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CONSULTING SERVICES FOR THE ANNUAL WASH SECTOR PERFORMANCE REVIEW FOR THE GAMBIA 2020 & 2021

FINAL REPORT

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Table of Contents

ABBREVIATIONS ***4***

DEFINITION AND NOMENCLATURES ***5***

EXECUTIVE SUMMARY ***6***

1. INTRODUCTION ***11***

1.1. The Annual Sector Performance Review - Aims and Preparation Process 11

1.2. Country Context 11

1.2.1 The Socio-economics 13

1.2.2 Poverty and Inequality 14

1.2.3 An Overview of the Demographic Dynamics 14

1.2.4 The Changing Weather and Water Resources 18

1.2.5 The International Development Assistance 20

1.2.6 Water, Sanitation and Hygiene WASH in The Gambia 21

2. METHODOLOGY ***22***

2.1. Objectives and Scope of the Assessment 22

2.2. The Scope of the Performance Review 22

2.2.1 Water and Sanitation Mapping and Uptake of WASH Services 22

2.2.2 Capacity Assessment for Sustainable WASH Services Delivery 23

2.2.3 Water Resources Management Linked to Livelihoods 23

2.2.4 WASH Sector Governance and Financing 23

2.3. Data Collection Methods and Tools 24

2.3.1 Household Surveys 24

2.3.2 Participatory data collection 25

2.3.3 Data Processing and Analysis 26

2.3.4 Validation workshop 26

3. WASH STATUS AS AT 2020/2021 ..... ***27***

3.1. WASH Governance 27

3.1.1 Policy, Legal and Strategic Framework (including Policy Shifts and Enforcements) 27

3.1.2 Key Players and WASH Coordination 29

3.1.3 Planning and Monitoring through the M&E Framework 32

3.1.4 Institutional Capacity 34

3.1.5 Local Government and Communities 36

3.1.6 Private sector and NGO participation 37
3.1.7 WASH Sector Service Delivery Systems 38
3.1.8 WASH Sector Financing and Funding Mechanisms 39
3.2. Other Cross-cutting Issues 41
3.1.9 Gender Dimensions in WASH 41
3.1.10 The impact of Climate Change on Water Sources 41
3.3. Safe Water Supply 43
3.3.1 Urban Water Supply in Large Systems 43
3.3.2 Rural Water Supply 45
3.4. Sanitation and Hygiene 52
3.4.1 Urban Sanitation and Hygiene 54
3.4.2 Rural Sanitation and Hygiene 57
3.4.3 Hygiene Promotion 64
3.4.4 Hygiene Behaviour (KAP) 65
3.4.5 WASH in Public Places 66
4. CONCLUSION AND WAY FORWARD 73
4.1. Progress on WASH Service Delivery and Challenges 73
4.1.1 The Overall Governance: Policy, Legal and Programmatic Framework 73
4.1.2 Sector Financing and Planning 74
4.1.3 Monitoring Evaluation and Learning (MEL) 75
4.1.4 Equitable Utilization of WASH Facilities and Services 75
4.1.5 Sustaining Water and Sanitation Services, and Good Hygiene Behaviour 76
4.2. Summary of Recommendations 76
ANNEXES 79
Annex 1 - Evaluation Matrix: WASH Sector Performance Review 2020/21 79
Annex 2: Key Water Projects Financed by Development Partners in The Country for the Past 20 Years 85
Annex 3 - Data Collection Tools 86

List of Tables

Table 1: Number of Randomly selected communities and households 25
Table 2: Key sector policies (among others) of relevance to this review are the following 27
Table 3: Key emerging issues and recommendations 77

List of Figures

Figure 1: GDP per capita (current US$) (Source: World Bank) 13
Figure 2: Sex of household head 15
Figure 3: Educational level of household head 16

Figure 4: Household Size: of number of people in a household *17*
Figure 5: Main source of household livelihood *18*
Figure 6: Scope of Work *23*
Figure 7Figure 8: Scope of Work *23*
Figure 9: Technical Approach *24*
Figure 10: Gender distribution in domestic water collection in CCR (North) *41*
Figure 11: Percentage of urban household (Source of data: MICS, 2018, P366, and UN – GLASS, 2018/19) *45*
Figure 12: Primary source of drinking water for the household *46*
Figure 13: Household accessing water source compared to rainy season *47*
Figure 14: Proportion of Household accessing water source compared to rainy season *47*
Figure 15: Proportion of household satisfaction of water sources *49*
Figure 16: Proportion of household having access to enough drinking water *50*
Figure 17: Responsibility for Household Water Collection *50*
Figure 18: The time taken for household water collection *51*
Figure 19: The time taken for household water collection *51*
Figure 20: Proportion of Households treating water before drinking *52*
Figure 21: Proportion of Households treating water before drinking *52*
Figure 22: Household rate of satisfaction about their solid waste management *57*
Figure 23: Household rate of satisfaction about their solid waste management *57*
Figure 24: Households with Types of Latrines *60*
Figure 25: Households with Types of Latrines *60*
Figure 26: The time it takes for households to access toilet faclities *60*
Figure 27: The time it takes for households to access toilet faclities *60*
Figure 28: Proportion of household women having problems accessing toilet facilities *61*
Figure 29: Proportion of household women having problems accessing toilet facilities *61*
Figure 30: Household rate of satisfaction on their toilet facility/latrines *61*
Figure 31: OD/ODF in the Regions *62*
Figure 32: ODF Map of The Gambia *63*
Figure 33: Proportion of households ever participated in hygiene training or demonstrations *64*
Figure 34: Key Times for Practicing Hand Washing *65*
Figure 35: Proportion of households facing challenges in accessing menstrual hygiene materials *66*
Figure 36: ODF percentage in schools' in each region *70*
Figure 37: ODF percentage in schools' in each region *70*

ABBREVIATIONS

ASPR	Annual Sector Performance Review
CLTS	Community Led Total Sanitation
CRR	Central River Region
CSO	Civil Society Organisations
DCD	Department of Community Development
DWR	Department of Water Resources
EA	Executing Agency
EU	European Union
FCL	FRAME Consultants Ltd
FGD	Focus Group Discussion
GCM	General Circulation Models
GDHS	Gambia Demographic and Health Survey
GLAAS	UN-Water Global Analysis and Assessment of Sanitation and Drinking-Water
GDP	Gross Domestic Product
GMD	Gambian Dalasi
GNI	Gross National Income
IA	Implementing Agency
ISRAD	Institute of Social Research and Development
IWRM	Integrated Water Resources Management
KII	Key Informant Interview
LLR	Lower River Region
LRR	Lower River Region
MOFWR&NAMs	Ministry of Fisheries, Water Resources and National Assembly Matters
MICS	Multiple Indicator Cluster Survey
MoH	Ministry of Health
NAWEC	National Water and Electricity Company
NBR	North Bank Region
NEA	National Environmental Agency
NGO	Non-Governmental Organization
ODA	Overseas Development Assistance
OMVG	Gambia River Development Organization
PCU	Project Coordinating Unit
PHAST	Participatory Hygiene and Sanitation Transformation
PIP	Project Implementation Partners
PSC	Project Steering Committee
SDG	Strategic Development Goal
SME	Small & Medium Enterprises
UN	United Nations
UNICEF	United Nations Children's Fund
URR	Upper River Region
VDC	Village Development Committee
WASH	Water, Sanitation and Hygiene
WCR	West Coast Region

DEFINITION AND NOMENCLATURES

Improved sanitation includes connection to a public sewer, connection to septic tank systems, pour-flush latrines, simple pit latrines and ventilated improved pit latrines. Not considered as improved sanitation are service or bucket latrines (where excreta is manually removed), public latrines and open latrines.

