except for Banda where there was an increase of 2.5 percentage points.

FIGURE 3.11: MAIN SOURCE OF WATER USED BY HOUSEHOLDS FOR OTHER DOMESTIC PURPOSE BY REGION AND DISTRICTS, 2010 AND 2021 – BONO REGION.

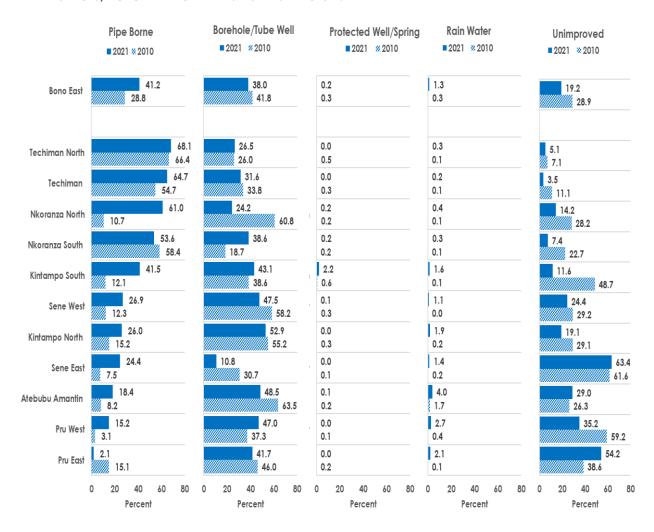


Between 2010 and 2021, the proportion of households using pipe-borne water for other domestic purposes in Bono East Region rose by 50.3 and 29.4 percentage points in Nkoranza North and Kintampo North districts respectively.

However, a decrease was observed in Pru East and Nkoranza South.

Use of Borehole/Tube wells for other domestic purposes reduced by 3.8 percentage points in the region, with Sene East (2.8) and Nkoranza North (2.5) reducing over 2.5 fold.

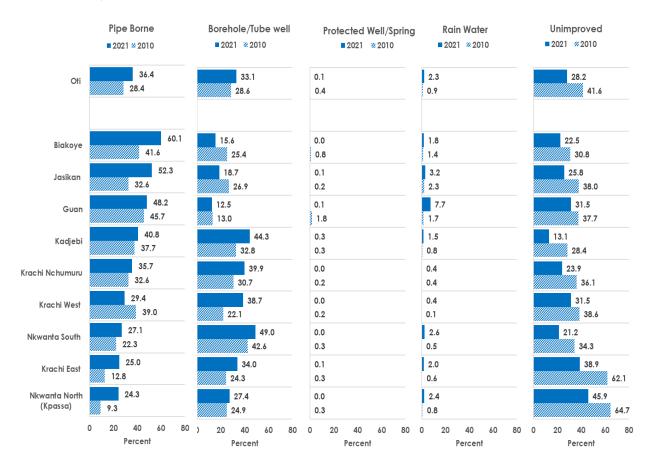
FIGURE 3.12: MAIN SOURCE OF WATER USED BY HOUSEHOLDS FOR OTHER DOMESTIC PURPOSE BY REGION AND DISTRICTS, 2010 AND 2021 – BONO EAST REGION.



Except for Krachi West, all districts in Oti Region witnessed increases in the proportion of households using pipe-borne water for other domestic purposes from 2010 to 2021. The increase in Nkwanta North was 2.6 times that of 2010.

Use of unimproved water for other domestic purposes reduced across all districts from 2010 to 2021, reducing by 2.2 times in Kedjebi District over the period.

FIGURE 3.13: MAIN SOURCE OF WATER USED BY HOUSEHOLDS FOR OTHER DOMESTIC PURPOSES BY REGION AND DISTRICTS, 2010 AND 2021 – OTI REGION

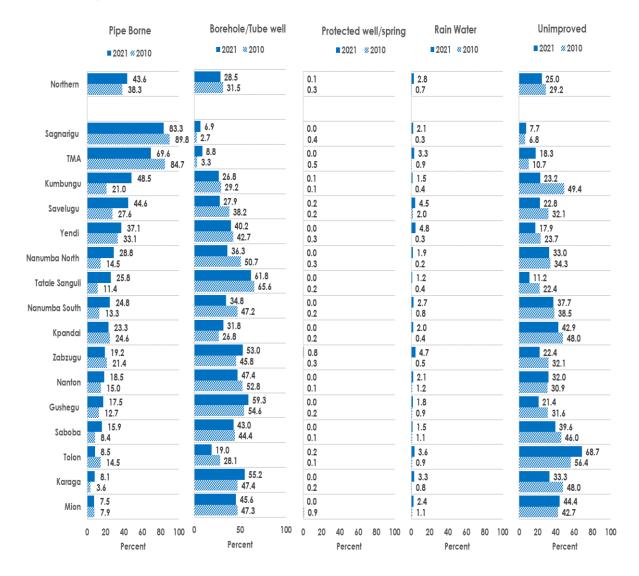


Proportion of households that use unimproved water for other domestic purposes declined across almost all districts in Northern Region between 2010 and 2021 except Sagnarigu, TMA, Nanton, Tolon and Mion.

Proportion of households that use pipe borne water for other domestic purposes increased from 38.3 percent in 2010 to 43.6 percent in 2021.

Sagnarigu has the highest proportion (83.3%) and Mion with 7.5 percent the lowest.

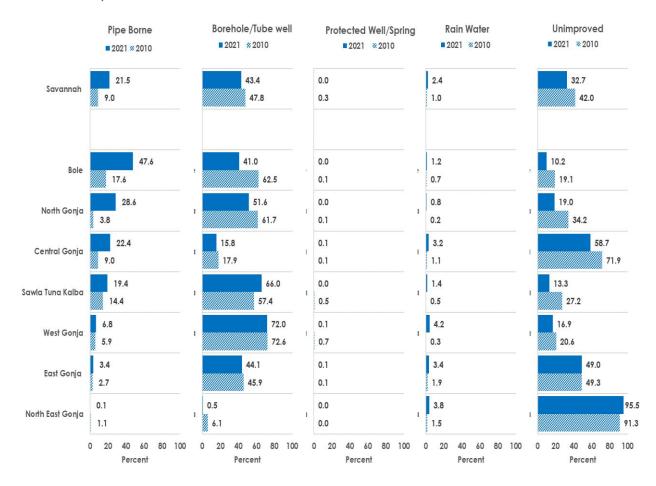
FIGURE 3.14: MAIN SOURCE OF WATER USED BY HOUSEHOLDS FOR OTHER DOMESTIC PURPOSES BY REGION AND DISTRICTS, 2010 AND 2021 – NORTHERN REGION



Less than ten percent of households in North East Gonja (0.1%), East Gonja (3.4%), and West Gonja (6.8%) districts use pipe borne water for other domestic purposes in 2021.

Use of unimproved water for other domestic purposes in Savannah Region reduced across all districts from 2010 to 2021 with North East Gonja (95.5%) recording the highest and Bole (10.2%) the lowest in 2021.

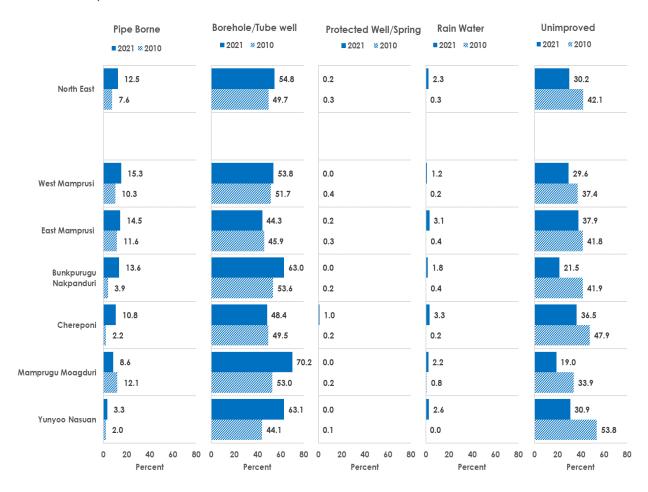
FIGURE 3.15: MAIN SOURCE OF WATER USED BY HOUSEHOLDS FOR OTHER DOMESTIC PURPOSE BY REGION AND DISTRICTS, 2010 AND 2021 – SAVANNAH REGION



Proportion of households using unimproved water for other domestic purposes declined across all districts from 2010 to 2021 in the North East Region. Proportion in Bunkpurugu Nakpanduri District reduced by half in 2021 (21.5%) that of 2010 (41.9%).

Less than 16 percent of households in all districts used pipe-borne water for other domestic purposes in 2021. Yunyoo Nasuan District recorded the least proportion (3.3%) of households that use pipe-borne water for other domestic purposes.

FIGURE 3.16: MAIN SOURCE OF WATER USED BY HOUSEHOLDS FOR OTHER DOMESTIC PURPOSES BY REGION AND DISTRICTS, 2010 AND 2021 – NORTH EAST REGION

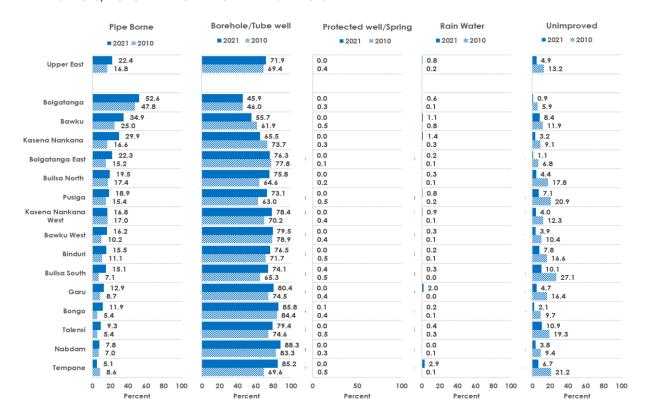


Borehole water (71.9%) is the most prominent source of water used in the Upper East Region for other domestic purposes.

The proportion of usage increased across all districts from 2010 to 2021 except for Kasena Nankana Municipal where there was a marginal reduction of 0.3 percentage points.

Proportion of households using unimproved water for other domestic purposes reduced over the period, with over 13.0 percent reduction in 4 districts (Bulsa North:13.3 Pusiga:14.1, Timpane:14.2, Builsa South:17.2).

FIGURE 3.17: MAIN SOURCE OF WATER USED BY HOUSEHOLDS FOR OTHER DOMESTIC PURPOSES BY REGION AND DISTRICTS, 2010 AND 2021 – Upper East Region

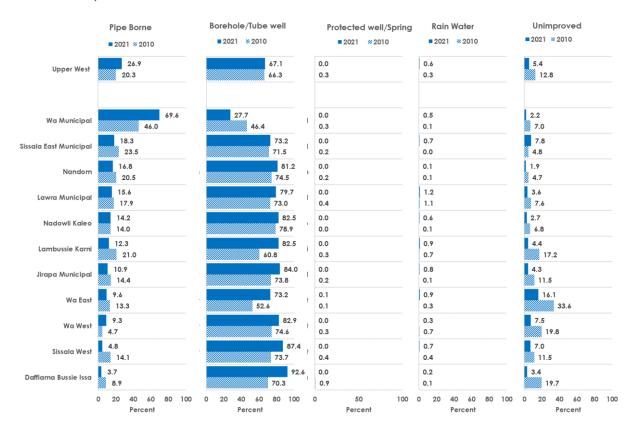


Borehole water is the predominant source of water for other domestic use in all districts of the Upper West Region.

Proportion of usage increased across all districts from 2010 to 2021 except for Wa Municipal with a reduction of 10.1 percentage points.

Usage of unimproved water for other domestic purposes reduced across all districts from 2010 to 2021 with over 16 percentage point reductions in Wa East (16.8) and Daffiama Bussie Essa (16.2).

FIGURE 3.18: MAIN SOURCE OF WATER USED BY HOUSEHOLDS FOR OTHER DOMESTIC PURPOSES BY REGION AND DISTRICTS, 2010 AND 2021 – Upper West Region



## **CHAPTER FOUR**

## 4. HIGHLIGHTS OF HOUSEHOLDS WITH SOURCES OF DRINKING WATER ON PREMISES

More than half (53.1%) of households have their sources of drinking water on premises and is higher in urban (72.3%) than rural (23.3) areas.

Proportion of households with source of drinking water on premises varies from 88.9 percent in Greater Accra Region, the highest, to 8.7 percent in North East Region, the lowest.

In eleven regions less than half of households have their sources of drinking water on premises.

