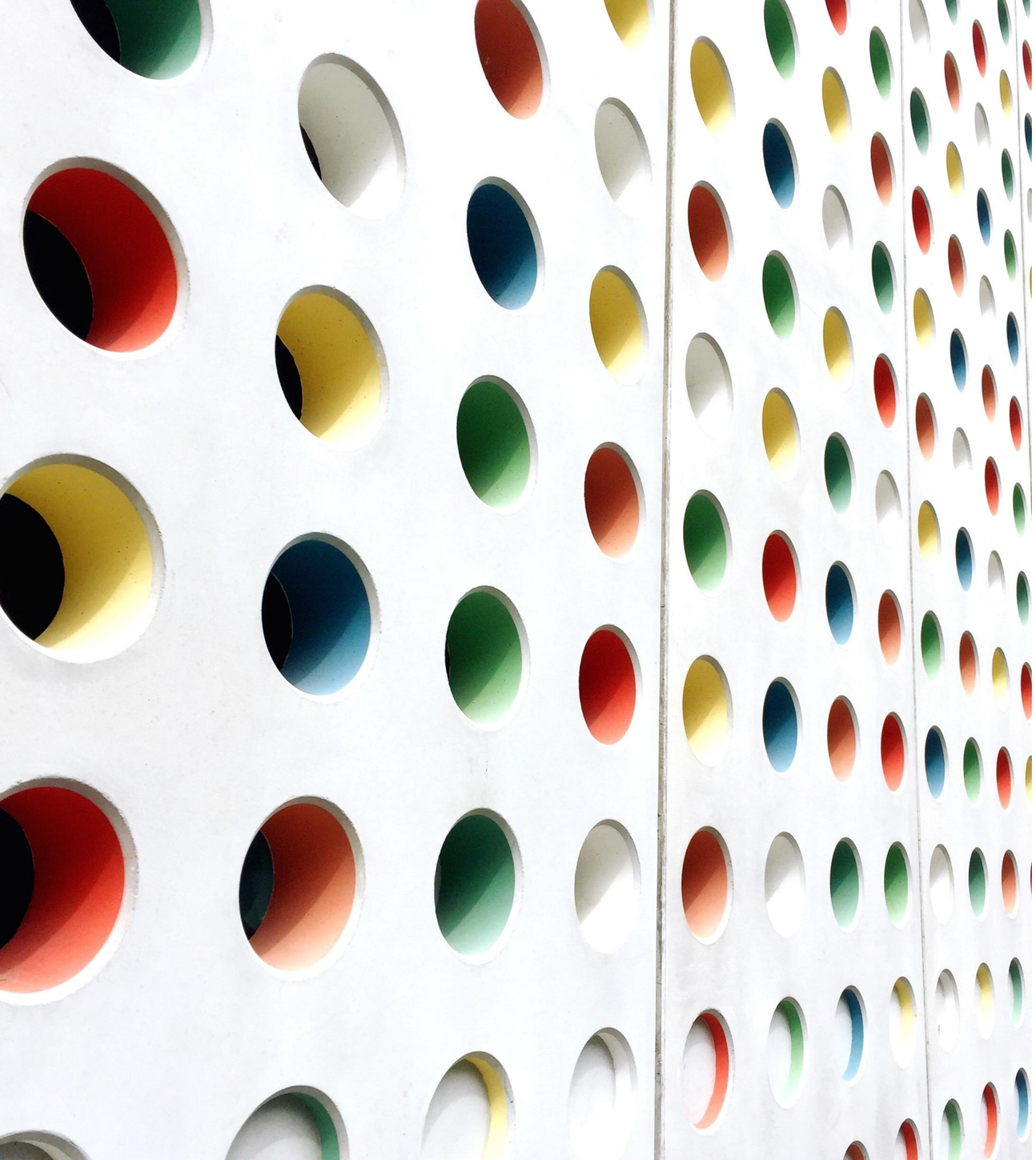


Management of Social Services

WEEK 9: WATER AND SANITATION SERVICES (Nature and scope)

Lecturer: Gloria Angela Mukova (MSc.)

Recap – previous week

Housing as a Social Service

Uganda's National Housing Policy

Policy analysis

- Policy strengths
- Policy weaknesses
- Policy performance

Fig. 1. Housing – Gamma app

This Week … …

Water and Sanitation Services

- Nature and status of water and sanitation services in Uganda
- Comparative analysis