Electronic Waste or e-waste is any broken or unwanted electrical or electronic appliance. E-waste includes computers, entertainment electronics, mobile phones and other items that have been discarded by their original users. While there is no generally accepted definition of e-waste, in most cases, e-waste consists of expensive and more or less durable products used for data processing, telecommunications or entertainment in private households and businesses.

Industrial Waste Management encompasses waste generated by industries and includes solid, liquid and gaseous wastes. In addition, it includes any material that is rendered useless during a manufacturing process, such as that of factories, industries, mills and mining operations. Any waste arising from commercial, trade activities, laboratories or containing substances or materials which are potentially harmful to human beings or equipment are termed as industrial waste.

Health-Care Waste includes all the waste generated within health-care facilities, research centres and laboratories related to medical procedures. In addition, it includes the same types of waste originating from minor and scattered sources, including waste produced in the course of health care undertaken in the home (e.g., home dialysis, self-administration of insulin, recuperative care).

Hazardous Waste is waste that is dangerous or potentially harmful to human health or the environment. Hazardous waste can be liquids, solids or gases.

EXECUTIVE SUMMARY

Water, Sanitation and Hygiene are essential to everyday life, and have been recognized by the UN as basic Human Right. It is the responsibility of Government of The Gambia to provide, regulate and facilitate WASH services for its population of 2.3 million people to enjoy a better quality of life. The water supply and sanitation sector in The Gambia has been evolving gradually in the last two decades, in response to rising demands and challenges of maintaining sector related infrastructure constructed as a response to the changing climate. This Annual Sector Performance Report (ASPR) describes the progress made over the years in the provision of Water, Sanitation and Hygiene (WASH) services

The assessment found many organizations, projects and private citizens striving to improve WASH service delivery across the country; and for the first time, a Sector Performance Report (SPR) has been prepared to capture and present sector efforts, with particular focus on the activities and outcomes from 2018 to 2021. This report was collated and written from a comprehensive assessment which engaged a range of government ministries, agencies and non-government organizations and represents WASH sector performance and achievements as at 2020/21.

The Gambia is pursuing its WASH commitment towards SDG 6, measured by a) the percentage of population using improved basic drinking water sources which are located on premises and available when needed and free of faecal, chemical and physical contamination; and b) access to adequate and equitable sanitation and hygiene for all, and end open defecation paying special attention to the needs of women and girls and those in vulnerable situations. Key considerations in this assessment are equitable access to water and sanitation facilities, sustainability of the facilities and related services, integration of communities into sustainable WASH development efforts, and hygiene improvement. As there are important overall areas of WASH development such as the integrated water resources management included in the sector design, the two measurable indicators were considered with a holistic view, which is in line with international standards and practices.

a) Sector Governance:
The sector has progressed on the overall legal frameworks, but needs to scale-up its coordination and harmonisation of efforts. An important achievement has been the formulation and adoption of the Revised National Policy for Sanitation and Hygiene (January, 2020); The Gambia National Strategy for Sanitation and Hygiene (2020 – 2022); and The Gambia National Strategy for Urban Sanitation (January 2020). However, the sector is still facing challenges of operationalizing these instruments for service regulation and provision, as well as for integrated approach to water resource management.

The National Sanitation and Hygiene Policy and the supportive strategies call for institutional restructuring in order to harmonise and regulate the fragmented governance of the WASH sector. It is expected that the reforms will create the needed enabling environment for improved service delivery both in terms of quantity and quality. However, the challenge is to implement the reforms and further clarify roles and responsibilities, whilst at the same time increase resource allocations for better service delivery. The sector would need adequate resources and capacity to implement a truly Government-led sector coordination and planning framework.

National Water Resources Policy of 2006 is almost out-dated, requiring a comprehensive review to incorporate new lessons, mainstream the emerging climate change realities and address the recurrent challenges. To address these concerns and adjust to conflicting demands, there is need to revise the water framework and define relevant policy objectives, clarify institutional responsibilities, management rules and consultation parameters; and engage all stakeholders in Sector Wide Approach (SWAp) programming.

This can be achieved through the following interventions: a) finalise the regulative framework including The Gambia Water Bill (2014), National Water Resources Management Authority Bill, Gambia Meteorological Authority Bill, Water Use Regulations Act, and Drillers‟ Licence and Borehole Construction Regulations; b) provide modalities for effective coordination in the WASH sector, including working procedures between authorities and their respective boards and establish collaborating technical committees across all sectors (NAWEC, NEA, PURA, LGAs, Ministries, etc); c) introduce new management tools like water use (abstraction) permits, WASH policy in water supply, and use of digital innovations (Data and Technology); and d) ratify the policy directives supporting financial sustainability of the two Authorities demonstrated by enactments of financial responsibilities of Government and service users

Government financial allocation to the WASH sector was found very low, with bulk of the investment funds coming from donors. However, further assessment of sector financing estimated available funding at US$109.8 Million for WASH programming from 2017 to 2021; and total investment on the sector in 2020/21 was estimated at US$60.8 Million. Estimates of investment requirements suggests that additional funding will be required for capital investment, particularly rehabilitation of existing facilities. For sanitation, there is no official policy on cost sharing, though there is an implicit assumption that households will meet hardware costs for on-site sanitation but not for sewerage. This underscores the need for an improved promotion and marketing programmes to encourage households to invest in sanitation as well as a reassessment of the equity of publicly funded sewerage.

The sector was found dealing with issues of monitoring and evaluation at various levels. A function of Monitoring, Evaluation and Learning (MEL) was created in the DWR to produce necessary performance information. Emphasis was placed on the input/output levels, as the first step in the sequence, and none at the impact level. Further the MEL system is very much focused around projects and yet to be developed into an integrated sector-wide system. This report recommends the institutionalisation of the Annual Sector Performance Review to support the overall information management system of the sector.

b) Access to Improved Water Sources

Overall, The Gambia has recorded a mixed performance on progress towards the SDG water targets. The country has exceeded in meeting the MDG on access to water sources (with 88% in 2015), and progressing on SDG 6 (universal access to water). According to The Gambia Demographic and Health Survey (GDHS) 2019/20, 95% of households have access to improved drinking water sources (96% urban households) and (92% rural households). The percentage of households using an improved source of drinking water increased slightly from 91% in 2013 to 95% in 2019-20. This assessment estimated 79.5% of households accessible to safe drinking water sources (85% urban households) and 74% rural households).