FIGURE 4.1: HOUSEHOLDS WITH SOURCE OF DRINKING WATER ON PREMISES BY TYPE OF LOCALITY AND REGION



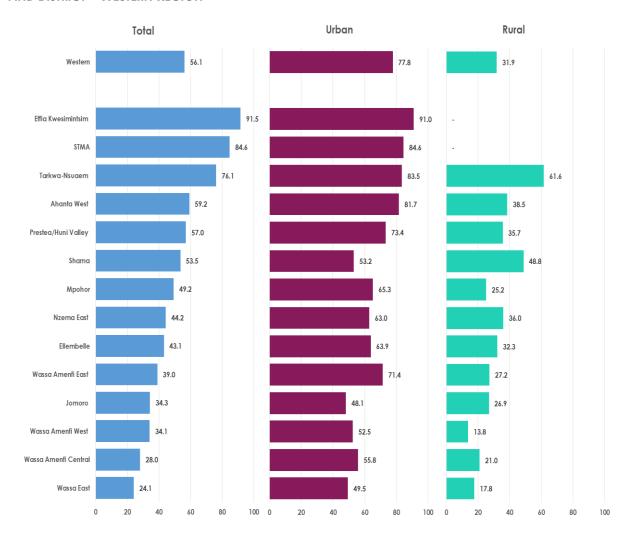
About six-in-ten (56.1%) households in the Western Region have their main source of drinking water on premises and is higher in urban (77.8%), than rural (31.9%) areas.

Large variations exist in both rural and urban areas for households with main source of water in premises.

Rural – 43.9 percentage points (Tarkwa-Nsuaem - 61.7%, the highest; Wassa East - 17.8%, the lowest).

Urban – 40.6 percentage points (Efia-Kwesimintsim - 90.1%, the highest; Wassa East - 49.5%, the lowest).

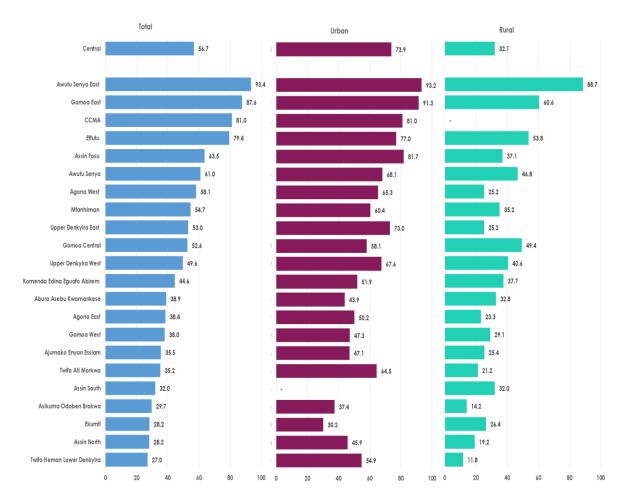
FIGURE 4.2: HOUSEHOLDS WITH SOURCE OF DRINKING WATER ON PREMISES BY TYPE OF LOCALITY, REGION AND DISTRICT – WESTERN REGION



In Central Region, 56.7 percent of households have their main source of drinking water on premises, with urban (73.9%) being more than 2 times as much as rural (32.1%) areas.

Proportion of households with source of drinking water on premises varies from 93.4 percent in Awutu Senya East, the highest, to 27.0 percent in Twifo Hemang Lower Denkyira, the lowest.

FIGURE 4.3: HOUSEHOLDS WITH SOURCE OF DRINKING WATER ON PREMISES BY TYPE OF LOCALITY, REGION AND DISTRICT – CENTRAL REGION



Almost 9-in-10 (88.9%) of households in the Greater Accra Region have their main source of drinking water on premises with urban, (90.7%) having a higher proportion than rural (66.0%) areas.

Among the districts, it varies from 96.9 percent in Ga Central, the highest, to 34.2 percent in Ada East, the lowest.

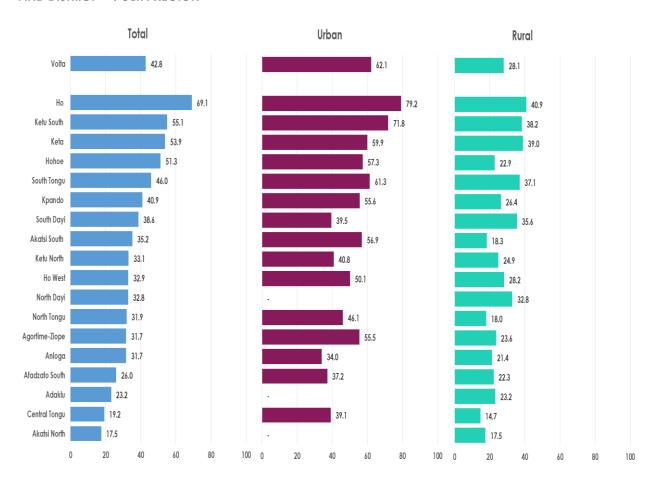
FIGURE 4.4: HOUSEHOLDS WITH SOURCE OF DRINKING WATER ON PREMISES BY TYPE OF LOCALITY, REGION AND DISTRICT – GREATER ACCRA REGION



About 4-in-10 (42.8%) households in the Volta Region have their main source of drinking water on premises and is higher in urban, (62.1%) than rural (28.1%) areas.

The proportion in Ho (69.1%), the highest, is about 4 times as much as that of Akatsi North (17.5%), the lowest.

FIGURE 4.5: HOUSEHOLDS WITH SOURCE OF DRINKING WATER ON PREMISES BY TYPE OF LOCALITY, REGION AND DISTRICT – VOLTA REGION

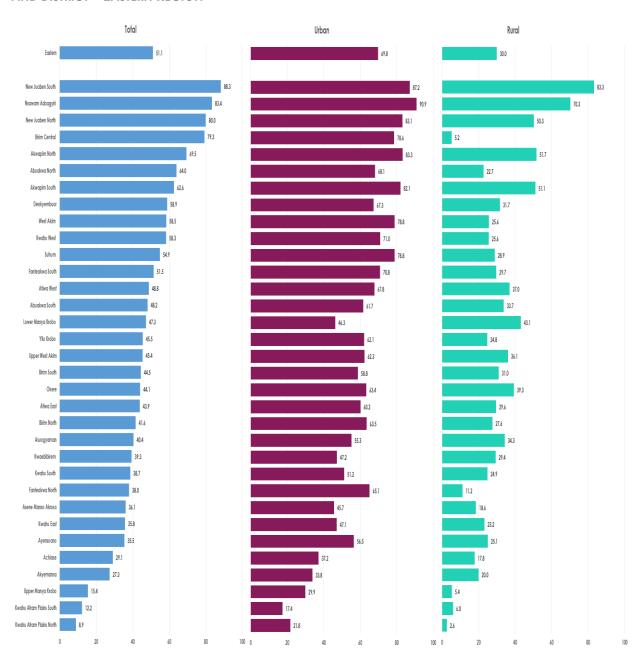


About half (51.1%) of households in the Eastern Region have their sources of drinking water on premises, with a higher proportion in urban, (69.8%) than rural (30.0) areas.

There are marked variations across the districts, with New Juaben South recording the highest (88.3%) and Kwahu Afram Plains North (8.9%), the lowest.

In twenty-one districts, less than half of households have their sources of drinking water on premises.

FIGURE 4.6: HOUSEHOLDS WITH SOURCE OF DRINKING WATER ON PREMISES BY TYPE OF LOCALITY, REGION AND DISTRICT – EASTERN REGION

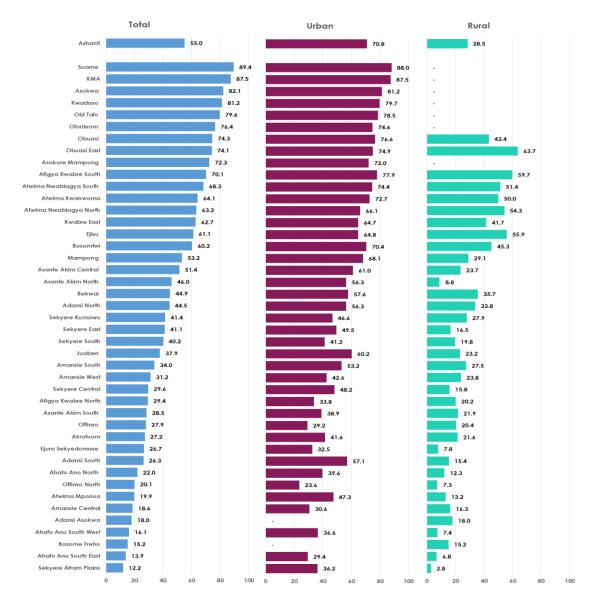


The proportion of households with their sources of drinking water on premises in Ashanti Region is 55.0 percent, with a higher proportion in urban (70.8%) than rural (28.5) areas.

At the district level, proportion of households with source of drinking water on premises varies from 89.4 percent in Suame, the highest, to 12.2 percent in Sekyere Afram Plains, the lowest.

In twenty-five districts, less than half of households have their sources of drinking water on premises.

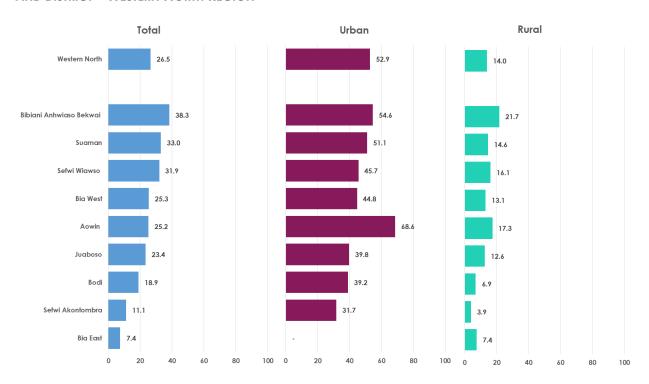
FIGURE 4.7: HOUSEHOLDS WITH SOURCE OF DRINKING WATER ON PREMISES BY TYPE OF LOCALITY, REGION AND DISTRICT – ASHANTI REGION



Only 26.5 percent of households in the Western North Region have their main source of drinking water on premises with urban areas being about four times (52.9%) higher than rural (14.0%)

In all the districts, less than 4 in 10 of households have their sources of drinking water on premises, raging from 7.4 percent in Bia East District, the lowest, to 38.3 percent in Bibiani Anwhiaso Bekwai District, the highest.

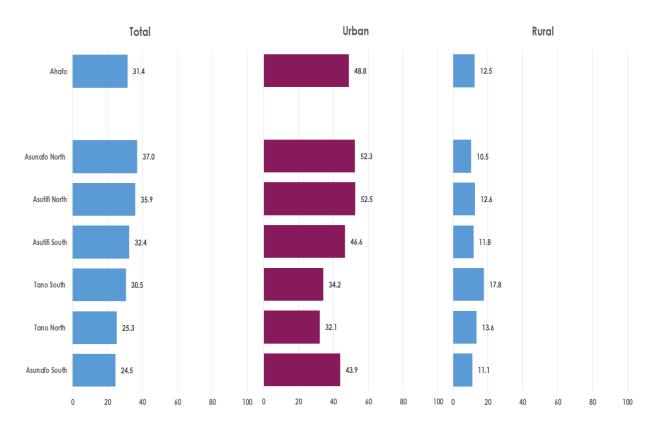
FIGURE 4.8: HOUSEHOLDS WITH SOURCE OF DRINKING WATER ON PREMISES BY TYPE OF LOCALITY, REGION AND DISTRICT – WESTERN NORTH REGION



Less than a third (31.4%) of households in the Ahafo Region have their main source of drinking water on premises, and it is higher in urban (48.8%) than rural (12.5%) areas.

Across the districts, proportion of households with their sources of drinking water on premises varies from 24.5 percent in Asunafo South, the lowest, to 37.0 percent in Asunafo North, the highest.

FIGURE 4.9: HOUSEHOLDS WITH SOURCE OF DRINKING WATER ON PREMISES BY TYPE OF LOCALITY, REGION AND DISTRICT – AHAFO REGION

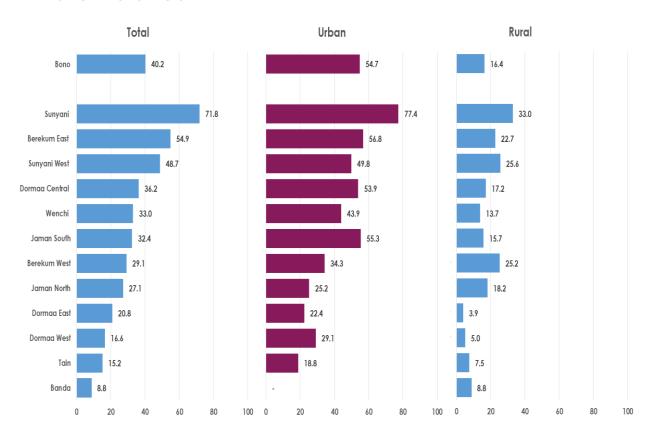


About 4 in 10 (40.2%) households in the Bono Region have their main source of drinking water on premises with a higher proportion in urban (54.7%), than rural (16.4%) areas.