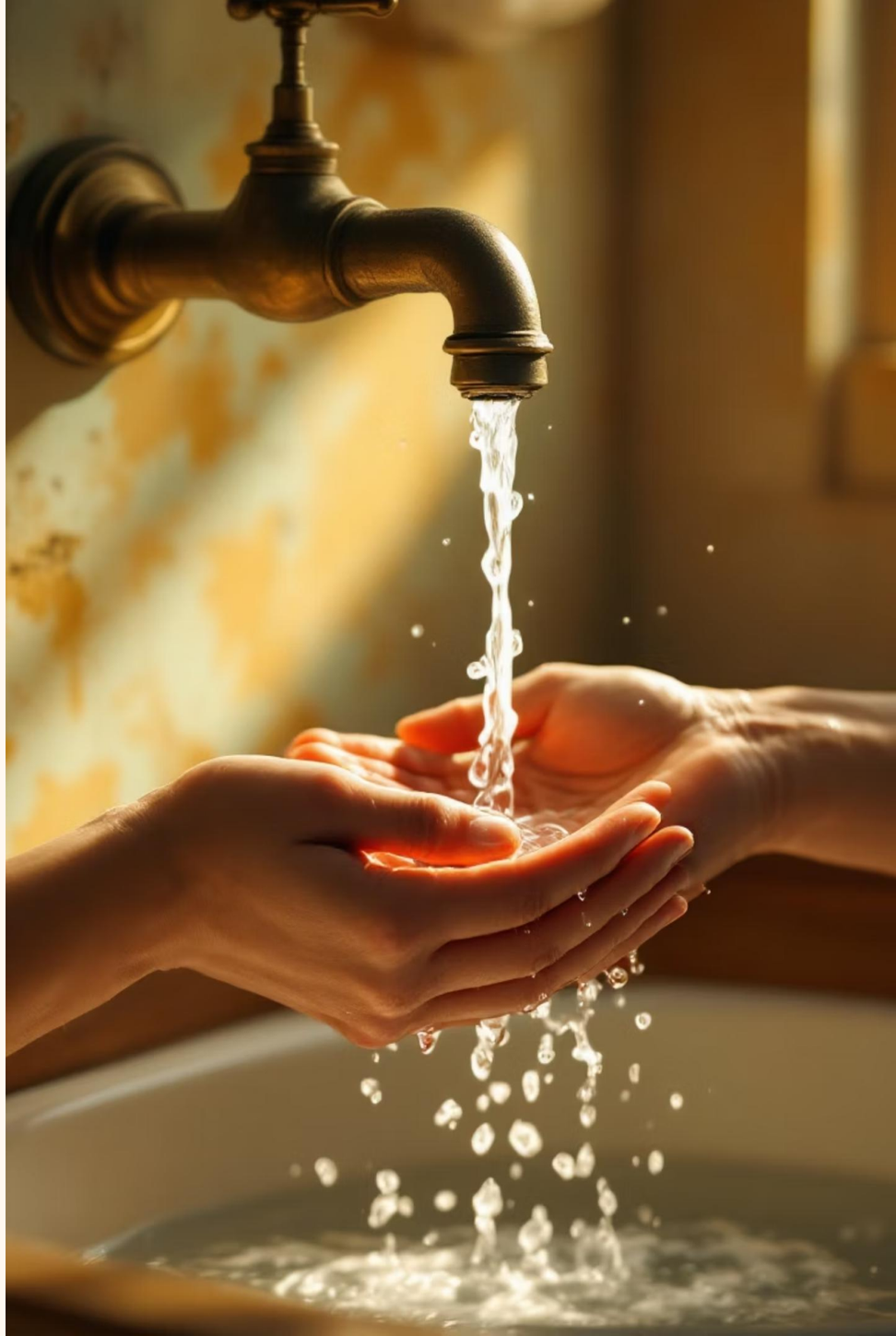


Fig. 2. Water and sanitation – Gamma app

Week's Objectives … …

- To examines global challenges of water and sanitation service provision
- To analyse the regional progress towards achieving the safe water and sanitation services provision development goal
- To examine Uganda's situation of water and sanitation service provision

Water and Sanitation Services

- Global perspective of water and sanitation services
- Status of water and sanitation services in Uganda
- Water and sanitation services in Kenya, China and the Netherlands

Water and Sanitation Services: Nature and Scope

Domestic Water Supply

Water for drinking and household uses including cooking, bathing, and cleaning

Water for Production

Water for livestock, industry, hydropower generation, aquaculture, marine transport, tourism, and environmental conservation