Urban Water Supply: Extensive analysis in this study found that a) 57% of urban households have access to safely managed water sources (where drinking-water supply includes piped (tap) water inside dwelling/institution; piped (tap) water inside yards; minimum of 25 litres per person per day (24 hours) availability; and free from contamination; and b) 28% of urban households have access to improved basic water sources (with collection time not more than 30 minutes for a round trip, including queuing, and one or two of the following: water is accessible on premises; or water is available when needed; or water supplied is free from contamination). With these classifications, this study presents 85% of urban household have access to quality drinking water. A Senior Officer in the National Water and Electricity Company (NAWEC) cited that *coverage with the large systems network of the company does not reach the urban slums and other new settlements due to resource constraints*. Within the urban setting there are inequities between settlements due to rapid population growth and limited capacity of NAWEC to expand its water networks to reach all the settlements. Therefore, an estimated 15% of the urban populations are (in off-grid areas) inaccessible to NAWEC large water network. Majority of such households are accessing water from private boreholes.

Overall, significant progress has been made in water supply, but this needs to be sustained to ensure sector targets are met.

Rural Water Supply: This study further found piped-borne water as the most common source for urban households, while rural households (74%) obtain drinking water mainly from public tap/standpipe (55%) or tube well/borehole (19%). Most communities visited now have at least one solar-powered tube well either obtained through individual efforts of household members, or through remittances from relatives abroad. The assessment further found 12.9% of water points assessed in 50 communities were dysfunctional, majority of which are hand pumps and unprotected dug-wells. Operation and maintenance of WASH facilities (shifted to community responsibility), have ever been challenging to them due to resource constraints, lack of skilful local pump-maintenance artisans and inadequate spare part supply chains.

With regard to water safety and quality, a Key Informant cited the presence of E. coli in rural water supply, which is an indicator of widespread faecal contamination. The review found 12.1% of total household population in The Gambia at very high risk of faecal contamination based on number of E. coli detected in sources of drinking water (The Gambia MICS, 2018). Contamination may occur by the water-chain: between the source and the household during transport, handling and storage. Also, pollution at improved water sources are found linked to poor sanitation and hygiene behaviours in some rural villages.

c) Access to Improved Sanitation and Hygiene

Although, Government proposed ambitious WASH targets: a) increased access to improved sanitation facilities from 64.9% to 75%; and b) increased households with hand washing facilities with soap and running water from 30.3% to 60% (urban) and 26% to 50% (rural), the rate of progress on sanitation coverage is still slow. It is unlikely that The Gambia will meet its SDG targets. A key weakness in policy response to sanitation and hygiene issues was the lack of a clear-cut institutional home for sanitation.

Government records presented that 72 % of households use improved sanitation facilities (GDHS, 2019/20), although use of such facilities is higher in urban (80%) than rural areas (44%). Also, by residence, 59% of urban population have basic sanitation service, as compared to 32% for the rural population. Despite this, The Gambia recorded the lowest rates of open defecation free (ODF) in Africa (1%), but some stakeholders are critical with the accuracy of this achievement, especially where GDHS, 2019/20 presented 10% open defecation (OD) in Central River Region - North.

Urban Sanitation and Hygiene: This study found urban sanitation characterized by poor solid, liquid and industrial waste management, requiring significant revision of the institutional responsibilities, coordination mechanisms, and funding and further resource mobilization arrangements in order the revised national objectives as outlined in pillar 2.5.2 of the sanitation infrastructure plan for urban areas. While most households have toilet facilities in their premises, wastewater discharges are untreated or partially treated into open drains; or by dumping solid waste in streets and waste water in the river/ponds.

Generally, there is an increasing wastewater generation with increasing water logging and stagnant pools of water in many towns and urban slums due to lack of functioning or efficient drainage systems. Increasing urbanization, coupled with poor urban planning and weak enforcement of the Physical Planning Act, has resulted in unauthorized construction of buildings along flood plains, natural drainage ways and reservations. This is exacerbated by the lack of drainage system for sludge and storm water conveyance, causing flooding in many localities during the rainy season.

Solid waste management and drainage structures are inadequate in GBA, with huge quantities of uncollected waste find its way into watercourses, causing blockages, thus exacerbating annual flooding hazards, particularly in the slum communities of Gibo town, Fagi Kunda, Tallinding and Nema Kunku.

In 2019, pilot urban CLTS assessment reported that 29.62% of the surveyed compounds employ private collectors to dispose-off their solid waste; 22.3% use communal dumps, while 9% bury their household waste pits and 29.62% indiscriminately dump their refuse. Around 35% of compounds store their solid waste in polythene bags, while dust bins were used in 20% of households. (WASH unit, MoH, 2019). This study found that refuse or solid waste collection challenging all the municipalities. With the emerging of collection trucks and strollers in Banjul and Kanifing municipalities, there are some improvements in solid waste management. ***Rural Sanitation and Hygiene*** services has been vested on Local Government Authorities (LGAs), but key stakeholders in the Area Councils cited that solid and liquid waste collection, treatment and disposal remains burden on them. The study found maintenance of drainage facilities in all LGAs generally insufficient. Sanitation programming efforts of government and development partners are primarily focused on Greater Banjul Area in order to prevent disease epidemic such as cholera in agglomerated settings (MoH, 2020: National Policy on Sanitation and Hygiene).

The review found households building their own sanitary facilities for human excreta management through self-financing, and they do waste disposal through services of private sanitation service providers. Despite the poor environmental sanitation practices in the communities, the review found 74% of households owning family latrines, of which 29 % are improved facilities; and 24 % share neighbour's latrines for defecation, of which 11% are improved facilities. This is showing 98% uptake of latrine facilities in sample communities, while 2 % of the villagers are still using the bush.

d) WASH in Public Places

Water supply: The study confirmed that the sector improved access to safe drinking water sources in health and learning institutions. However, a single source of water in any of such institutions (e.g. a lone hand-pump in a large school) was reported inadequate, as such staff averred that hand pumps are always been congested during breaks for school meals. The assessment found majority (87.5%) of the schools surveyed had access to an improved drinking water source. However, more investment would be required to reduce congestion at water points to 250 children/safe water point, especially in larger schools.

Sanitation services: This study assessed sanitation and hygiene conditions in a number of sample public places: schools (16), health facilities (16), regular market places (8), weekly "loomo" markets and agricultural "sandika" markets (7), and places of worship (13).

Health Care Facilities: All the 16 health care facilities visited have latrine facilities, but without functioning hand-washing facilities with soap and good drainage. Uptake of the facilities were found very high. There are no sex separated toilet with menstrual hygiene facilities; and almost all the health centres lacks latrine facilities that are user-friendly for people with limited mobility.

School Facilities: Data from this assessment presented the following findings:

a) All the 16 schools visited have latrine facilities on the premises or about 60 meters away, but with an average 130 boys per latrine and 115 girls per latrine (while the internationally accepted standard for pupil to latrine ratio is 25 girls per latrine and 50 boys per latrine).

b) 80% of latrines facilities visited do not have hand-washing facilities, and students have to come along with water for use at the toilet or use latrine without water. The study found existing facilities for human excreta management in other public places (regular and loomo market, agricultural markets, car parks, etc.) inefficient.