Among the districts, it varies from 8.8 percent in Banda, the lowest, to 71.8 percent in Sunyani, the highest.

In 10 out of 12 districts in the region, less than half of the households have their main sources of drinking water on premises.

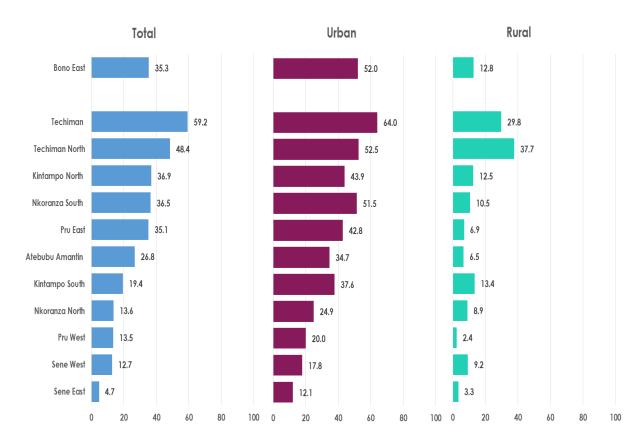
FIGURE 4.10: HOUSEHOLDS WITH SOURCE OF DRINKING WATER ON PREMISES BY TYPE OF LOCALITY, REGION AND DISTRICT – BONO REGION



Less than 4 in 10 (35.3%) households in the Bono East Region have their main source of drinking water on premises, with a higher proportion of households in urban (52.0%), than in rural (12.8%) areas.

Apart from Techiman, which has 59.2 percent of households with main source of drinking water on premises, in all the remaining 10 districts they are less than half.

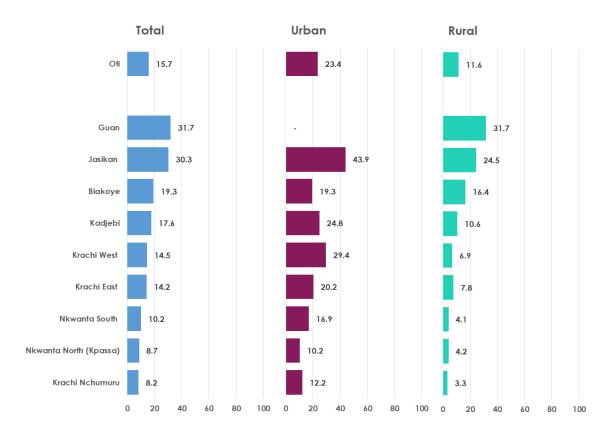
FIGURE 4.11: HOUSEHOLDS WITH SOURCE OF DRINKING WATER ON PREMISES BY TYPE OF LOCALITY, REGION AND DISTRICT – BONO EAST REGION



About 16 percent of households (15.7%) in the Oti Region have water on their premises, with a higher proportion of households in urban, (23.4%) than rural (11.6%) areas.

Four districts, Guan (31.7%), Jasikan (30.3%), Biakoye (19.3%) and Kadjebi (17.6%), recorded higher proportions of households having water on their premises than the regional average of 15.7 percent.

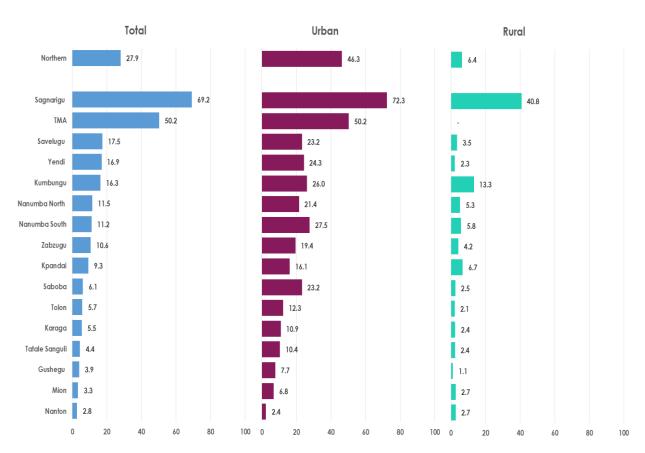
FIGURE 4.12: HOUSEHOLDS WITH SOURCE OF DRINKING WATER ON PREMISES BY TYPE OF LOCALITY, REGION AND DISTRICT – OTI REGION



About 28 percent of households (27.9%) in the Northern Region have the source of drinking water on their premises, with higher proportion of households in urban, (46.3%) than rural (6.4%) areas.

Across the 16 districts, only two districts, Sagnarigu (69.2%) and Tamale Metropolitan (50.2%) have more than half of the households with main source of drinking water on premises.

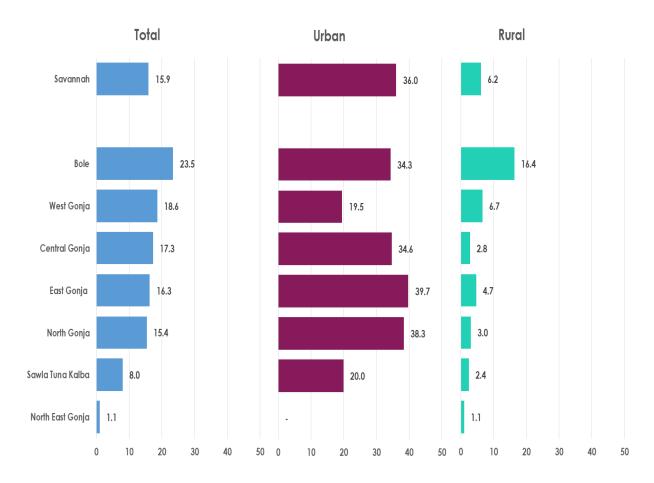
FIGURE 4.13: HOUSEHOLDS WITH SOURCE OF DRINKING WATER ON PREMISES BY TYPE OF LOCALITY, REGION AND DISTRICT – NORTHERN REGION



Proportion of households with water on their premises in Savannah Region is 16 percent, with that of urban (30.6%), about 5 times that of the rural (6.2%) areas.

In all districts, the proportion of households having water on their premises is higher in urban, than rural areas.

FIGURE 4.14: HOUSEHOLDS WITH SOURCE OF DRINKING WATER ON PREMISES BY TYPE OF LOCALITY, REGION AND DISTRICT – SAVANNAH REGION



Only about 9.0 percent of households (8.7%) in the North East Region have their main source of drinking water on premises with a higher proportion in urban (20.2%) than rural (2.5%) areas.

Across the districts, there are variations in proportion of households with main source of drinking water on premises, ranging from 15.0 percent in East Mamprusi, the highest, to 12.5 percent in West Mamprusi, the lowest.

FIGURE 4.15: HOUSEHOLDS WITH SOURCE OF DRINKING WATER ON PREMISES BY TYPE OF LOCALITY, REGION AND DISTRICT – NORTH EAST REGION

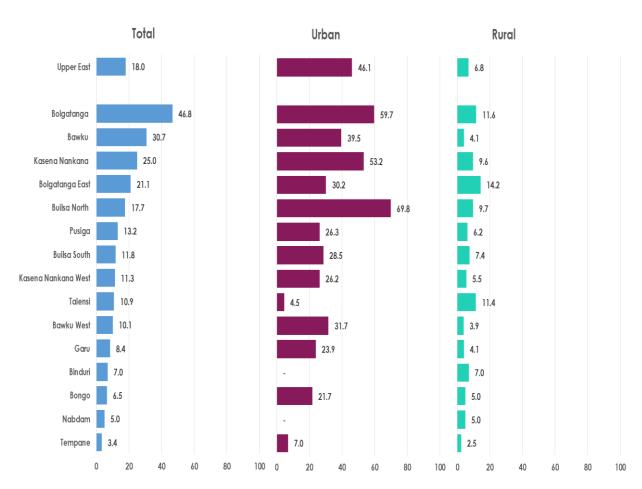


Proportion of households with main source of drinking water on premises in Upper East Region is 18.0 percent, with the urban proportion (46.15) being almost seven times that of the rural (6.8%).

Across the districts, proportion of households with main source of drinking water on premises is highest in Bolgatanga (46.8%) and lowest in Tempane (3.4%).

Builsa North has the highest (69.8%) proportion of households in urban areas with water on their premises, whiles in the rural areas the highest is in Bolgatanga East (14.2%).

FIGURE 4.16: HOUSEHOLDS WITH SOURCE OF DRINKING WATER ON PREMISES BY TYPE OF LOCALITY, REGION AND DISTRICT – UPPER EAST REGION

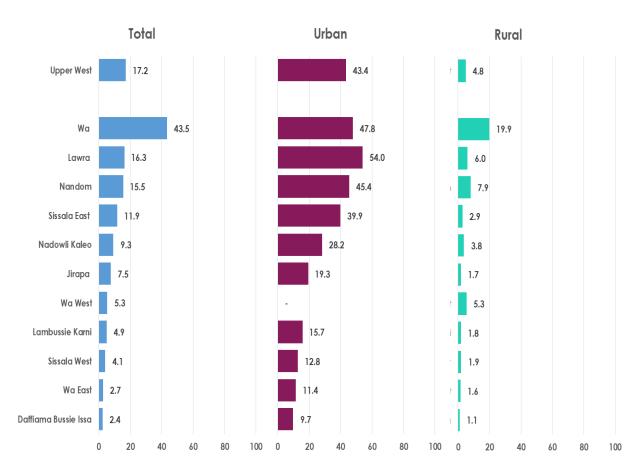


Proportion of households that have water on their premises in Upper West Region is 17.2 percent, with a higher proportion in urban (43.4%) than in rural (4.8%) areas.

Wa has the highest (43.5%) proportion of households with water on their premises, with Daffiama Bussie Issa recording the lowest (2.4%).

Lawra has the highest proportion of urban households (54.0%) having water on their premises and the second highest (6.0%) in rural areas.

FIGURE 4.17: HOUSEHOLDS WITH SOURCE OF DRINKING WATER ON PREMISES BY TYPE OF LOCALITY, REGION AND DISTRICT – UPPER WEST REGION

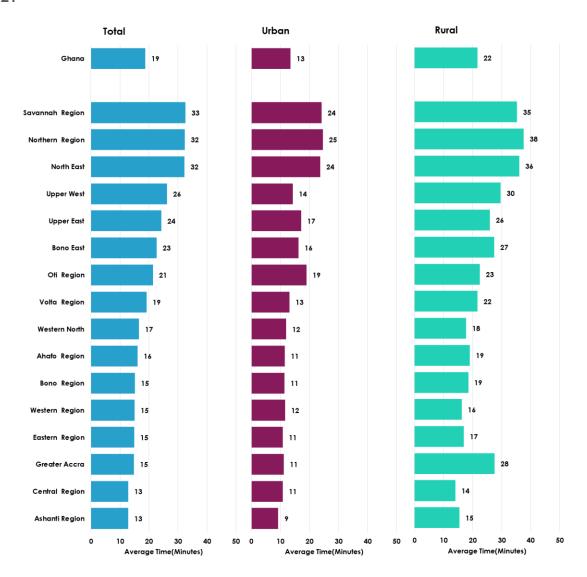


## **CHAPTER FIVE**

## 5. HIGHLIGHTS OF AVERAGE TIME SPENT BY HOUSEHOLDS WITHOUT DRINKING WATER ON PREMISES TO ACCESS DRINKING WATER

On average, households in Ghana spend 19 minutes to access drinking water from its source and back. Seven of the regions (Savannah- 33, Northern – 32, North East – 32 minutes,...) spent more time in accessing drinking water than the national average.