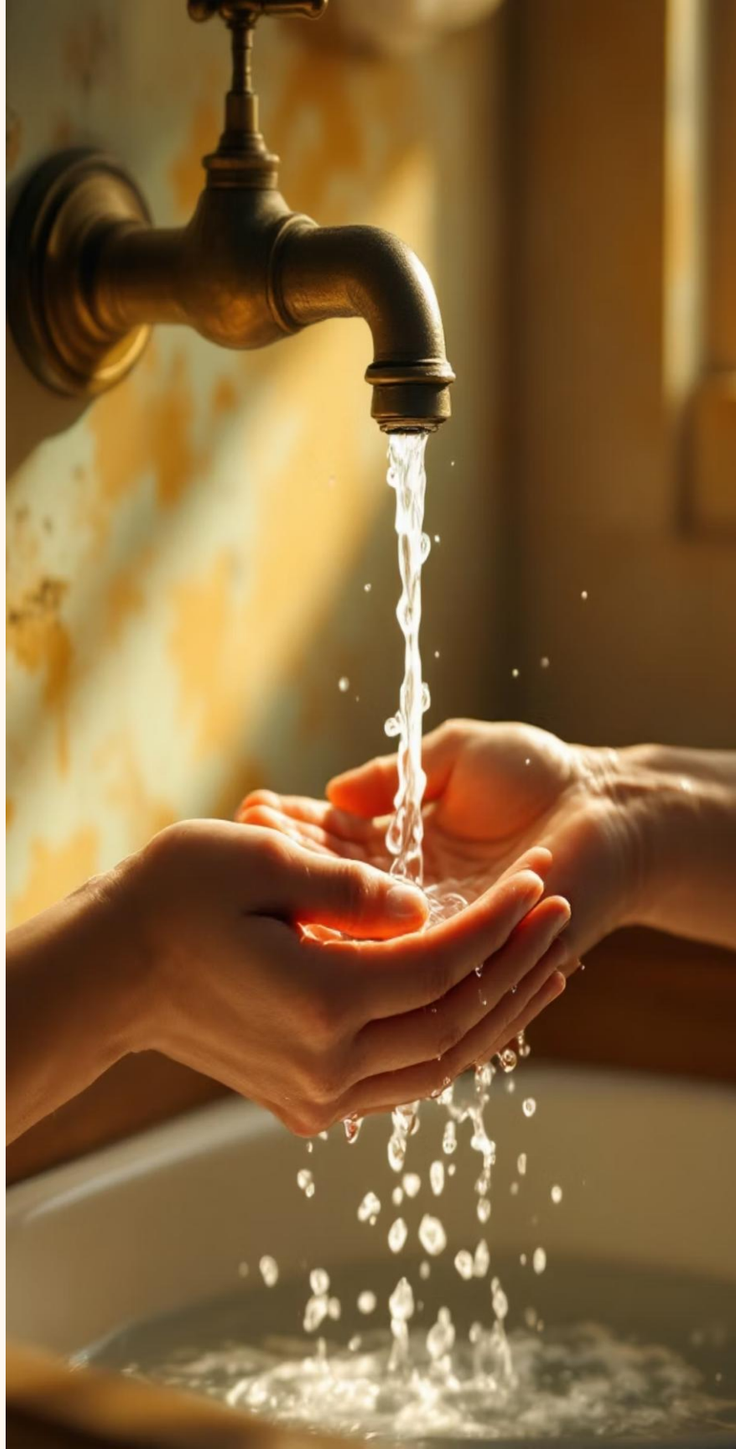
Sanitation and Hygiene

Household sanitation facilities, sanitation in schools and other public spaces, and hygiene promotion

All these components directly impact the quality of life and overall productivity of populations. Easy access to safe and clean drinking water saves time and resources for other productive activities as well as leisure, particularly benefiting women and children who typically bear water collection responsibilities.

Water and Sanitation Services: A Global Perspective

Ensuring universal access to clean water and adequate sanitation is fundamental to public health, environmental sustainability, and human dignity.



The Global Water and Sanitation Crisis

Access to clean water and adequate sanitation facilities remains one of the most pressing public health challenges. Water and sanitation services are essential for preventing disease, promoting health, and enabling economic development across communities worldwide.

The disparities in access to the services create significant barriers to development and perpetuate cycles of poverty and ill health in affected regions.

2.2B

People Without Safe Water

Lack access to safely managed drinking water services globally

4.2B

People Without Sanitation

Lack access to safely managed sanitation facilities worldwide

Source: World Health Organisation (WHO)

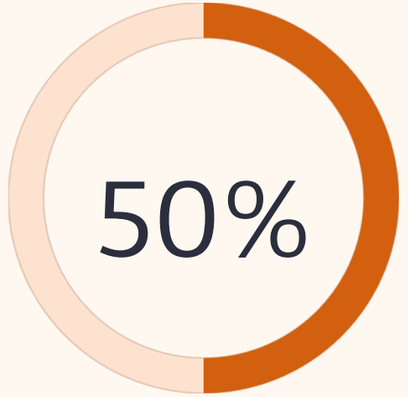
The Global Divide in Water Access

Water sources vary widely, they include surface water from rivers and lakes, as well as groundwater from aquifers. Coverage of water supply and sanitation services demonstrates stark regional disparities that reflect broader patterns of economic development and infrastructure investment.

The United Nations Sustainable Development Goals (SDGs) have set an ambitious target to ensure universal access to water and sanitation by 2030, requiring unprecedented global coordination and investment.