1. INTRODUCTION

1.1. The Annual Sector Performance Review - Aims and Preparation Process

The Republic of the Gambia has received grants from the African Development Bank to finance the Climate Smart Rural WASH Development Project (the Project). The Project has in turn commissioned the consortium of Frame Consultants Ltd., DevEmerge Global and Institute of Social Research and Development (ISRAD) to carry out an Annual Sector Performance Review to develop a national baseline report of the WASH sector as of 2020 and 2021. The purpose of the Project is to improve the socio-economic and environmental conditions of the rural and peri-urban population through improved access to sustainable WASH infrastructure and services in the Gambia.

The Interim Report was submitted on Monday 31st January 2022 after presenting the draft at a workshop on 27th January 2022. The final Interim Report reflects the outcome of these discussions with the stakeholders. In it, the Consultants set out how it would utilize a combination of reviews and assessment of social, political, environmental, regulatory and organisational mechanisms to prepare a report that gives details of a baseline and the WASH sector performance during the period under review.

The Ministry of Fisheries and Water Resources is the Executing Agency (EA), and will execute the project through the Department of Water Resources (DWR) as Implementing Agency, supported by a Project Steering Committee (PSC) which shall be chaired by the Permanent Secretary of the Ministry to provide policy direction and operational oversight. The direct implementation and management of the project is being undertaken by a Project Coordinating Unit (PCU) supported by the Project Implementation Partners (PIPs), such as MoH, DCD, NAWEC, NEA, The councils.

The objectives of this project are to: (1) increase sustainable access to safe water by 17% and access to safely managed sanitation by 2%; (2) enhance services delivery capacity in the sector, and (3) improve the livelihoods through nurturing safe water and sanitation services related opportunities for women and youth employment. The project will benefit an estimated 200,000 rural and peri-urban Gambians, particularly women and children who are expected to live healthier lives and trek shorter distances to fetch water. An additional 300,000 people will benefit from the interventions in improved solid and liquid wastes management, in addition to improving the rapidly deteriorating aquatic environment. Other public and private sector institutions, including schools, health units, markets and small & micro-enterprises will also benefit from the project. It is expected that about 500 individuals and SMEs will benefit from aquatic resources management training and household waste reuse/waste-for-cash training. Another 400,000 urban and peri-urban residents in Kanifing Municipal and Brikama Local Government Area will be indirect beneficiaries of the improved environmental sanitation resulting from the interventions in waste management. The Annual WASH Sector Performance Review for The Gambia 2020 and 2021 is one of the deliverables of the project.

1.2. Country Context

The Republic of The Gambia is surrounded by Senegal except for its western coast, and is the smallest country in mainland Africa with a high density of 214 people per square kilometre.

The country comprises five administrative regions and two municipalities.[1]The geography is predominantly drought-prone Sahelian shrubland with sparse natural vegetation of woodland savannah, undergoing rapid degradation. There are four diverse agro-ecological zones suitable for a wide range of agricultural products; and abundance of water resources (118,000 ha of surface water regimes and two major aquifers of good recharging capacities) presenting huge potentials for sustainable water sources.

The population was estimated at 2.455 million (51.2% female) in 2021 at a growth rate of 3.1% per annum (2010–2021) showing a youth population of 43% (below 15 years)[2]. This demographic composition is due to a high fertility rate (of 5.3 births per woman3) and low life expectancy of an average age of 61.4. This is contributing to a high dependency ratio, estimated at 88.2% in 2018[4], with an average household size of 8 persons. The country is undergoing rapid urbanization with an increase from 50% in 2001 to 61.2% in 2018, and 4% annual urbanization growth rate. With this pace, if unabated, 71.5% of the population will be urban dwellers by 2025. This will create new poverty and welfare challenges, including growing pressure on water and sanitation services in urban areas, which government must prepare to match-up.

The Gambia, among other UN member states, made a commitment to meet the Millennium Development Targets by 2015, and in particular Target 7C (To halve by 2015, the proportion of people without sustainable access to safe drinking water and basic sanitation). The Government of The Gambia recognizes that safe water, improved sanitation and hygiene are essential in achieving the improvements to people's health and development and in contributing to the attainment of Goal 7 and Target 7c of the Millennium Development Goals (MDGs). Sanitation and hygiene are also considered as major determinants of poverty. While improvements to sanitation and hygiene not only generate economic benefits in terms of better health and more productive pursuits of higher productivity, it could also produce positive outcomes for school enrolment, retention and performance as well as a healthy and dignified living environment.

While significant efforts have been made in the provision of safe drinking water, much, however, still remains to be done in the field of sanitation and hygiene. Sanitation and hygiene seem not to be getting the desired policy response resulting in the lack of an efficient coordination mechanism for basic sanitation issues in the country. Another weakness in the sanitation and hygiene subsector has been the lack of a clear-cut institutional setting to address sanitation and hygiene issues. The sanitation and hygiene sub component could be found in various programmes of several sectors such as the Ministry of Health and Social Welfare, Department of Water Resources, National Water and Electricity Company (NAWEC), Department of Community Development, the National Environment Agency and the Local Government Authorities and Municipalities.

Sanitation refers to a range of interventions to improve the hygienic management and/or disposal of human and animal excreta, solid waste, waste-water, hazardous and clinical waste. Sanitation is understood as the collection, transportation, treatment and disposal or reuse of human excreta and domestic and industrial waste (liquid, solid and gaseous) as well urban storm water management. It also includes the management of electronic waste (e-waste), hazardous waste, health-care waste, and radioactive and other dangerous substances.

[1] The regions are West Coast Region, Lower River Region, Central River Region, Upper River Region and North Bank Region; the municipalities are Banjul and Kanifing.
[2] UNFPA website, https://www.unfpa.org/data/GM. Data extracted on 02.03. 2020.
[3] UNFPA, World Population Dashboard. Available at https://www.unfpa.org/data/world-population/GM. Data extracted on 13.01.2020.
4 World Bank (2019). World Bank Open Data. Available at https://data.worldbank.org/indicator/SP.POP.DPND?locations=GM. Data extracted on 13.02.2020.

The definition includes the technology (infrastructure) and the equipment necessary for the safe disposal of waste. Therefore, this annual review aims at conducting a general review reports and other documents on WASH activities carried out by the various stakeholders and partners. The review collects primary data from all the regions and districts with a representative sample for households and focus group discussions. The period under review is year 2020-2021. This is the situational analysis of WASH Programs successes and failures until 2021 in the Gambia. A team of consultants did the review within a period of three months (Jan-March 2022).