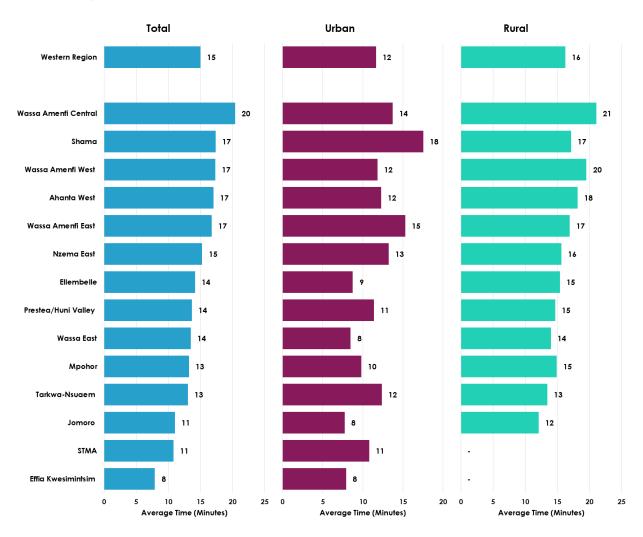
FIGURE 5.1: AVERAGE TIME TAKEN TO ACCESS DRINKING WATER FROM ITS SOURCE AND BACK BY REGION; 2021



Households in the Western Region spend on the average 15 minutes to access drinking water from its source and back. Time spent by households without drinking water on premises varies from 8 minutes in Efia Kwesimintsim, the lowest, to 20 minutes in Wassa Amenfi Central, the highest.

In urban areas, households in Shama District spend 18 minutes to access water which is more than two times that of Effia Kwesimintsim, Jomoro and Wassa East (8 minutes) while a little over 40 percent of the districts in rural areas spend more than 16 minutes to access water.

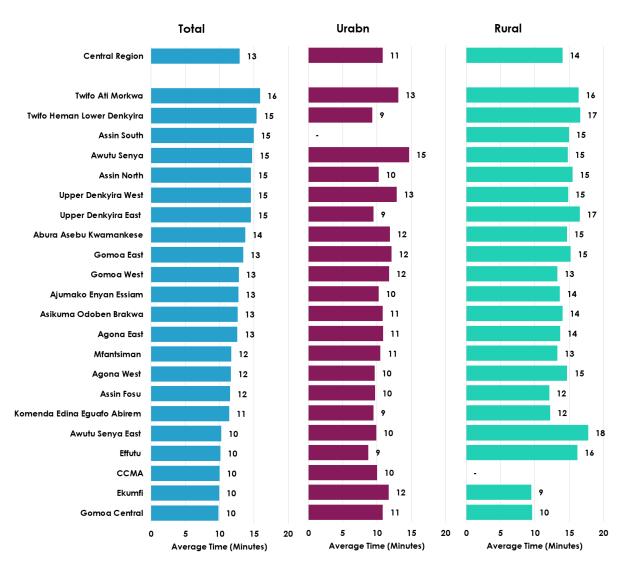
FIGURE 5.2: AVERAGE TIME TAKEN TO ACCESS DRINKING WATER FROM ITS SOURCE AND BACK BY LOCALITY AND DISTRICT; 2021 – WESTERN REGION



Households in Central Region spend on average 13 minutes round trip to access drinking water. Thirty-six percent of the districts (including Twifo Ati Morkwa-16; Twifo Hemang Lower Denkyira -15; Abura Asebu Kwamankese- 14...) spend more time than the regional average.

In urban areas, households in Awutu Senya (15 minutes) spend 6 minutes more time to access drinking water compared to four districts (Effutu, Komenda Edina Eguafo Abirem, Upper Denkyira East and Twifo Hemang Lower Denkyira – 9 minutes). Over 54 percent of the districts in rural areas spend more than 14 minutes to make a round trip to fetch water.

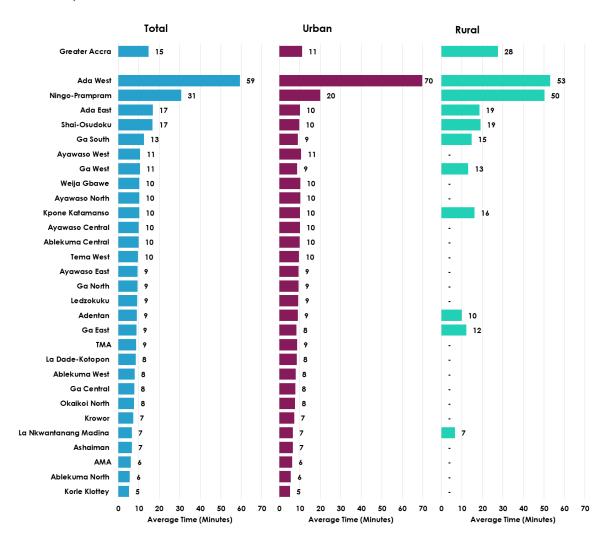
FIGURE 5.3: AVERAGE TIME TAKEN TO ACCESS DRINKING WATER FROM IT SOURCE AND BACK BY LOCALITY AND DISTRICT; 2021 – CENTRAL REGION



Households in the Greater Accra Region spend on average 15 minutes to access drinking water from its source and back. Almost 14 percent of the districts (Ada West-59, Ningo Prampram - 31, Ada East and Shai – Osudoku – 17 minutes) spend more time than the regional average.

Regardless of the locality type, Ada West recorded highest amount of time spent to access drinking water from its source and back followed by Ningo Prampram.

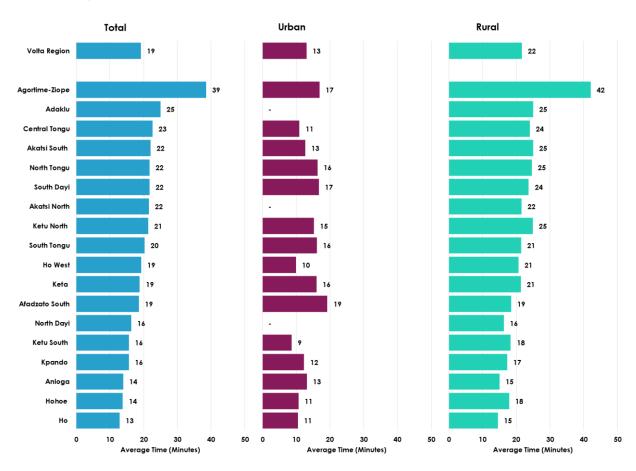
FIGURE 5.4: AVERAGE TIME TAKEN TO ACCESS DRINKING WATER FROM ITS SOURCE AND BACK BY LOCALITY AND DISTRICT; 2021 – GREATER ACCRA REGION



Households without drinking water on premises in Volta Region spend on average 19 minutes to fetch drinking water. Across the districts, time spent by households to fetch drinking water varies from 13 minutes in Ho, the shortest, to 39 minutes in Agortime-Ziope, the longest.

In urban areas, 46 percent of the districts recorded more time in fetching drinking water than the regional average while in the rural areas, Agortime-Ziope (42 minutes), the longest, spend 27 minutes more than Ho Municipal (15 minutes), the shortest

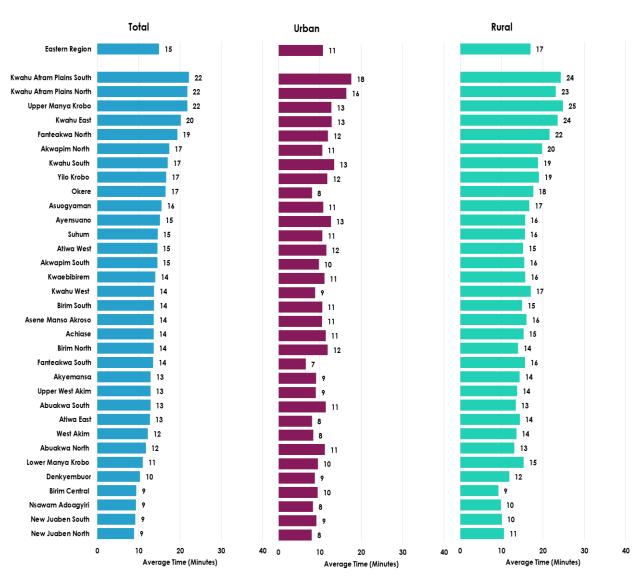
FIGURE 5.5: AVERAGE TIME TAKEN TO ACCESS DRINKING WATER FROM ITS SOURCE AND BACK BY LOCALITY AND DISTRICT; 2021 – VOLTA REGION



The average time spent by households in Eastern Region to fetch drinking water is 15 minutes. Thirty percent of the districts (Kwahu Afram Plains South - 22; Kwahu Afram Plains North - 22; Upper Manya Krobo - 22) spend more time than the regional average.

In urban areas, households in Kwahu Afram Plains South - 18 minutes (the longest), spend 11 minutes more time to access drinking water compared to Fanteakwa South (7 minutes), the shortest. In rural areas, six districts (including Upper Manya Krobo – 25; Kwahu Afram Plains South-24; Kwahu Afram Plains North -23...) spend 20 minutes and more to make a round trip in accessing drinking water.

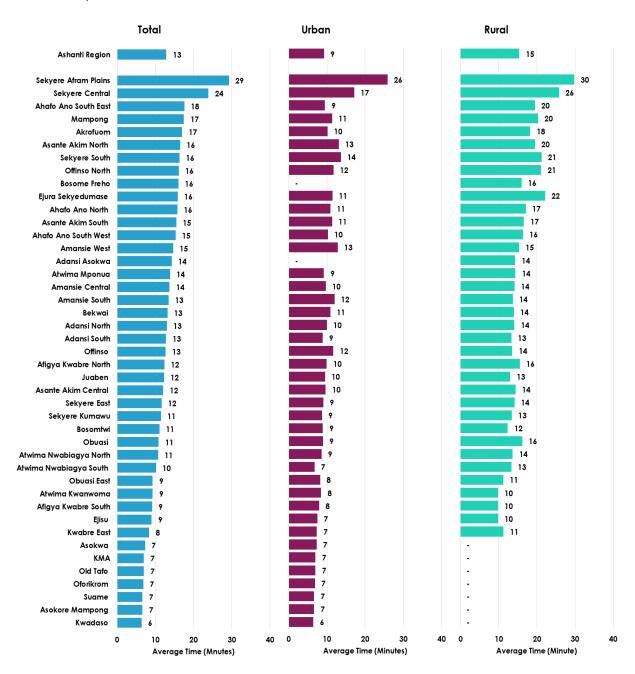
FIGURE 5.6: AVERAGE TIME TAKEN TO ACCESS DRINKING WATER FROM ITS SOURCE AND BACK BY LOCALITY AND DISTRICT; 2021 – EASTERN REGION



Households in Ashanti Region on the average spend 13 minutes to access drinking water from its source and back. Households in rural areas (15 minutes) spend 6 minutes more than households in urban (9 minutes).

Households in Sekyere Afram Plains spent more time than all the other districts in Ashanti Region to access drinking water in both urban (26 minutes) and rural (30 minutes) areas.

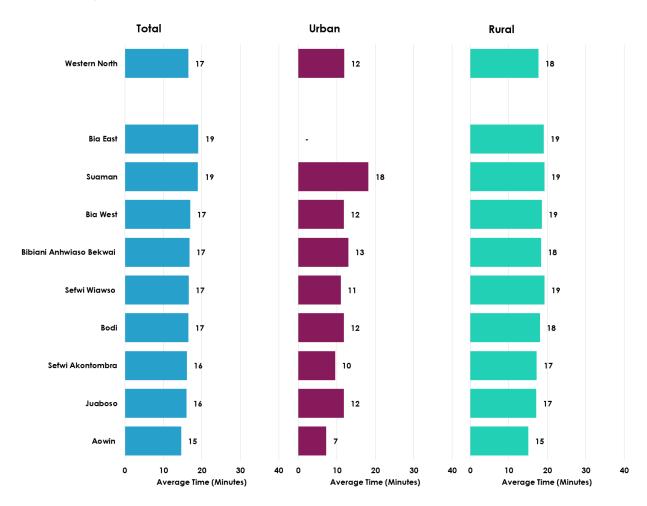
FIGURE 5.7: AVERAGE TIME TAKEN TO ACCESS DRINKING WATER FROM IT SOURCE AND BACK BY LOCALITY AND DISTRICT; 2021 – ASHANTI REGION



In the Western North Region, households on the average spend 17 minutes to make a round trip to access drinking water. Two out of the nine districts (Bia East and Suaman, 19 minutes...) spend more time to fetch drinking water than the regional average of 17 minutes.

In urban areas, households in Suaman spend the highest amount of time (18 minutes) to access drinking water, which is 11 minutes more than that spent to access water in Aowin (7 minutes), the shortest. In rural areas, four districts (including Bia East, Suaman-19 minutes, Bia West and Bibiani Anhwiaso Bekwai – 18 minutes) recorded more time than the regional average.