High-Income Countries

Population with safely managed drinking water

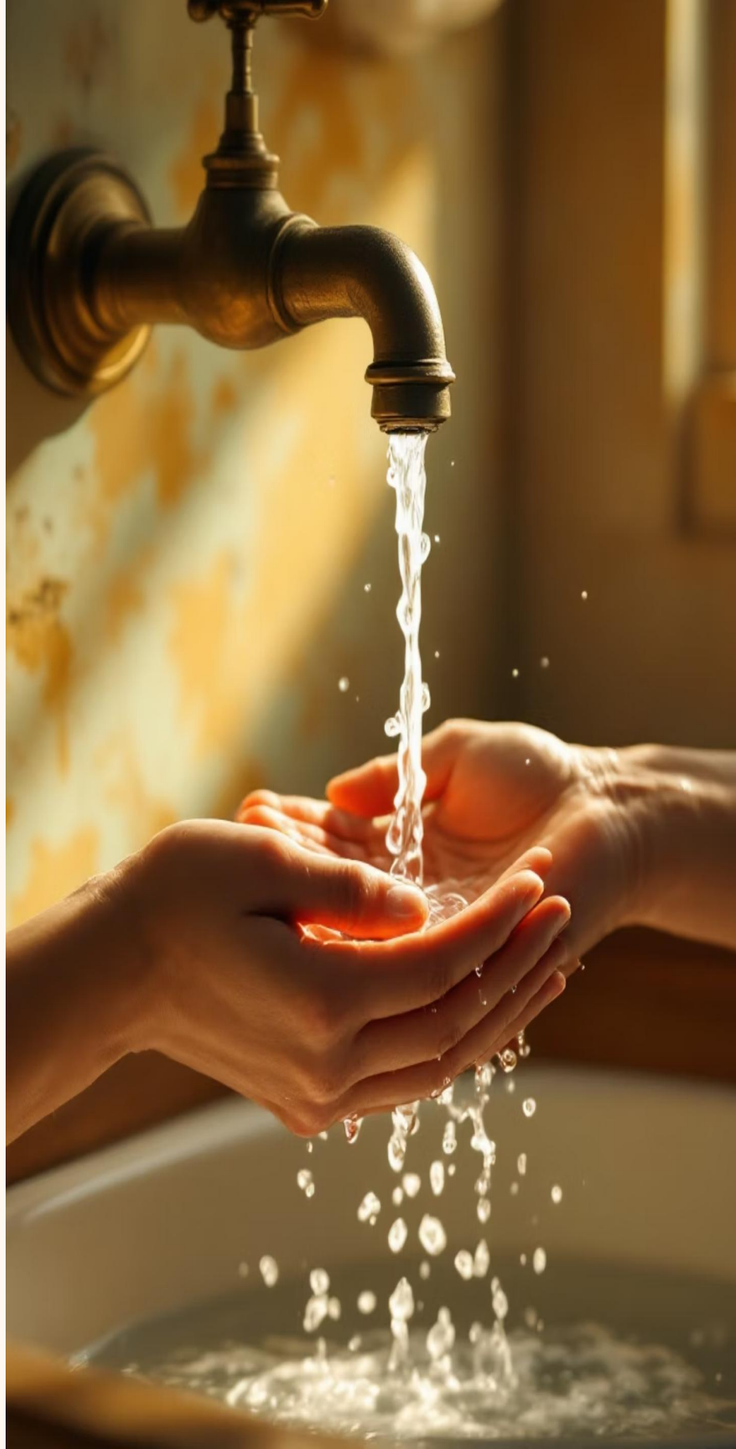


Low-Income Countries

Population with safely managed drinking water

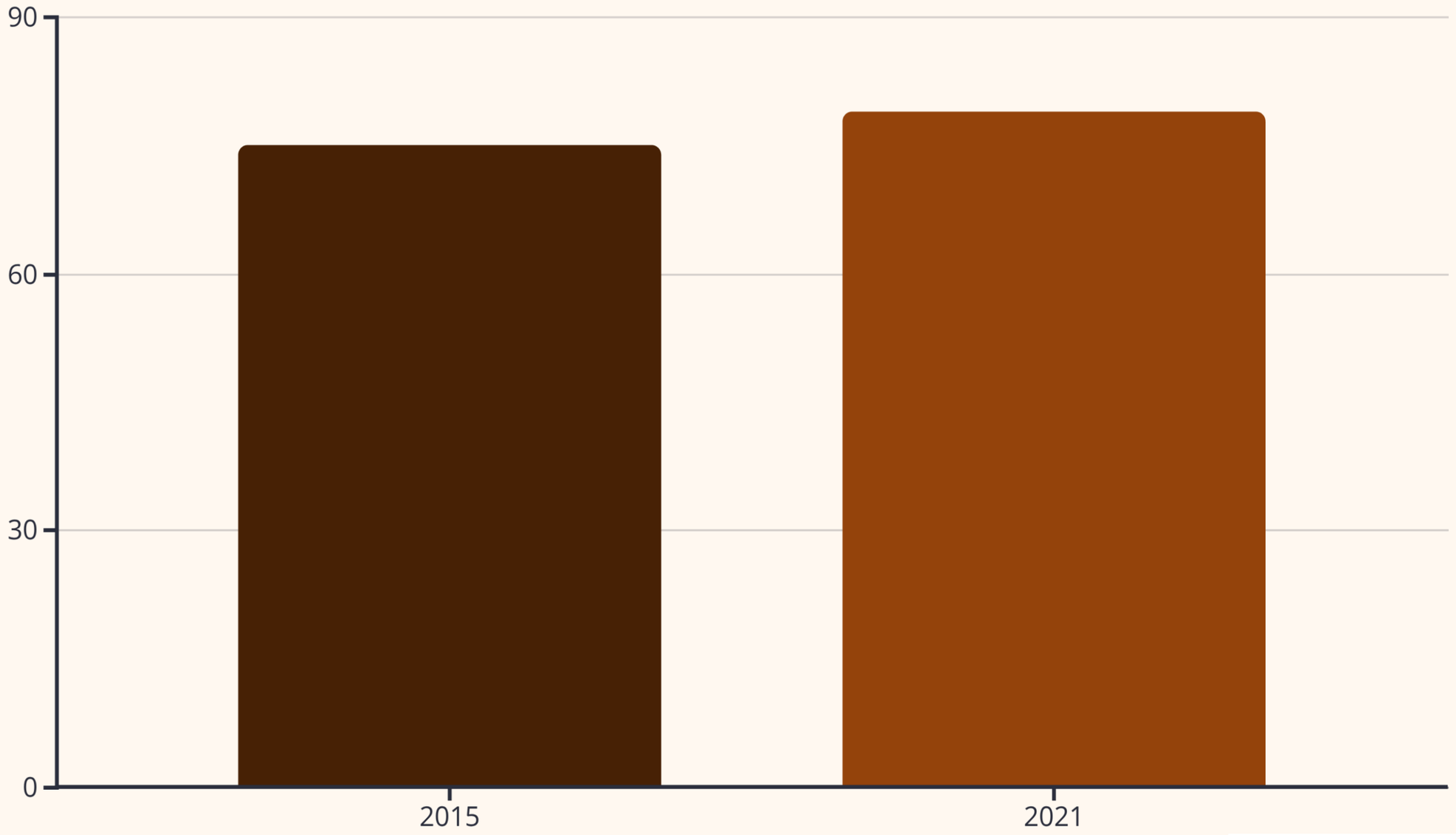
Water and Sanitation Services: Uganda’s status