1.2.1 The Socio-economics

Until recently, The Gambia's macroeconomic situation remained erratic and challenging, characterized by an unpredictable governance. In the past, the country faced challenging moments of sharp economic downturn, with several dips of the annual growth rate of the Gross Domestic Product (GDP) per capita in 2011 (-10.8%), 2014 (- 4.3%) and 2016 (- 1.05%)[5]. Over 2017-2018, the macroeconomic situation started to recover and the GDP growth rate per capita reached 3.45% in 2018 and 2.92 in 2019. GDP per capita at current prices reached USD 751.3 in 2019 (figure 1) due to strong service sector (rebound of tourism) and trade subsectors which accounted for roughly 20% of the GDP.[6]

The debt-to-GDP ratio was estimated at 130% of GDP in 2017, and an extremely heavy public debt burden (81 percent of GDP[7] in 2019) by which the country has been classified as being in debt distress. Consequently,

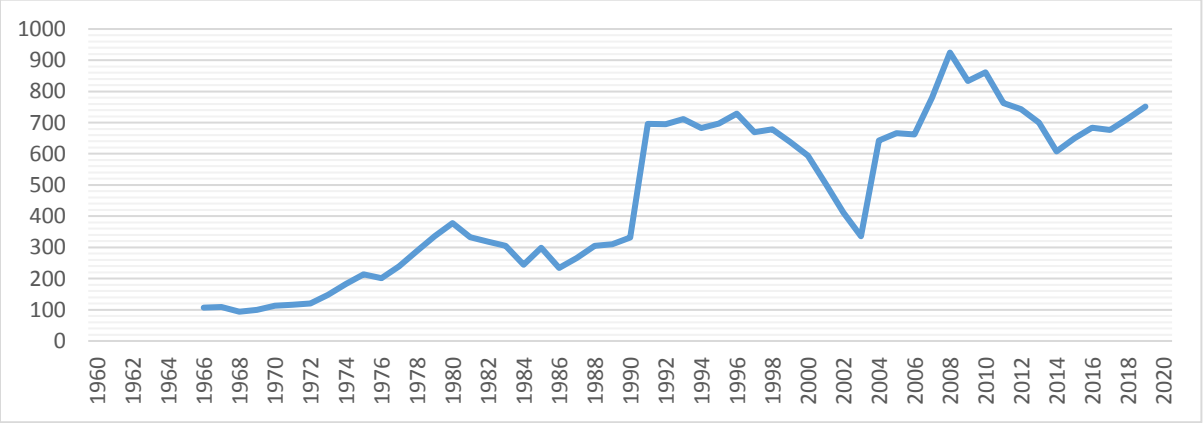


Figure 1: GDP per capita (current US$) (Source: World Bank)

the country continues to rely heavily on inflows of net development assistance (27.3% of GNI[8]) whilst remittances amount to almost one-fifth of the GDP[9].The key drivers of growth over the last decade were services, contributing 58% to 61% of the GDP; Agriculture Sector contributing 24 to 27% to GDP; and the industry contributed 12 to 17%[10] from 2013 to 2017 respectively; while the Overseas Development Assistance (ODA) is playing an important role in sustaining the economy over the years. Despite this progress, the recent global COVID-19 pandemic and related safety restrictions placed a burden on the global economy, including

[5] https://data.worldbank.org/indicator/NY.GDP.PCAP.KD.ZG?end=2019&locations=GM&start=2010
[6] https://data.worldbank.org/indicator/NY.GDP.PCAP.CD?end=2019&locations=GM&start=2010
[7] International Monetary Fund Data Mapper, Available at https://www.imf.org/external/datamapper/GGXWDG_NGDP@WEO/OEMDC/ADVEC/WEOWORLD/GMB . Last accessed 28.01.2020.
[8] OECD/DAC 2017.
[9] World Bank, World Development Indicators (WDI), 2019.
[10] Rebasing and compilation of Gross Domestic Product – 2013 base year, GBoS, June 2018.

in the Gambia; where Government revenues were also affected, with an estimated decline in import duties and other tax revenues of GMD 2.7 billion[11] from April to September. 2020.

The main features of the economy are its small size and narrow market; and its little diversification relying mainly on agriculture and re-export trade. The country has a small export base, with groundnuts as the main export commodity. The economy is predominantly based on rain fed subsistence agriculture, which is the main source of livelihood for the majority of the population[12]. The inflation started increasing since January 2021, mostly impacted by food price increases, which is affecting household food security and increasing vulnerability. However, it decelerated slightly to 6.9% in August 2021[13]. Nevertheless, the country is faced with a troubled economy arising from the poor performance of agriculture and industries, economic mismanagement, massive corruption inherited from the past regime, and volatile oil/commodity prices.[14]

1.2.2 Poverty and Inequality

The Gambia is one of the poorest countries in the world, ranked 174 out of 189 countries in 2018.[15] Poverty levels (households living on less than US$ 1.25/day) were estimated at 48.65% in 2015.[16] Rural poverty is on the rise, showing an increase from 60% of the rural population considered poor in 2003 to 62.1 % in 2010. This rose to 69 % in 2016 (IHS report, 2017). The factors driving poverty suggest that rural poverty and food insecurity are closely associated with low productivity, particularly in rain-fed agriculture. About 15.4 % of the population are multi-dimensionally poor, reflecting low consumption levels, limited educational attainment, and gaps in access to drinking water, sanitation and electricity, especially in the rural regions. The economy witnessed a contraction in growth by 0.2% and in real GDP per capita by 3.1%, reversing gains in poverty reduction, with international poverty rate (US$1.9 in 2011 PPP) increasing from 8.4% in 2019 to 9.2% in 2020[17].

An important feature of poverty in The Gambia is the female face, as women constitute the majority of the poor and extremely poor, exacerbated by the fact that they occupy a low socio-economic status. Poverty differentials among men and women are largely the result of women's limited access to productive assets such as land including credit and other support services. In the absence of laws or policies that explicitly redress these, women find themselves at a great disadvantage and will continue in a cycle of poverty. Income inequality is a prominent feature of the poverty profile of The Gambia, with a Gini coefficient of 35.9 points in 2015 (World Bank updates, 2019). Forty per cent of the active labour force are considered 'working poor', meaning that their earning capacity and standard of living is inadequate even for meeting basic needs.

1.2.3 An Overview of the Demographic Dynamics

Poverty in The Gambia is pervasive and undermines the capacity of families to effectively participate in the country's economic transformation. This assessment found a high dependency of the local population on imported foodstuffs, especially rice, and a large percentage of the population is vulnerable to even small price increases.

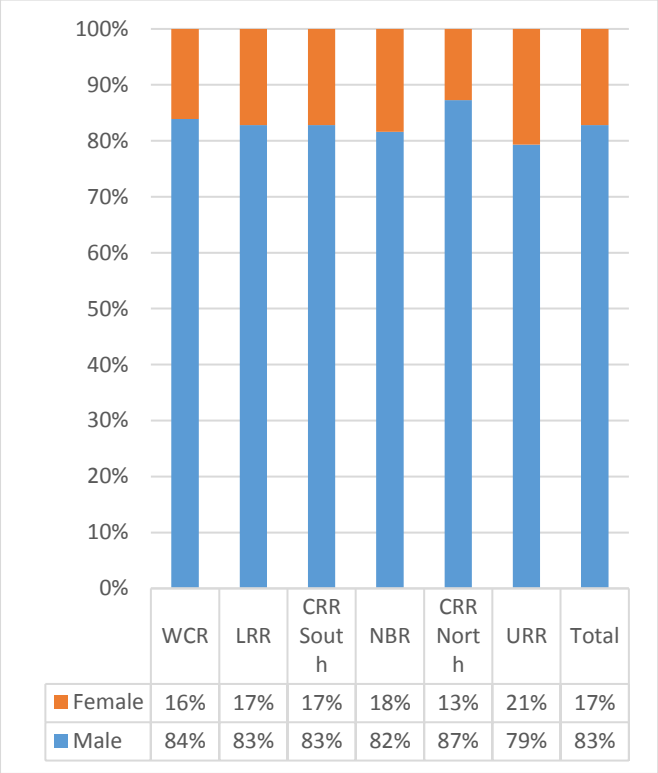
Poverty exists in all the rural and small towns, with only a slight improvement in Greater Banjul Area (GBA). The Gambia has a very young population (over 60% under 30 years) and much of the youth has migrated to the towns and cities, specifically GBA, leaving behind elderly persons in the rural areas. The increase in the