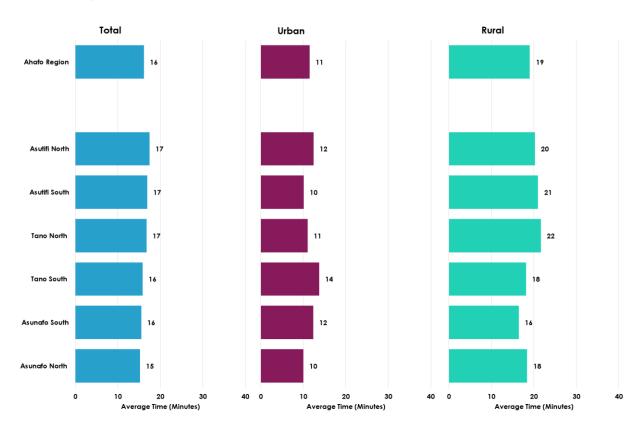
FIGURE 5.8: AVERAGE TIME TAKEN TO ACCESS DRINKING WATER FROM ITS SOURCE AND BACK BY LOCALITY AND DISTRICT; 2021 – WESTERN NORTH REGION



On average, households in the Ahafo Region spend 16 minutes to access drinking water from its source and back. This is higher in rural areas (19 minutes) than urban (11 minutes).

In urban areas, time spent to make a round trip in fetching water varies from 14 minutes in Tano South to 10 minutes in Asunafo North and Asunafo South while in rural areas, three districts (Tano North - 22, Asutifi South – 21 and Asutifi North – 20 munites ) spend more time than the regional average.

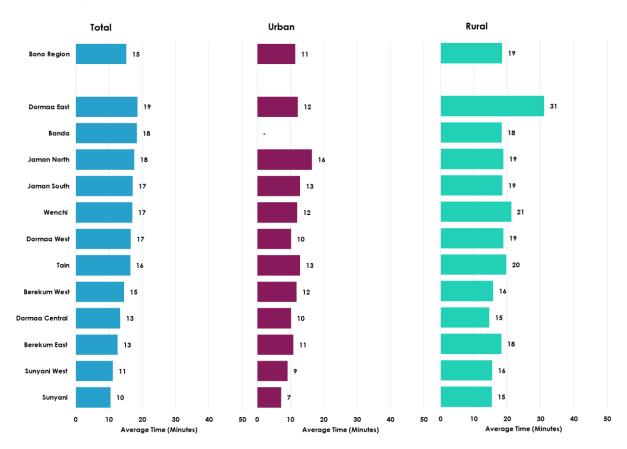
FIGURE 5.9: AVERAGE TIME TAKEN TO ACCESS DRINKING WATER FROM ITS SOURCE AND BACK BY LOCALITY AND DISTRICT; 2021 – AHAFO REGION



Households in Bono Region spend on average 15 minutes to access drinking water from its source and back. Seven-out-of-12 districts (including Dormaa East – 19, Banda – 18, Jaman North – 18 minutes,...) spend more time to fetch water than the regional average.

Urban households in Jaman North spend 16 minutes to access water, the highest in the region, and is more than two times that of Sunyani (7 minutes), the shortest. In rural areas, on the other hand, Dormaa East (31 minutes) recorded longest amount of, followed by Wenchi (21 minutes) and Tain (20 minutes).

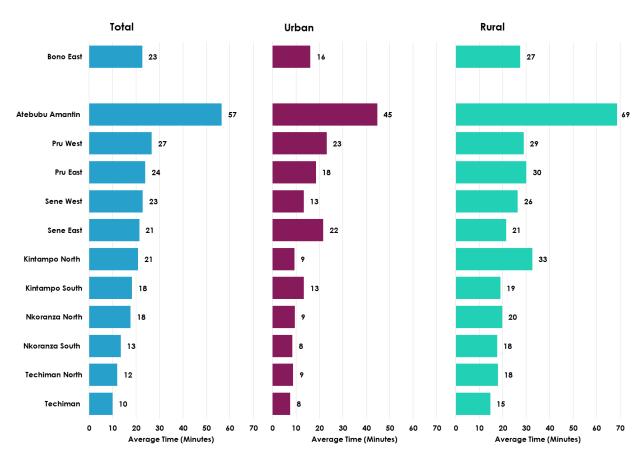
FIGURE 5.10: AVERAGE TIME TAKEN TO ACCESS DRINKING WATER FROM IT SOURCE AND BACK BY LOCALITY AND DISTRICT; 2021 – BONO REGION



In Bono East Region, households on average spend 23 minutes to access drinking water from its source and back, with more time spent in rural, (27 minutes) than urban (16 minutes) areas.

Households in Atebubu Amantin spend 57 minutes to access drinking water, the longest, which is 5.7 times that of Techiman (10 minutes), the shortest.

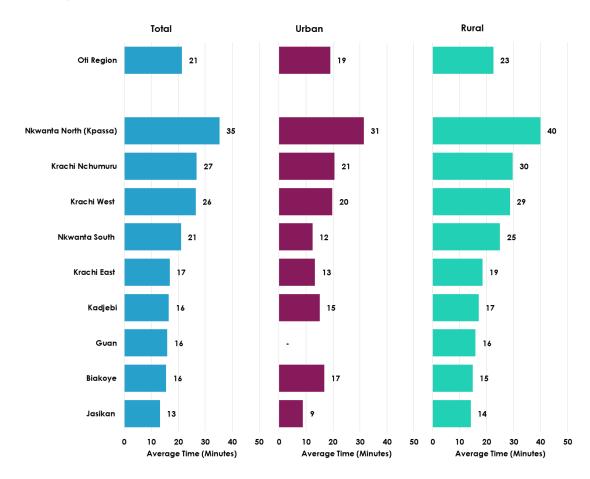
FIGURE 5.11: AVERAGE TIME TAKEN TO ACCESS DRINKING WATER FROM ITS SOURCE AND BACK BY LOCALITY AND DISTRICT; 2021 – BONO EAST REGION



Households in the Oti Region spend on average 21 minutes to access drinking water. Three out of the nine districts spend more time than the regional average. Households in rural areas (23 minutes) spend 4 minutes more than households in urban (19 minutes) to make a round trip to fetch drinking water.

In both urban and rural areas, Nkwanta North (Kpassa) spend more time to access drinking water from its source and back followed by Krachi Nchumuru and Krachi West.

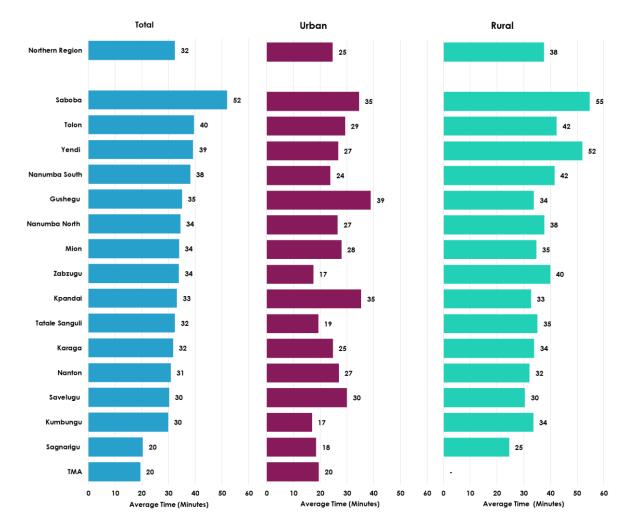
FIGURE 5.12: AVERAGE TIME TAKEN TO ACCESS DRINKING WATER FROM ITS SOURCE AND BACK BY LOCALITY AND DISTRICT; 2021 – OTI REGION



Households in Northern Region on the average spend 32 minutes to access drinking water, with households in rural (38 minutes) spending 13 minutes more than those in urban (25 minutes) areas.

Across the districts, average time spent to fetch drinking water varies from 20 minutes in TMA to 52 minutes in Saboba District.

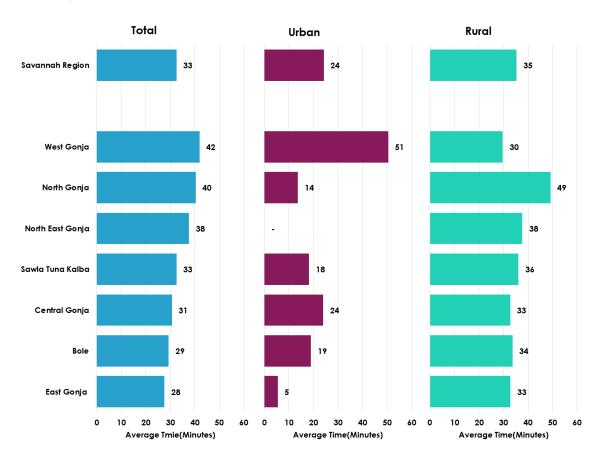
FIGURE 5.13: AVERAGE TIME TAKEN TO ACCESS DRINKING WATER FROM ITS SOURCE AND BACK BY LOCALITY AND DISTRICT; 2021 – NORTHERN REGION



Households in Savannah Region on the average spend 33 minutes to access drinking water in a round trip. Three out of the 7 districts spend more time in fetching water than the regional average.

In urban areas, the average time spent to fetch water in West Gonja (51 minutes) is about 10 times that of East Gonja (5 minutes) while in rural areas, the variation between North Gonja (49 minutes), the longest, and West Gonja (30 minutes), the shortest, is 19 minutes.

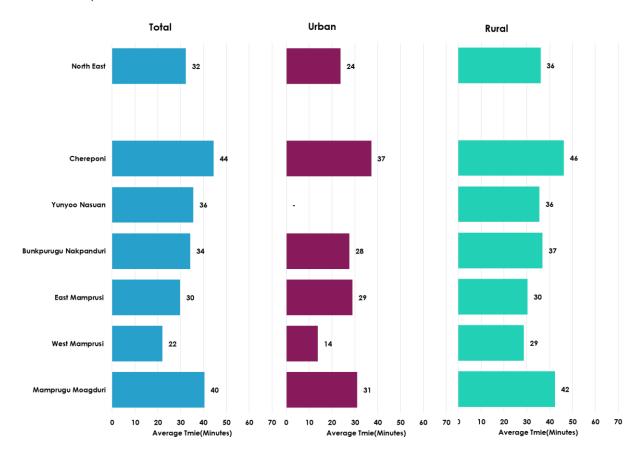
FIGURE 5.14: AVERAGE TIME TAKEN TO ACCESS DRINKING WATER FROM ITS SOURCE AND BACK BY LOCALITY AND DISTRICT; 2021 – SAVANNAH REGION



Households in North East Region spend on average 32 minutes to access drinking water, with rural areas (36 minutes) spending 12 minutes more time compared to urban (24 minutes).

Across the districts, households in Chereponi spend more time to fetch drinking water in both urban (37 minutes) and rural (46 minutes) areas than any other district.

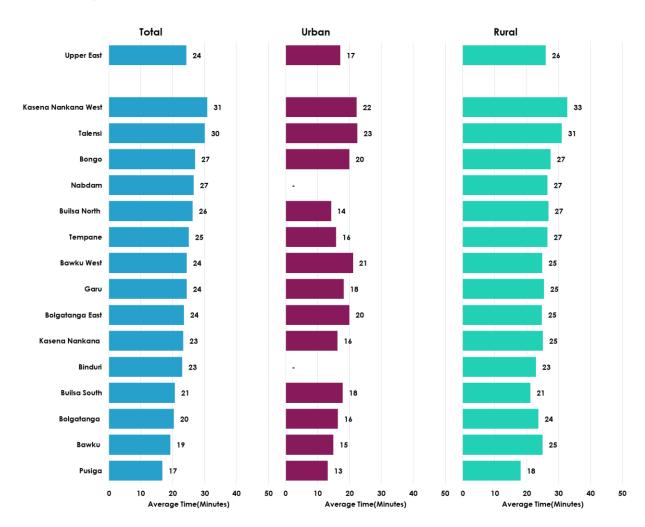
FIGURE 5.15: AVERAGE TIME TAKEN TO ACCESS DRINKING WATER FROM ITS SOURCE AND BACK BY LOCALITY AND DISTRICT; 2021 – NORTH EAST REGION



An average of 24 minutes is spent by households in Upper East Region to make a round trip to access drinking water, with households in urban (17 minutes) having a shorter time than those in rural (26 minutes).

In urban areas, Talensi District recorded 23 minutes, which is 10 minutes difference compared to Pusiga (13 minutes), while in rural areas, six districts (Kasena Nankana West – 33, Talensi – 31, Bongo – 27 minutes, Nabdam, Builsa North and Tempane) recorded more than 26 minutes.