The provision of Water, Sanitation, and Hygiene (WASH) services in Uganda has seen significant progress, though disadvantaged by sharp inequalities, rapid population growth, and persistent underfunding. The sector is characterized by a rural-urban divide and a gap between basic access and safely managed services.



During the dry season, national accessibility to safe water in Uganda increased from 75% in 2015 to 79% in 2021, demonstrating gradual but meaningful progress. However, this improvement masks significant disparities between urban and rural populations that require targeted policy interventions.

Uganda's Water Access Progress



National Service Delivery Survey Results 2022

A. Water Supply Access

Service Level	National	Urban	Rural	Definition
Basic Access	**~67%**	**~96%**	**~60%**	Improved source within a 30-minute round trip.
Safely Managed	**~25%**	**~60%**	**~17%**	Improved source, on premises, available when needed, and free of contamination.

Primary Water Sources

Boreholes and Protected Springs

51% of households access water through boreholes, protected springs, and gravity flow schemes—a seven percentage point decrease from 2015

Fig. 3. Water and sanitation – Gamma app

Water Sources and Urban-Rural Disparities

Primary Water Sources

Public Water Taps

11% of households rely on public water taps, showing a modest one percentage point increase since 2015

Urban Households

90%

With access to safe water

Fig. 3. Water and sanitation – Gamma app

Distance to nearest water source

Table 5. 3: Households by Distance to safe Water Sources during the Wet and Dry Season (%)

Distance in Km	2008		2015		2021	
	Wet Season	Dry Season	Wet Season	Dry Season	Wet Season	Dry Season
0.00 to 0.5	69.0	57.1	62.7	59.5	57.9	55.9
0.51 to 1.00	14.4	19.2	20.6	20.8	27.7	27.7
1.01 to 1.50	2.2	2.8	3.4	4.0	2.7	2.6
1.51 to 3.00	9.6	14.5	10.1	11.5	9.2	9.9
Above 3.00	4.8	6.5	3.1	4.2	2.4	3.9
Total	**100**	**100**	**100**	**100**	**100**	**100**

National Service Delivery Survey Results 2022

Access to safe drinking water during the dry season

Table 5. 1: Households by Water Source for Drinking during the Dry Season (%)

Water Source	2008			2015			2021		
	Rural	Urban	National	Rural	Urban	National	Rural	Urban	National
Piped Water in Dwelling	0.2	5.4	1.1	0.8	8.0	2.4	1.1	11.8	4.5
Piped Water in Compound	1.1	14.4	3.5	1.3	18.2	5.1	3.0	25.0	10.0
Piped Water Outside Compound	1.3	16.3	3.9	-	-	-	-	-	-
Public Tap	4.1	26.2	7.9	5.1	24.8	9.5	7.5	19.5	11.3
Borehole/Protected Springs & Gravity Flow Scheme	59.7	31.0	54.6	63.5	37.0	57.6	61.6	28.7	51.2
Rainwater	0.6	0.3	0.6	0.6	0.5	0.5	0.8	1.0	0.9
Bottled water	-	-	-	0.1	1.1	0.3	0.4	3.8	1.5
Total (Safe Sources)	**67.0**	**93.6**	**71.6**	**71.4**	**89.6**	**75.4**	**74.4**	**89.7**	**79.3**
Unprotected Source (well/spring)	19.6	4.2	16.8	-	-	-	16.3	7.4	13.4
Lake/River/Stream/Pond/Dam	13.1	0.8	11.0	25.9	9.3	22.2	6.8	1.7	5.2
Vendor	-	-	-	-	-	-	0.3	0.6	0.4
Tanker Truck	-	-	-	-	-	-	0.2	0.1	0.1
Other	0.5	1.3	0.6	2.7	1.1	2.3	2.1	0.6	1.6
Total (Other Sources)	**33.2**	**6.3**	**28.4**	**28.6**	**10.4**	**24.5**	**25.7**	**10.4**	**20.7**
Total	**100**	**100**	**100**	**100**	**100**	**100**	**100**	**100**	**100**