[11] 2.8 percent of GDP = USD 52 million (MoFEA, 2020).
[12] 2016 Comprehensive Food Security and Vulnerability Analysis.
[13] World Bank Report, October 2021
[14] The Gambia National Development Plan (2018–2021).
[15] Human Development report (HDR). 2019.
[16] The Gambia National Development Plan (2018–2021).
[17] WFP 2021, CFSVA

urban population imposes a taxing burden on the capacity of the public services with majority of the urban poor living in the slums with limited access to electricity, safely managed water sources and good sanitation. For some rural households, the closest source of water may be up to 500 meters away, which is within international standards, 500 metres and maximum queueing time at a water source 30 minutes[18]. Data from the regions are showing that almost half of the rural populations live in houses constructed from temporary materials. Rural infrastructure, especially residential areas in eastern regions, are woefully maintained. It seems likely that the compromising levels of utilities (electricity and safe water), sanitation and environmental quality can lead to poor health conditions in rural villages. The current levels of basic social services must be improved in the near future as a foundation for sustainable development.

i. **Gender Issues:** The assessment showed changing social roles of men and women throughout the regions. Although female-headed households do not appear significantly more vulnerable to poverty than the male-headed households, the generic nature of poverty in The Gambia, combined with the male domination of the culture are not gender-friendly in the villages. The study found that women and girl children are responsible for collecting water, sanitation and for undertaking household tasks such as hygiene.

   Figure 2 shows that males are the dominant heads of households. The percentage of households headed by males varies from 79% in URR to 87% in CRRN. This has an impact on decision making with regard to WASH in the households.



	WCR	LRR	CRR South	NBR	CRR North	URR	Total
Female	16%	17%	17%	18%	13%	21%	17%
Male	84%	83%	83%	82%	87%	79%	83%

Figure 2: Sex of household head

ii. **Education:** Only 42 % of adult men and women in the Gambia are literate.[19] Net primary school enrolment stands at 77 %[20], with gender parity in both primary and secondary education. The national completion rate for primary education in 2018 (Grade 6) stands at 65.5 % (69.2 % for girls and 61.3 % for boys[21]).

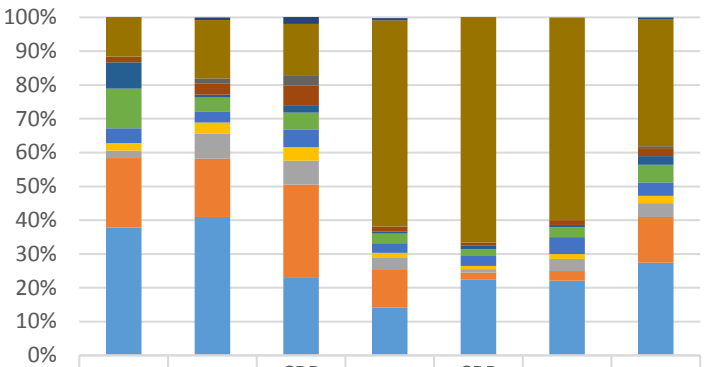
[18] Sphere Handbook 2018

[19] UNDP, 2018.

[20] World Bank (2018), WDI, available at https://data.worldbank.org/indicator/SE.PRM.NENR?locations=GM&view=map, data extracted on 18 February 2020.

[21] MICS, 2018 (p304).

However, the completion rate for primary education stands at 73.3 % in urban areas and 46.2 % in rural areas. Government policies provide for universal access to pre-primary and primary education, yet the quality of education remains of concern.[22]



	WCR	LRR	CRR South	NBR	CRR North	URR	Total
Other	0%	1%	2%	1%	0%	0%	1%
Dara Majalis	12%	17%	15%	61%	67%	60%	38%
University	0%	2%	3%	0%	0%	0%	1%
Diploma	2%	3%	6%	1%	1%	1%	2%
Certificate	8%	1%	2%	1%	1%	1%	3%
Completed Secondary	12%	4%	5%	3%	2%	3%	5%
Dropped in Secondary	4%	3%	5%	3%	3%	5%	4%
Completed Primary	2%	3%	4%	1%	1%	1%	2%
Dropped in Primary	2%	7%	7%	4%	1%	4%	4%
Madarassah	21%	17%	27%	11%	2%	3%	14%
No Formal Education	38%	41%	23%	14%	23%	22%	27%

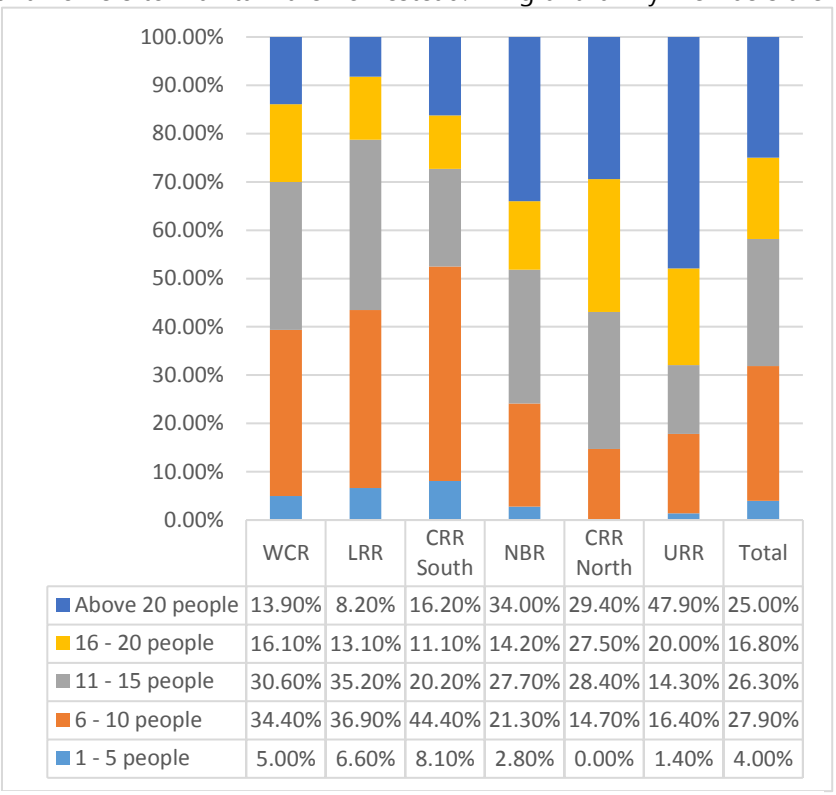
Figure 3: Educational level of household head

This study examined educational levels of household head and found that Lower River Region (LRR) has the highest number of literates among household heads, seconded by West Coast Region (figure 3).

iii. **Household Size:** Gambian households, built around the concept of an extended family compound, are quite large, normally including one or more adult males with their wives and children. There are large households in the rural regions: 26.3%, 16.8% and 25% of households have memberships of 11-15, 16-20 and above 20 people respectively (Figure 4). The study shows notable differences in the size and gender composition of poor and non-poor households in the regions. Size appears to be the single most important predictor of poverty (i.e. per capita expenditure in major consumption categories) in the households. Participatory poverty assessment (PPA – PRA wealth ranking) showed that the poorest 44% of households are above 20 members, while the top 10% of non-poor households are of 7 members on average. Large households tend to be multi-generational, have a higher incidence of polygamy and higher dependency ratio (higher ratio of elderly and children) which add up to lower per capita expenditures.