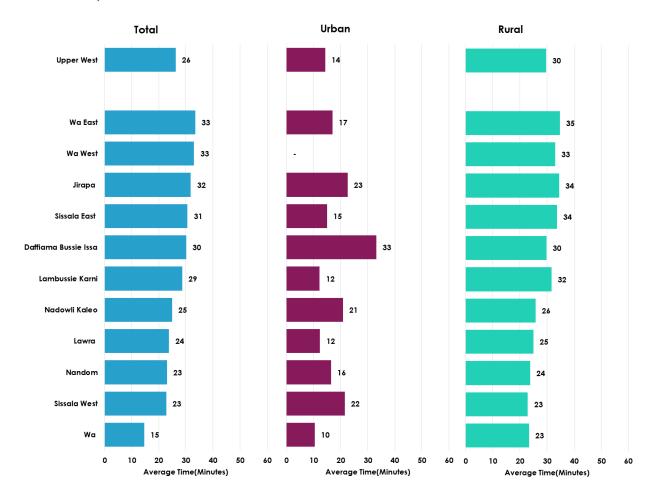
FIGURE 5.16: AVERAGE TIME TAKEN TO ACCESS DRINKING WATER FROM ITS SOURCE AND BACK BY LOCALITY AND DISTRICT; 2021 – UPPER EAST REGION



Averagely, households in the Upper West Region spend 26 minutes to access drinking water, with those in rural areas (30 minutes) spending more time than urban (14 minutes).

Across the districts, the time taken to fetch water varies from 15 minutes in Wa Municipal, the shortest, to 33 minutes in Wa East, the longest average.

FIGURE 5.17: AVERAGE TIME TAKEN TO ACCESS DRINKING WATER FROM ITS SOURCE AND BACK BY LOCALITY AND DISTRICT; 2021 – UPPER WEST REGION



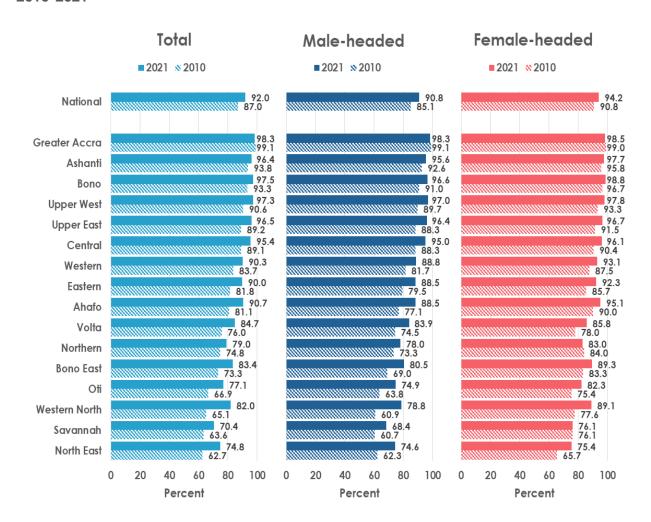
## **CHAPTER SIX**

## 6. HIGHLIGHTS OF HOUSEHOLDS THAT USE IMPROVED WATER AS MAIN SOURCES OF DRINKING WATER

Use of improved water sources for drinking increased from 87.0 percent in 2010 to 92.0 percent in 2021. There were similar increases in both male-headed and female-headed households.

In Greater Accra, for both male- and female-headed households, use of improved drinking water sources decreased from 99.1 percent in 2010 to 98.3 percent in 2021.

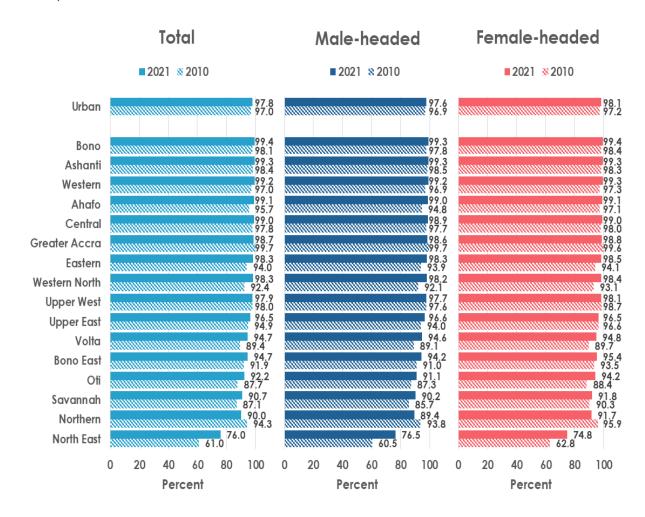
FIGURE 6.1: USE OF IMPROVED WATER SOURCES FOR DRINKING BY SEX OF HOUSEHOLD HEAD AND REGION, 2010-2021



Use of improved drinking water sources by households in urban areas increased marginally by 0.8 percentage points between 2010 and 2021. There were similar increases in both male-headed and female-headed households within the period.

The same pattern was replicated in all the regions over the period.

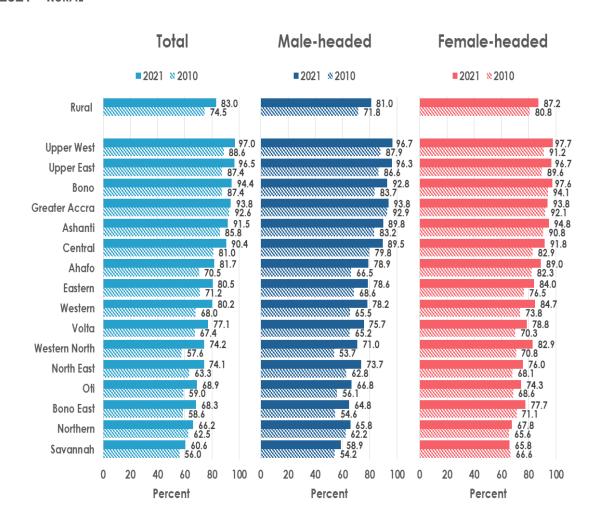
FIGURE 6.2: USE OF IMPROVED DRINKING WATER SOURCES BY SEX OF HOUSEHOLD HEAD AND REGION, 2010 – 2021, URBAN



There was a significant increase in the use of improved drinking water sources in rural areas from 74.5 percent to 83.0 percent between 2010 and 2021. There were similar increases in both male-headed and female-headed households over the period.

Across the regions, there are increases in the use of improved water sources except for female headed households in Savannah Region which declined slightly by 0.8 percentage points.

FIGURE 6.3: USE OF IMPROVED DRINKING WATER SOURCES BY SEX OF HOUSEHOLD HEAD AND REGION, 2010 - 2021 - RURAL



Nine districts in Western Region recorded proportions less than the regional average (90.3%) of households using improved drinking water sources, with Nzema East Municipal (74.5%) recording the least.

FIGURE 6.4: USE OF IMPROVED WATER SOURCES BY SEX OF HOUSEHOLD HEAD AND DISTRICT, 2010 AND 2021 – WESTERN REGION

	BothSexes.2021	BothSexes.2010	Male.2021	Male.2010	Female.2021	Female.2010
Western	90.3	83.7	88.8	81.7	93.1	87.5
STMA-Sekondi	99.9	99.9	81.6	66.3	89.3	80.1
STMA-Takoradi	99.9	99.9	77.6	42.9	83.5	50.4
Effia Kwesimintsim Municipal	99.8	96.8	86.8	57.5	91.1	69.7
STMA	99.8	99.8	86.2	69.1	91.5	78.1
STMA-Essikado-Ketan	99.7	99.8	94.8	83.5	96.6	88.4
Shama	97.9	93.5	86.1	76.2	90.2	75.5
Ahanta West Municipal	96.4	88.2	77.4	64.3	80.8	70.2
Tarkwa-Nsuaem Municipal	95.4	84.8	98.1	93.8	97.6	93
Jomoro Municipal	89.1	83	99.7	99.7	99.7	99.8
Wassa Amenfi East Municipal	88	60.8	99.9	99.9	99.9	99.9
Prestea/Huni Valley Municipal	87.8	71.7	99.9	99.9	99.9	99.9
Mpohor	87.5	76	99.8	99.8	99.8	99.9
Wassa Amenfi West Municipal	83.8	69.8	99.8	96.8	99.8	97
Ellembelle	81.9	77.5	96.5	88.6	96.1	87.6
Wassa Amenfi Central	79.3	44.7	71.4	65.7	80.7	77
Wassa East	78.5	66.3	77.4	75.5	89.9	80.9
Nzema East Municipal	74.5	69.8	87.1	80.1	92.4	88.1

Ten districts in Central Region recorded proportions less than the regional average (95.4%) of households using improved drinking water sources, with Twifo Hemang Lower Denkyira (83.5%) recording the least.

Proportion of households that use improved water sources increased from 89.1 percent in 2010 to 95.4 percent in 2021. There were similar increases in both male and female headed households over the period.

FIGURE 6.5: USE OF IMPROVED WATER SOURCES BY SEX OF HOUSEHOLD HEAD AND DISTRICT, 2010 AND 2021 – CENTRAL REGION

	BothSexes.2021	BothSexes.2010	Male.2021	Male.2010	Female.2021	Female.2010
Central	95.4	89.1	95	88.3	96.1	90.4
CCMA-Cape Coast South	99.9	99.8	100	99.8	99.9	99.8
Effutu	99.9	99.3	99.9	99.3	99.9	99.3
CCMA (Cape Coast Metropolitan Assembly)	99.8	99.7	99.8	99.6	99.8	99.7
CCMA-Cape Coast North	99.7	99.4	99.7	99.4	99.8	99.5
Mfantsiman	99.4	97.2	99.4	97.2	99.4	97.3
Gomoa Central	99.3	97.1	99.4	97	99.3	97.3
Awutu Senya East	99	97	99.1	96.9	99	97.2
Gomoa West	98.7	86.8	98.5	87	98.9	86.5
Gomoa East	97.6	94.1	97.6	93.9	97.5	94.4
Ekumfi	97.5	65.2	97.7	64.9	97.2	65.5
Upper Denkyira West	97.1	88.3	96.5	87	98.5	91.2
Komenda Edina Eguafo Abirem	97	97.3	96.7	97	97.4	97.7
Assin Fosu Municipal	96.2	81.4	95.3	80.2	97.5	84.2
Abura Asebu Kwamankese	96.1	93.8	95.8	93	96.5	94.8
Agona West	94.5	89.7	93.8	87.8	95.3	92.4
Upper Denkyira East	94.1	82.6	92.9	80.1	96.4	87.8
Agona East	92.8	86.5	92.7	85.7	92.9	87.6
Ajumako Enyan Essiam	92.1	83.5	91.4	82.4	92.9	84.7
Assin North	91.6	88.3	90.7	86.1	93.3	92.1
Awutu Senya	90.7	74.1	91.1	72.1	90.2	77
Assin South	89.4	79.4	88.2	77.3	91.4	82.7
Twifo Ati Morkwa	88.6	85.2	87.1	83.5	91.2	89.2
Asikuma Odoben Brakwa	87	78.9	85.8	77.6	88.7	81.1
Twifo Heman Lower Denkyira	83.5	79	82	77.5	86.2	82.1

There was a marginal decrease in the proportion of household heads that use improved water sources from 99.1 percent to 98.3 percent between 2010 and 2021.

Across most of the districts in Greater Accra Region there were similar marginal decreases except in a few such as Ada East and Kpone Katamanso where there were decreases of 10.6 and 6.8 percentage points respectively.