National Service Delivery Survey Results 2022

Access to safe drinking water during the wet season

Table 5. 2: Households by Water Source for Drinking During the Wet Season (%)

Water Source	2008			2015			2021		
	Rural	Urban	National	Rural	Urban	National	Rural	Urban	National
Piped Water in Dwelling	0.2	5.1	1.0	0.8	7.1	2.2	0.9	10.2	3.9
Piped Water in Compound	0.8	13.4	3.0	1.0	14.8	4.1	2.5	22.8	8.9
Piped Water Outside Compound	1.0	15.4	3.6	-	-	-			
Public Tap	3.0	24.2	6.8	3.6	19.9	7.2	5.4	13.8	8.0
Borehole/Protected/ Gravity Flow	48.2	24.3	44.0	51.2	28.7	46.2	50.4	23.2	41.8
Rain Water	26.7	12.4	24.0	27.7	22.6	26.6	27.2	19.5	24.8
Bottled Water	-	-	-	0.1	1.1	0.3	0.2	3.5	1.3
Total (Safe Sources)	**79.9**	**94.8**	**82.4**	**84.4**	**94.2**	**86.6**	**86.6**	**93.0**	**88.7**
Unprotected Source	11.8	3.3	10.3	-	-	-	7.9	4.6	6.9
Lake/River/Stream/Pond/Dam	8.2	0.6	6.9	14.0	5.2	12.1	4.2	1.2	3.2
Vendor	-	-	-	-	-	-	0.3	0.2	0.2
Tanker Truck	-	-	-	-	-	-	0.1	0.1	0.1
Other	0.3	1.2	0.5	1.6	0.6	1.4	0.9	0.7	0.8
Total (Other Sources)	**20.3**	**5.1**	**17.7**	**15.6**	**5.8**	**13.4**	**13.4**	**6.8**	**11.2**
Total	**100**	**100**	**100**	**100**	**100**	**100**	**100**	**100**	**100**

National Service Delivery Survey Results 2022

B. Sanitation and Hygiene Access

Service Level	National	Urban	Rural	Definition
Basic Sanitation	**~29%**	**~45%**	**~25%**	Use of improved facilities not shared with other households.
Basic Handwashing	**~38%**	**~55%**	**~34%**	Availability of a handwashing facility with soap and water at home.

Sanitation and Waste Management practices and status

Effective waste disposal remains a significant challenge across Uganda, with practices varying substantially between urban and rural areas. Understanding these patterns is essential for developing targeted sanitation interventions.

Garden Disposal

36% nationally — Most common method overall, with 44% prevalence in rural areas where organic waste integration into gardens is culturally accepted

Pit Disposal

34% nationally — Second most common method, with 25% usage in urban areas as an alternative to formal collection services

Waste Vendors

30% in urban areas — Particularly prevalent in Kampala at 59%, representing the emergence of formal waste collection systems in cities

Burning

22% in Buganda regions — More practised in Buganda South and North compared to other sub-regions, raising environmental and health concerns

Regional variations highlight the need for context-specific sanitation solutions that account for local practices and infrastructure capacity.

Tap water coverage by the public sector

80% of urban population — National water supplies 80% in urban areas with safe tap water

Sewerage services coverage by public sector

15% — the sewerage corporation have less than 15% coverage in urban areas. Most urban residents rely on on-site sanitation facilities like septic tanks and pit latrines

WASH status: Key insights for Uganda

- **Sanitation is the Biggest Challenge:** Only 29% of the population has access to a decent, private toilet/ latrine. This is a major public health crisis.
- **Shared Sanitation is Rampant:** A significant portion of the population, especially in urban slums, uses shared, often unclean, toilet /latrine facilities.
- **Hygiene is Neglected:** Low access to handwashing facilities.

Water and Sanitation Services: International Comparison

International Comparison: Kenya

Water and Sanitation Status

Kenya has made significant strides in water and sanitation provision, particularly in urban areas. The country has invested heavily in water infrastructure development and reform of water sector governance.

Key achievements include the establishment of Water Services Regulatory Boards and increased private sector participation. However, rural areas and informal settlements continue to face substantial access challenges, with disparities similar to those observed in Uganda.

Kenya's experience offers valuable lessons in sector reform, regulatory frameworks, and the balance between public and private service delivery models.