[22] "The Gambia Annual Education Yearbook"

A series of PRAs in this review suggested four determinant of household wealth (remittances, non-farm employment, land and household assets). The most important factor almost universally, was amount overseas remittances from emigrant workers to maintain the homestead. Emigrant family members are apparently seen initially as drain on farm labour supply for production of agro-commodities (and family income generation) and only subsequently as an asset contributing to household income/welfare (through earnings from informal jobs in Europe/America). In light of this, the introduction of labour saving techniques and provision of investment capital (both in the field and for technical professions) could be important compliments to current efforts in resettling the returnees/deportees from Europe. Livestock was perceived as the second most important measure of household wealth and included draught animals for crop production as well as for potential sale should the family need additional income.



	WCR	LRR	CRR South	NBR	CRR North	URR	Total
Above 20 people	13.90%	8.20%	16.20%	34.00%	29.40%	47.90%	25.00%
16 - 20 people	16.10%	13.10%	11.10%	14.20%	27.50%	20.00%	16.80%
11 - 15 people	30.60%	35.20%	20.20%	27.70%	28.40%	14.30%	26.30%
6 - 10 people	34.40%	36.90%	44.40%	21.30%	14.70%	16.40%	27.90%
1 - 5 people	5.00%	6.60%	8.10%	2.80%	0.00%	1.40%	4.00%

Figure 4: Household Size: of number of people in a household

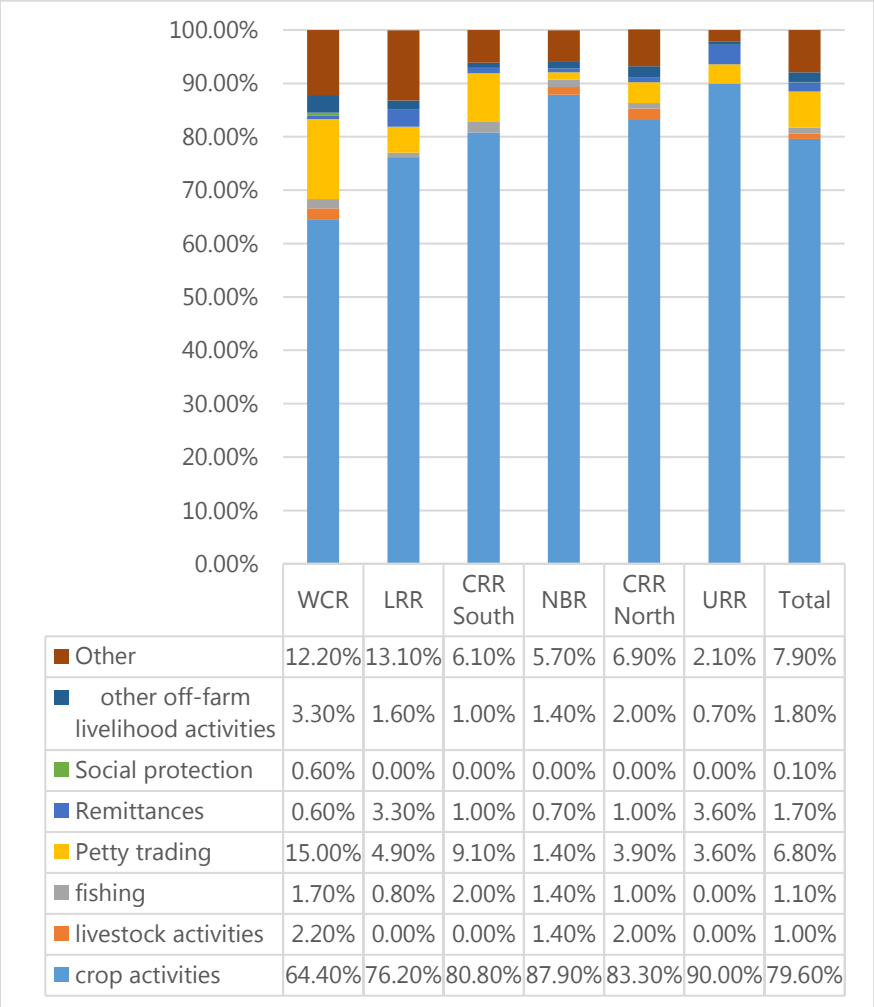
iv. **Livelihoods:** As a growing economy, there has been interesting evolution in The Gambian livelihood systems: non-agricultural activities have increased significantly while the share of the agriculture in GDP has been stagnating. The social and economic ramifications of low agricultural productivity are more immediate and more starkly evident in the country due to increasing food import bills. Food insecurity and malnutrition are wide-spread, especially among women and children. Approximately 20% of families are considered food-poor, and highly vulnerable to food insecurity[23]. Reflecting on climate change and a redefined, liberalized sectoral policy framework, farmer respondents associated higher risk with agricultural activities.

Lack of agricultural subsidies and appropriate input, despite their obvious macroeconomic imperative, have contributed to a large extent of uncertainty in agricultural production. Small producers respond to this phenomenon by actively diversifying their sources of income into non-farm activities as a risk-spreading strategy. While farming continues to be the most important single source of rural household income, non-farming activities generate significant household incomes in The Gambia. One of the more obvious manifestations of this process has been increasing urbanization supporting a surge in the service sector in GBA, and, to a much lesser extent, in services and micro-enterprises in Regional (secondary) urban centres.

[23] WFP 2016, Comprehensive Food Security and Vulnerability Analysis (CFSVA)

Most of the household heads are engaged in one farming activity or another as their main occupation. All the regions register more than 70 % of the household heads engaged in farming (except WCR). The West Coast Region (WCR) has the lowest number of heads involved in farming, of 64%. It can be seen that in WCR, the heads are mainly engaged in commercial business, far above that of the other household heads. The number of them being involved in casual labour or just relaxing as pensioners is quite insignificant. This is a logical trend as the business opportunities are greater in the WCR, and the further we go into the country, the lesser the commercial opportunities.

The assessment found significant efforts being applied by rural households in diversifying their income sources, especially towards non-farm activities as shown in figure 5. The rationale for these adjustments is found on the need to reduce the risks associated with large seasonal fluctuations in income.