FIGURE 6.6: USE OF IMPROVED WATER SOURCES BY SEX OF HOUSEHOLD HEAD AND DISTRICT, 2010 AND 2021 – GREATER ACCRA REGION

	BothSexes.2021	BothSexes.2010	Male.2021	Male.2010	Female.2021	Female.2010
Greater Accra	98.3	99.1	98.3	99.1	98.5	99
AMA-Okaikoi South	99.9	99.9	99.9	99.9	100	99.9
Okaikoi North Municipal	99.9	99.5	100	99.5	99.9	99.4
Ayawaso Central Municipal	99.9	99.9	100	99.9	99.9	99.8
AMA-Ashiedu Keteke	99.9	99.8	99.9	99.9	99.9	99.8
Ablekuma West Municipal	99.9	99.9	99.9	99.9	99.9	99.8
AMA	99.9	99.9	99.9	99.9	99.9	99.9
Ashaiman Municipal	99.8	100	99.8	100	99.8	99.9
Ayawaso East Municipal	99.8	99.9	99.8	99.9	99.8	99.9
AMA-Ablekuma South	99.8	99.9	99.8	100	99.8	99.9
Tema West Municipal	99.8	99.4	99.8	99.4	99.8	99.3
TMA-Tema Central	99.8	99.4	99.7	99.3	99.9	99.5
Ayawaso North Municipal	99.8	100	99.8	100	99.6	100
Krowor Municipal	99.7	99.9	99.7	99.9	99.8	99.9
Ablekuma North Municipal	99.7	99.9	99.8	99.9	99.7	99.9
Ledzokuku Municipal	99.7	99.8	99.7	99.8	99.7	99.7
Korle Klottey Municipal	99.5	99.8	99.6	99.8	99.3	99.8
TMA	99.5	99.8	99.5	99.8	99.5	99.8
Ablekuma Central Municipal	99.5	99.9	99.5	99.9	99.4	99.8
Ayawaso West Municipal	99.4	99.6	99.4	99.7	99.4	99.5
Ga North Municipal	99.4	98.6	99.4	98.7	99.3	98.5
TMA-Tema East	99.3	100	99.4	100	99.2	100
La Dade-Kotopon Municipal	99.2	99.8	99.1	99.7	99.4	99.9
Ga Central Municipal	99.2	99.2	99.2	99.2	99.2	99.3
Ga East Municipal	99.2	99.4	99.1	99.4	99.3	99.6
La Nkwantanang Madina Municipal	99.1	99.8	99.1	99.8	99.2	99.8
Weija Gbawe Municipal	98.8	99.2	98.7	99.3	98.9	99.1
Ga West Municipal	98.5	99.7	98.5	99.7	98.3	99.7
Ga South Municipal	97.1	95.1	97.1	95.1	97.1	95.2
Adentan Municipal	96.8	99.7	96.6	99.7	97.1	99.7
Ningo-Prampram	96.2	98	96.5	97.8	95.3	98.2
Ada West	95.5	97.5	95.3	96.9	95.7	98.2
Ada East	94	83.4	93.8	84.5	94.4	82.1
Kpone Katamanso Municipal	93	99.8	92.7	99.7	93.5	99.8
Shai-Osudoku	90.4	92.8	90.1	92.7	90.9	93

Among Volta Region districts, North Tongu (68.3%), Adaklu (65.6%) and Agortime-Ziope (65.2%) recorded more than 15 percentage points less than the regional proportion of households using improved drinking water sources in 2021.

There were some increases in the proportion of household heads that use improved water sources in all the districts except Agortime-Ziope where there was a marginal decrease of 0.4 percentage point.

FIGURE 6.7: USE OF IMPROVED WATER SOURCES BY SEX OF HOUSEHOLD HEAD AND DISTRICT, 2010 AND 2021 – VOLTA REGION

	BothSexes.2021	BothSexes.2010	Male.2021	Male.2010	Female.2021	Female.2010
Volta	84.7	76	83.9	74.5	85.8	78
Anloga	95.8	92.2	95.5	91.6	96.2	92.9
Ho Municipal	95.6	90.1	95.4	90.2	95.7	90
Keta Municipal	94.2	88.7	93.7	88	94.8	89.4
Kpando Municipal	92	85.1	90.2	82.9	94.5	88.2
Hohoe Municipal	90.3	82.8	89.3	81.7	91.7	84.5
Ketu North Municipal	90.2	83.8	90	82.8	90.5	84.9
North Dayi	89.1	81	85.3	75.2	93.5	87.4
Akatsi South Municipal	85.2	69.6	84.4	68.3	86.1	71.1
Ho West	84.6	78.5	83.1	76.1	86.8	82
Ketu South Municipal	84.4	65.2	85	65.6	83.5	64.7
Akatsi North	82.1	72.7	80.7	71.4	83.8	74.2
South Dayi	80.8	66.3	78.8	64.2	83.6	69
Central Tongu	75.7	62.7	74.4	60.5	77.1	65.7
Afadzato South	75.6	60.5	73.2	57.3	79.5	65.8
South Tongu	75.2	71	74.7	69.3	75.6	72.8
North Tongu	68.3	55.4	67.1	53.6	69.8	57.9
Adaklu	65.6	54.3	63.7	52.8	68.9	57.9
Agortime-Ziope	65.2	65.6	64.1	65.5	66.7	65.8

Three districts, Upper Manya Krobo, Kwahu Afram Plains South and Kwahu Afram Plains North, are more than 20 percentage points less than the Regional average (90.0%) of households using improved drinking water sources in Eastern Region in 2021.

There was a reduction (1.4%) among female-headed households using improved drinking water source from 2010 to 2021.

FIGURE 6.8: USE OF IMPROVED WATER SOURCES BY SEX OF HOUSEHOLD HEAD AND DISTRICT, 2010 AND 2021 – EASTERN REGION

	BothSexes.2021	BothSexes.2010	Male.2021	Male.2010	Female.2021	Female.2010
Eastern	90	81.8	88.5	79.5	92.3	85.7
New Juaben South Municipal	99.4	99	99.3	98.8	99.6	99.2
Birim Central Municipal	99.4	99.1	99.2	99.1	99.5	99
Birim North	98.6	94.7	98.3	93.6	99.2	96.8
New Juaben North Municipal	98.2	96	98	95.6	98.6	96.7
Nsawam Adoagyiri Municipal	98.1	92.8	98.1	92.1	98.3	93.8
Atiwa West	98	85.4	97.6	85.1	98.8	85.9
Kwaebibirem Municipal	97.9	93.8	97.6	93	98.5	95.3
Lower Manya Krobo Municipal	97.7	97.3	96.9	95.9	98.8	99.1
Denkyembuor	97.7	94	97.3	93.3	98.3	95.6
Birim South	96.8	93.6	95.9	92.3	98.1	95.7
Atiwa East	96.5	96	96.2	95.1	97.2	97.7
Kwahu West Municipal	96.4	93.1	95.8	92	97.3	94.7
Abuakwa North Municipal	96.4	73.2	95.7	71.3	97.4	76.4
Akyemansa	95.8	94.2	95.2	93.4	96.9	95.7
Akwapim North Municipal	93.8	83.2	93.1	81.3	94.7	85.4
Suhum Municipal	93.5	85.5	92.6	83.6	95	88.4
Asene Manso Akroso	93.2	90.2	92.4	88.9	94.4	92.3
Achiase	92.6	84	91.2	82.8	94.6	85.9
Asuogyaman	91.6	87.5	91	85.8	92.4	89.9
Abuakwa South Municipal	90.8	92.2	89.7	90.8	92.5	94.5
Okere	88.4	84.4	86.7	82.2	90.6	87.4
West Akim Municipal	87	76.9	85.1	73.3	89.7	82
Akwapim South Municipal	86.7	78.3	86.2	77.6	87.6	79.5
Fanteakwa South	84.5	59.1	83	55.9	87.5	65.7
Upper West Akim	84	70	84	69.9	83.9	70.1
Yilo Krobo Municipal	81.1	73.1	78.6	69.9	85.3	78.6
Kwahu South Municipal	80.9	72.2	77.4	69.3	85.4	76.4
Ayensuano	79	52.5	77.6	50.8	81.5	55.7
Kwahu East	76	64.9	72.6	61.5	81	69.9
Fanteakwa North	75.1	55.4	71.3	52.5	82.7	61.6
Upper Manya Krobo	65.8	60.7	63.1	59.2	72	65.3
Kwahu Afram Plains South	63.8	55.8	62.7	54.9	66.8	59.1
Kwahu Afram Plains North	45.4	43.6	41.2	39.5	54.8	56.2

There was an increase in the proportion of households that use improved water sources of 2.6 percentage points between 2010 and 2021 in the Ashanti Region. However, there was an increase of 10.4 percentage points in the Sekyere Afram Plains District over the same period.

FIGURE 6.9: USE OF IMPROVED WATER SOURCES BY SEX OF HOUSEHOLD HEAD AND DISTRICT, 2010 AND 2021 – ASHANTI REGION

	BothSexes.2021	BothSexes.2010	Male.2021	Male.2010	Female.2021	Female.2010
Ashanti	96.4	93.8	95.6	92.6	97.7	95.8
KMA-Manhyia South	99.9	100	99.9	99.9	99.9	100
KMA-Subin	99.9	99.8	99.9	99.8	99.9	99.8
KMA-Manhyia North	99.8	99.2	99.8	99.2	99.8	99.2
KMA	99.8	99.6	99.8	99.5	99.8	99.6
Suame Municipal	99.8	99.7	99.8	99.5	99.8	99.8
KMA-Bantama	99.8	99.4	99.8	99.4	99.8	99.5
Old Tafo Municipal	99.8	99.8	99.8	99.9	99.7	99.8
KMA-Nhyiaeso	99.7	99.6	99.7	99.5	99.7	99.6
Obuasi Municipal	99.7	99.3	99.7	99.3	99.7	99.4
Oforikrom Municipal	99.7	99.4	99.7	99.4	99.6	99.5
Atwima Kwanwoma	99.6	96.5	99.6	96.4	99.6	96.5
Kwabre East	99.6	99.4	99.6	99.3	99.7	99.5
Kwadaso Municipal	99.6	98.8	99.6	98.7	99.6	99
Ejisu Municipal	99.5	96.9	99.4	96.6	99.6	97.3
Asokwa Municipal	99.5	99.1	99.5	99	99.6	99.3
Asokore Mampong Municipal	99.4	99.4	99.5	99.5	99.4	99.3
Bosomtwi	99.4	97.1	99.3	96.8	99.6	97.6
Atwima Nwabiagya Municipal	99.4	98.4	99.3	98.1	99.6	98.8
Afigya Kwabre South	99.2	97.8	99	97.5	99.5	98.3
Obuasi East	99.1	98	99.1	98	99.1	97.8
Atwima Nwabiagya North	99	98.4	98.7	98.2	99.4	98.7
Amansie South	98.8	97.7	98.7	97.2	99	98.4
Amansie West	98.5	95.6	98.3	95.1	99.1	96.6
Bekwai Municipal	98.5	95.9	98.1	94.7	99	97.6
Sekyere East	98.5	96	98	95	99.1	97.2
Amansie Central	98.5	94.2	98.2	93.1	99	96.4
Asante Akim Central Municipal	97.5	97.6	96.7	96.9	98.6	98.6
Juaben Municipal	97	93.6	96.5	92.4	97.7	95.6
Adansi North	95.7	90.5	95.4	89.3	96.3	92.4
Offinso Municipal	94.4	89.1	92.6	85.3	97.2	95.3
Bosome Freho	94.1	86.8	93.5	85.8	95.2	88.6
Asante Akim South Municipal	93.6	90	91.7	87.8	96.7	93.9
Sekyere Kumawu	92.9	66.2	90.1	63.6	96.4	69.6
Afigya Kwabre North	92.5	89.9	89.8	86.4	97.1	95.9
Ahafo Ano South East	92.3	84	90.4	81.2	95.8	90
Ejura Sekyedumase Municipal	91.4	88.8	90.1	86.6	93.9	93.9
Asante Akim North Municipal	90.9	94.4	88	92.3	95.3	97.6
Ahafo Ano South West	90.7	74.1	89.3	71.6	93.5	80.2
Sekyere South	90.5	84.4	88	82	93.8	87.6
Mampong Municipal	90.3	78.2	89	76.3	92.2	81.1
Adansi South	89.7	76	89	73	90.7	84.6
Adansi Asokwa	89.1	80.5	87.9	78	91.3	86.2
Atwima Mponua	88.5	81.4	86.7	79	92.5	87.8
Ahafo Ano North Municipal	88.5	79.6	86.7	75.7	93.1	89.8
Akrofuom	85.7	81.6	83.8	80.2	90.4	84.7
Offinso North	85.7	73.8	80.9	66.9	90.4	87.7
Sekyere Central	79.7	56.7	76.6	55.6	85	58.6
Sekyere Central Sekyere Afram Plains	50.7	40.3	48.9	37.6	58.3	53.8
ockycle Allani Fians	30.7	40.5	- 40.9	_37.0		33.0

There was an increase of 16.9 percentage points in the proportion of households that use improved water sources between 2010 and 2021 in the Western North Region. The increase was higher in male-headed households (17.9%) than in female-headed households (11.5%).