Fig. 4. Water and sanitation – Gamma app

Water and Sanitation Status

Heavy reliance on **point-source solutions** (like boreholes) and **on-site sanitation**.

31% Safely Managed water services access

63% National (Basic) level access to water services

29% safely managed Sanitation services access

46% National (Basic) level access to Sanitation services. With high shared services

International Comparison: Netherlands

The Netherlands exemplifies world-class water management, with **100% access** to safely managed water and sanitation. The country's integrated water resource management addresses both supply and flood control, offering a model for comprehensive water governance despite its unique below-sea-level geography.

Nature and Status

WASH sector is a global benchmark for quality and sustainability

100% National (Basic) level access to water services

100% National (Basic) level access to Sanitation services.

International Comparison: China

China has achieved remarkable progress in expanding water and sanitation coverage, particularly in urban areas where access exceeds **95%**. Massive infrastructure investments and technological innovation have transformed service delivery, though rural-urban gaps persist and water quality concerns remain in some regions.

Nature and Status

has achieved a **near-universal access**

78% access to safely managed sanitation services

95% National (Basic) level access to water services

92% National (basic) level access to sanitation services

Pathways to Universal Access

Strengthen Infrastructure

Invest in resilient water supply and sanitation systems, particularly in underserved rural areas

Address Disparities

Implement targeted interventions to bridge urban-rural gaps and ensure equity in service provision

Enhance Governance

Develop strong regulatory frameworks and institutional capacity for sustainable service delivery

Promote Sustainability

Integrate environmental protection and climate resilience into water and sanitation planning

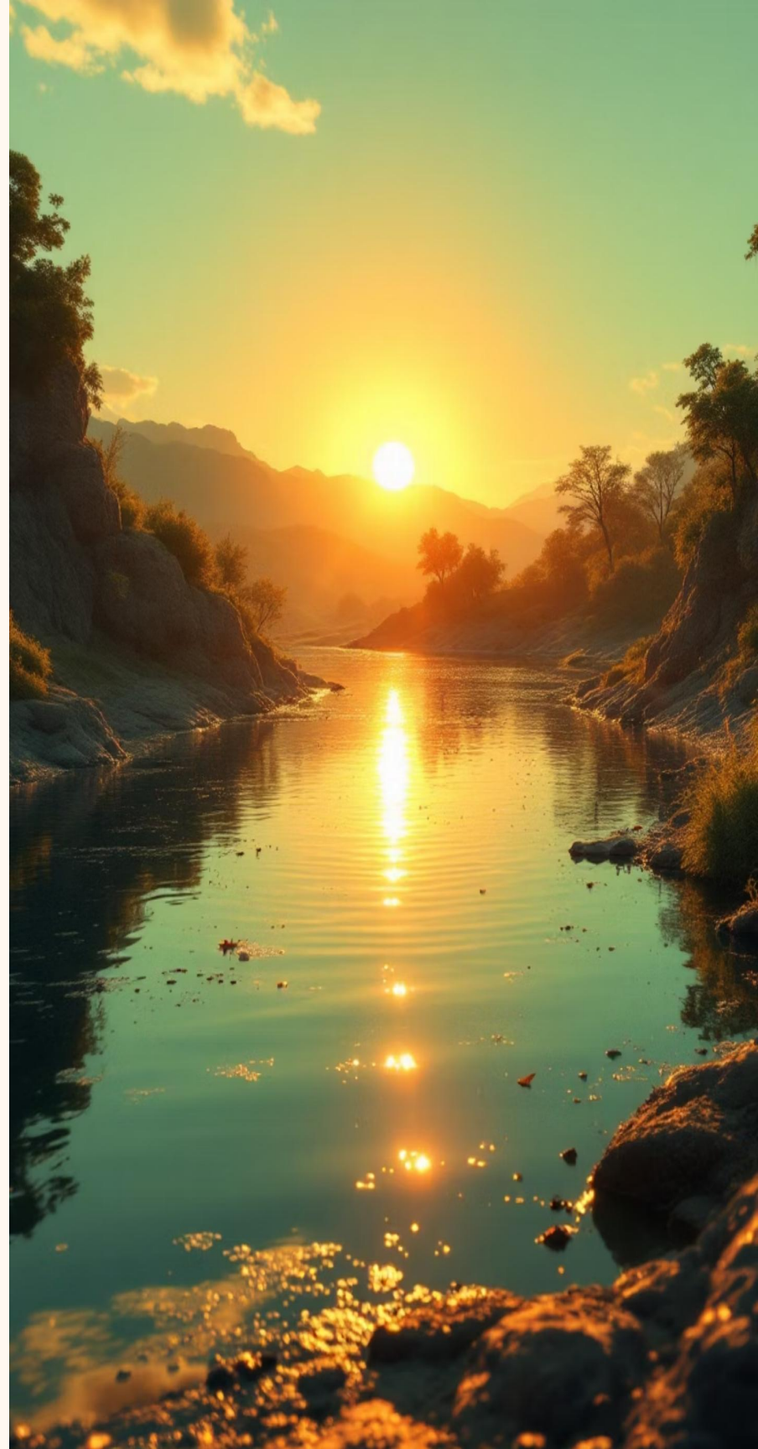


Fig. 5. Water and sanitation – Gamma app

Conclusions

China and Netherlands Water and Sanitation systems demonstrate that sustained political commitment, adequate financing, and strong institutional frameworks are essential for achieving universal water and sanitation access.

Achieving the SDG targets for water and sanitation requires coordinated action across multiple sectors, sustained financing, and unwavering political commitment to leave no one behind.

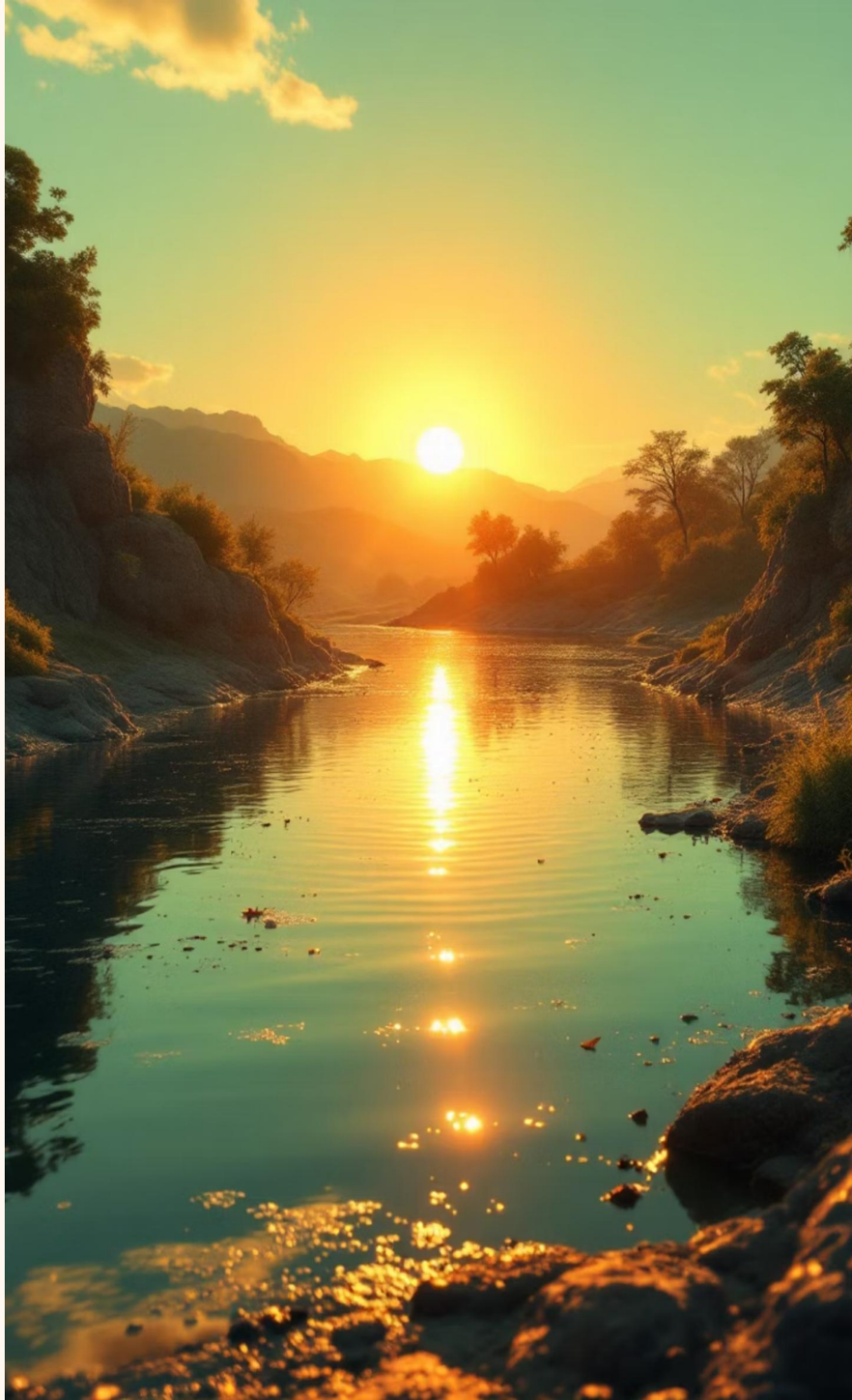


Fig. 5. Housing – Gamma app

Reference list

- **Ministry of Water and Environment (MWE). (2022).** Annual Performance Report for Water and Environment Sector, FY 2021/22.
- **National Water and Sewerage Corporation (NWSC). (2023).** *Annual Report 2022*. (Shows the performance of the urban utility).
- **WHO/UNICEF Joint Monitoring Programme (JMP). (2022).** Progress on household drinking water, sanitation and hygiene 2000-2022
- Figure 1 AI generated. Housing, Gamma app
- Figure 2-5. Water and Sanitation, Gamma app

Next week

Water and Sanitation Services:

- Management and administration
- Challenges