FIGURE 6.10: USE OF IMPROVED WATER SOURCES BY SEX OF HOUSEHOLD HEAD AND DISTRICT, 2010 AND 2021 – WESTERN NORTH REGION

	BothSexes.2021	BothSexes.2010	Male.2021	Male.2010	Female.2021	Female.2010
Western North	82	65.1	78.8	60.9	89.1	77.6
Bibiani Anhwiaso Bekwai Municipal	95.2	90.6	94.6	89.5	96	93
Sefwi Wiawso Municipal	93.2	83.2	91.7	80.6	96.1	89.4
Juaboso	87.7	63.2	85.4	59.2	92.6	76.3
Bodi	84.1	58.8	81.9	56.5	88.8	66.8
Suaman	81.2	48.6	78.5	41.6	88.2	67.5
Bia West	77.4	60.4	73.7	56.5	87.6	74.5
Sefwi Akontombra	71.2	42.7	68.1	40.2	79.4	54.3
Bia East	71	48.8	68.2	45.4	79.7	61.3
Aowin Municipal	62	46	57.1	40.7	74.9	62.6

Proportion of household heads that use improved water sources increased by 9.3 percentage points between 2010 and 2021 in the Ahafo Region. This was replicated in all the districts, with percentage increases ranging from 5.5 percentage points in Tano North to 13.9 points in Asutifi South.

FIGURE 6.11: USE OF IMPROVED WATER SOURCES BY SEX OF HOUSEHOLD HEAD AND DISTRICT, 2010 AND 2021 – AHAFO REGION

	BothSexes.2021	BothSexes.2010	Male.2021	Male.2010	Female.2021	Female.2010
Ahafo	90.7	81.1	88.5	77.1	95.1	90
Asutifi North	95.9	88.2	95	86	97.8	93.1
Tano South Municipal	95	85.4	93.4	81.1	97.5	92.6
Tano North Municipal	92.6	87.1	90.4	83.5	96.3	94
Asutifi South	91.9	78	89.8	74.7	96.3	86.2
Asunafo North Municipal	88.6	77.8	86.2	73.3	93.7	87.7
Asunafo South	83.3	74.1	80.1	70.2	90.3	85.9

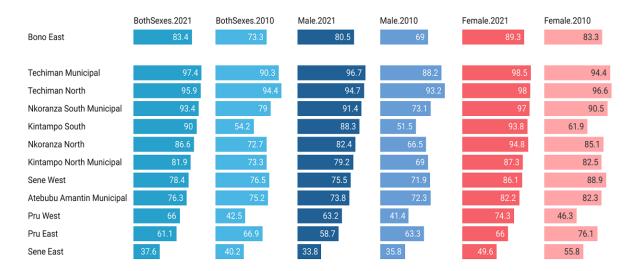
There was a reduction of about four percentage points in the use of improved drinking water sources by households between 2010 and 2021, in the Bono Region. This was replicated in all the districts except Banda District where there was a decrease of 4.2 percentage points over the same period.

FIGURE 6.12: USE OF IMPROVED WATER SOURCES BY SEX OF HOUSEHOLD HEAD AND DISTRICT, 2010 AND 2021 – BONO REGION

	BothSexes.2021	BothSexes.2010	Male.2021	Male.2010	Female.2021	Female.2010
Bono	97.5	93.3	96.6	91	98.8	96.7
Jaman North	99.8	97.5	99.8	97.1	99.9	97.9
Berekum West	99.6	98.2	99.5	96.8	99.7	99.7
Berekum East Municipal	99.4	98.6	99.3	98.2	99.5	99.2
Dormaa Central Municipal	99	96.2	98.8	95.1	99.3	97.8
Jaman South Municipal	99	96.6	98.5	94.9	99.6	98.4
Sunyani Municipal	98.6	94.1	98.3	92.3	99.3	96.9
Dormaa East	98	89.6	97.2	85.6	99.2	95.4
Tain	97.8	92.2	96.9	89.5	99.3	97
Sunyani West Municipal	97.4	92.8	96.9	91.2	98.1	95.3
Dormaa West	91.8	78.6	90.1	75.3	96.1	87.7
Wenchi Municipal	91.3	84.4	88.8	79.9	96	91.3
Banda	89.4	93.8	86.8	91.9	95.2	98.1

Proportion of household heads that use improved water sources increased from 73.3 percent in 2010 to 83.4 percent in 2021 in the Bono East Region. Similar increases were recorded in all the districts except Pru East and Sene East where decreases of 5.8 and 2.6 percentage points respectively, were recorded.

FIGURE 6.13: USE OF IMPROVED WATER SOURCES BY SEX OF HOUSEHOLD HEAD AND DISTRICT, 2010 AND 2021 – BONO EAST REGION



At the regional level, there was an increase in the use of improved drinking water source from 66.9 percent in 2010 to 77.1 percent in 2021 in Oti Region. There were similar increases in all the districts, ranging from a percentage increase of 3.7 in Biakoye District to 13.0 in Kadjebi District.

FIGURE 6.14: USE OF IMPROVED WATER SOURCES BY SEX OF HOUSEHOLD HEAD AND DISTRICT, 2010 AND 2021 – OTI REGION

	BothSexes.2021	BothSexes.2010	Male.2021	Male.2010	Female.2021	Female.2010
Oti	77.1	66.9	74.9	63.8	82.3	75.4
Kadjebi	89.1	76.1	87.5	72.5	93.2	86.2
Nkwanta South Municipal	85.4	77	84.4	75.6	87.8	81.4
Biakoye	81.8	78.1	78.5	74.1	87.4	86.1
Krachi Nchumuru	79.8	69.2	79.3	68.2	81.1	73.2
Guan	79	73.1	77.7	71	81	76.7
Jasikan Municipal	77.2	69.8	74.2	66.9	83.5	75.7
Krachi West Municipal	71.9	63.6	68.6	59.5	79.2	75.9
Krachi East Municipal	67.8	50.3	65.8	47.8	72.6	58.4
Nkwanta North	61.6	42.1	59	40.5	70.2	50.8

There was an overall increase in the proportion of households' use of improved water sources in the Northern Region from 74.8 percent in 2010 to 79.0 percent in 2021.

Across the districts, while there were similar increases in 11 districts, there were decreases in the remaining 7 districts (TMA-Tamale Central, Sagnarigu Municipal, TMA, TMA-Tamale South, Nanton, Nanumba South and Tolon)

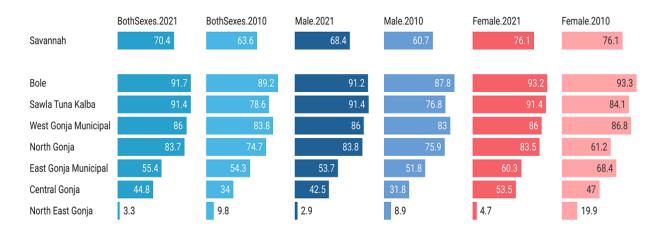
FIGURE 6.15: USE OF IMPROVED WATER SOURCES BY SEX OF HOUSEHOLD HEAD AND DISTRICT, 2010 AND 2021 – NORTHERN REGION

Northern 79 74.8	78			
		73.3	83	84
TMA-Tamale Central 99.1 99.	7 99.1	99.8	99.1	99.6
Sagnarigu Municipal 94.4 94.9	94	94.1	95.7	97.9
Tatale Sanguli 91.1 86.5	90.2	86.3	95.1	88.6
Gushegu Municipal 85.6 74	85.2	72.9	87.4	85.8
TMA 84.2 91.6	82.9	90	87.9	96.3
Kumbungu 83.9 57.1	83.1	56.3	87.3	69.2
Yendi Municipal 83.7 81.1	83.2	81.1	85.3	80.9
Savelugu Municipal 81.8 72.9	80.7	72.2	85.7	77.8
Zabzugu 80.3 72.3	79.6	72	85.1	76.1
TMA-Tamale South 75.2 75.8	73.8	72.7	80	87.6
Karaga 72.6 55	73.1	55.9	70.3	44.2
Nanumba North Municipal 72.1 68.9	71.5	68	75.1	76.1
Nanton 70.9 75.5	68.9	75.2	78.7	78.3
Saboba 69.3 59.9	68	58.8	74.5	68.4
Kpandai 65 54.2	64.5	54.2	66.5	54.2
Nanumba South 64.9 67.7	64.6	67.5	66.3	70.4
Mion 62.6 61.6	62.2	60.9	64.9	70.5
Tolon 34.6 51.5	32.7	50.6	45.5	60.6

Proportion of household heads that use improved drinking water sources in Savannah Region increased from 63.6 percent in 2010 to 70.4 percent in 2021. There were similar increases in all the districts except North East Gonja District where there was a decline of 6.5 percentage points over the period.

While there was an increase in the male proportion of 7.7 percentage points over the period, proportion of female-headed households remained the same (76.1%).

FIGURE 6.16: USE OF IMPROVED WATER SOURCES BY SEX OF HOUSEHOLD HEAD AND DISTRICT, 2010 AND 2021 – SAVANNAH REGION



Proportion of households that use improved water sources in the North East Region increased from 62.7 percent in 2010 to 74.8 percent in 2021. There were similar increases across all districts and among male and female-headed households.

FIGURE 6.17: Use of IMPROVED WATER SOURCES BY SEX OF HOUSEHOLD HEAD AND DISTRICT, 2010 AND 2021 – NORTH EAST REGION

	BothSexes.2021	BothSexes.2010	Male.2021	Male.2010	Female.2021	Female.2010
North East	74.8	62.7	74.6	62.3	75.4	65.7
Bunkpurugu Nakpanduri	86.3	67.8	86.6	67.9	85.4	67.3
Mamprugu Moagduri	83.1	67.6	83.2	67.7	82.5	65.3
Yunyoo Nasuan	75.5	51.8	74.4	51	80.6	59.8
Chereponi	73.2	57.9	72.9	58.8	74.2	47.3
West Mamprusi Municipal	71.3	65	71.6	65.1	70.1	64.7
East Mamprusi Municipal	68.9	62.2	68.1	60.7	71.8	72.5

Proportion of household heads in the Upper East Region that use improved water sources increased from 89.2 percent in 2010 to 96.5 percent in 2021. The pattern was replicated in all the districts and among male and female household heads.

FIGURE 6.18: USE OF IMPROVED WATER SOURCES BY SEX OF HOUSEHOLD HEAD AND DISTRICT, 2010 AND 2021 – Upper East Region

	BothSexes.2021	BothSexes.2010	Male.2021	Male.2010	Female.2021	Female.2010
Upper East	96.5	89.2	96.4	88.3	96.7	91.5
Bolgatanga East	99.4	95.5	99.4	95.3	99.5	95.8
Bolgatanga Municipal	99.4	95.5	99.4	95.1	99.3	96.3
Bongo	98.9	94	98.9	94	98.9	94
Nabdam	98	91.3	97.7	92.1	98.6	89.1
Kasena Nankana Municipal	97.9	93.3	97.9	92.1	98.1	95.6
Kasena Nankana West	97.4	91.8	97.1	91.6	97.8	92.2
Builsa North Municipal	97.3	83.9	97.1	82.4	97.7	87.6
Bawku West	97	91	97.1	90.6	97	92.5
Garu	96.8	86.6	96.9	86.4	96.6	87.8
Tempane	96.5	81.1	96.6	80.8	96.4	82.8
Pusiga	94	80.7	94.1	79.9	93.7	84.2
Binduri	93.2	85.2	93.4	84.5	92.8	87.6
Bawku Municipal	93.1	91.5	93.4	90.9	92.4	93.5
Talensi	93	82.9	92.8	81.7	93.6	85.9
Builsa South	91.8	76.1	91.8	75.5	91.8	77.8

Proportion of household heads that use improved sources of water in Upper West Region increased from 90.6 percent to 97.3 percent between 2010 and 2021. The same pattern was replicated in all the districts and among male- and female-headed households.

FIGURE 6.19: USE OF IMPROVED WATER SOURCES BY SEX OF HOUSEHOLD HEAD AND DISTRICT, 2010 AND 2021 – UPPER WEST REGION

	BothSexes.2021	BothSexes.2010	Male.2021	Male.2010	Female.2021	Female.2010
Upper West	97.3	90.6	97	89.7	97.8	93.3
Nandom Municipal	99.2	96.7	99.3	97	99	95.6
Wa Municipal	98.2	97.7	98.1	97.4	98.5	98.4
Sissala West	98.2	89.4	98	89.2	98.5	90.1
Wa West	97.8	86.5	97.8	85.9	97.9	89.1
Lawra Municipal	97.7	93.8	97.4	92.8	98.2	96.8
Nadowli Kaleo	97.7	94.4	97.6	94.3	97.9	94.6
Lambussie Karni	97.5	84.3	97.4	83.6	97.8	86
Jirapa Municipal	97.2	91.5	96.8	91	98	92.8
Daffiama Bussie Issa	96.6	85.9	95.4	84.2	98.7	90.1
Sissala East Municipal	96.6	96.6	96.6	96.2	96.6	98.2
Wa East	92.5	72.9	91.8	71.6	94.8	81.3

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