	WCR	LRR	CRR South	NBR	CRR North	URR	Total
Other	12.20%	13.10%	6.10%	5.70%	6.90%	2.10%	7.90%
other off-farm livelihood activities	3.30%	1.60%	1.00%	1.40%	2.00%	0.70%	1.80%
Social protection	0.60%	0.00%	0.00%	0.00%	0.00%	0.00%	0.10%
Remittances	0.60%	3.30%	1.00%	0.70%	1.00%	3.60%	1.70%
Petty trading	15.00%	4.90%	9.10%	1.40%	3.90%	3.60%	6.80%
fishing	1.70%	0.80%	2.00%	1.40%	1.00%	0.00%	1.10%
livestock activities	2.20%	0.00%	0.00%	1.40%	2.00%	0.00%	1.00%
crop activities	64.40%	76.20%	80.80%	87.90%	83.30%	90.00%	79.60%

Figure 5: Main source of household livelihood

Ultimately, this can only be achieved by diversifying income sources outside crop production, which are, with few exceptions, closely aligned with precarious marketing systems. The conclusion from this experience is by no means to dismiss out of hand efforts to improvement in crop production, but rather not to assume higher production to be an inviolable end in itself and to assess new agricultural practices in light of their net profitability to small farmers compared to other sources of income.

1.2.4 The Changing Weather and Water Resources

i. The Climate Change

The Gambia with its Sahelian climate, has been experiencing increasingly erratic rainfall patterns, higher intensity storms, intra-seasonal drought and increasing average air temperatures, ushered by periodic cold spells and heat waves. Between 1981 and 2010, both maximum and minimum temperatures have been observed to be increasing with minimum temperatures increasing much faster. Projections in mean monthly temperatures by the three GCMs show an increasing trend from 2020 to 2100. Infact mean annual temperatures are projected to change by at least +0.6°C by 2020 and +3.1°C by 2100.

Three General Circulation Models (GCM) (CCC199, BMRC98 and GFDL) were used to project temperatures increase in The Gambia from 1981 to 2100. Results of these models indicated projected changes over the baseline average temperatures. The average annual temperatures from 2020 through ten-year intervals to 2100 are projected to change by at least +0.6°C by 2020 and progressively thereon to +3.1°C by 2100, whilst precipitation on the other hand, in the worst case scenario is projected to decline by -4% by 2030 and by -54% by 2100 (Third National Communication, 2017).

The Gambia has witnessed irregular precipitation patterns over the past 30 years. Previous studies concluded that there was decreasing seasonal precipitation during the rainy season of June to October over 1951 to 2000. Yet, the proportion of precipitation collected from intense events over the last decade in the wettest months of August and September have contributed toward observed annual rainfall increases from 2000 to 2010. Analysis showed that the mean monthly temperature of The Gambia over the baseline period 1981-2010 was 27.9ºC, while the mean monthly maximum and the mean monthly minimum temperatures were approximately 35 ºC and 21 ºC respectively. High temperatures were recorded in the months of May and June. On average annual rainfall was 830.31mm, while July, August and September represent the wettest months in a year.

The combinations of sea level rise, global warming and changes in rainfall patterns as projected by GCM models could impact freshwater resources ***qualitatively*** and ***quantitatively***. Surface evaporation is expected to increase, whilst groundwater recharge is expected to take the reverse trend and both phenomena influence salt transport in the River Gambia and place additional constraints on management rules of an upstream reservoir. However, the biggest threat of saline intrusion into the River Gambia and coastal aquifers comes from projected sea level rise (Jarju, 2009, Jaiteh and Sarr, 2011). Furthermore, groundwater in western Gambia is at risk of increased salinization, while coastal aquifers may become reduced, which could affect fresh water supplies.

ii. Water Resources

The Gambia's water resources consist of surface waters (including River Gambia and its tributaries and a few coastal streams); and sub-surface water (in multiple aquifers found at different depths throughout the country). The country is bisected by one of Africa's most important and productive rivers and appears well endowed with water resources. With an average annual rainfall of only 850 mm, large parts of the country may be poorly served with quality water; and water scarcity would become a common phenomenon in the midst of plentiful. The Gambia shares water from The River Gambia with Guinea, Senegal, and Guinea Bissau and the interests of each of these countries are addressed through the OMVG. Being located at the outlet to the sea and the last riparian user of the river basin, the sustainable management of the upper catchment is of acute concern to The Gambia.

The question of groundwater resources receives very little attention in the OMVG mandate, which is primarily concerned with surface flows - only passing reference is made to the importance of hydrogeology. The identification and quantification of trans-boundary groundwater resources is very complicated, and aquifers rarely align with geopolitical boundaries. Furthermore, The River Gambia is prone to water pollution by mercury from the gold mining activity in Senegal. In a mercury inventory conducted by the NEA (using the UNEP mercury toolkit), the activity of Artisanal and Small Scale Gold Mining (ASGM) carried out upstream around the Kedugou region in Senegal was identified as one of the potential sources of mercury pollution

downstream in The Gambia[24]. Relying as it does on groundwater and River Gambia for much of its water requirement, The Gambia is particularly sensitive to developments in the upper catchment that may affect subsurface resources. Any WASH Policy must recognizes this reality.

The water resources sector comprised a complex of natural, technical and social systems, and a wide variety of different relationships between organizations and institutions. The Department of Water Resources would be the obvious nodal organization for the coordination and regulation of all activities related to development and use of water resource including abstraction licensing and trans-boundary watercourse management. However, the legal framework which provides the mandate to DWR is limited to carrying out meteorological and hydrological functions, as well as water quality and rural water supply functions.

There is generally a low degree of stakeholder awareness regarding the myriad pieces of sectoral legislation relating to the various aspects of water resource management and utilization in the regions. The legislation relating to the pricing of water, commercial abstraction of water, and the maintenance of water facilities and pipes are poorly coordinated. Furthermore, areas of legislation are either weak or require additional clarification: the rights and entitlements of consumers as regards NAWEC services, inadequate awareness about IWRM protocols, clarity of roles and responsibilities to address the overlaps in the present structures within the various sectors, mechanisms for the coordination of water resources activities, water use and enforcement, excessive, indiscriminate and unregulated abstraction of groundwater within the Greater Banjul Area through borehole drilling, archaic sectoral pieces of legislation, and no clear institutional roles and responsibilities at the regional level. This implies that, there is no known legislation about water and sanitation quality and the systematic regulation, and the enforcement of existing sectoral policies and legislations are too weak. Water abstraction for whatever purpose is unregulated, uncoordinated and undocumented in The Gambia. This current poor state of coordination leads to duplication of efforts, inefficient use of resources, and unwarranted competition over development resources and attention. In addition, Department of Water Resources is constrained by inadequate incentives, unconducive working environment, inadequate funding and number of trained high and middle levels manpower.

1.2.5 The International Development Assistance

The Gambia received annual average funding of USD 154.9 million from Official Development Assistance (ODA)[25] from 2013 to 2018. The proportion of net ODA within the GDP increased drastically between 2016 and 2017 from 9.8 % (USD 91.7 million) to 27.3 % (269.6 million). The top five ODA funding sources (2017–2018) were the International Development Association of the World Bank, EU Institutions, the United Kingdom, the African Development Bank and Kuwait.

High shares of ODA funding in 2018 were disbursed for the health sector (about 44 % of total ODA) followed by humanitarian aid (33 %), social infrastructure and services (9 %) and education (4 %) sectors. Furthermore, The Gambia is benefiting from generous contributions from the Green Climate Fund and the UN Peace-building Fund to support sustainable development initiatives to protect coastal lands, to adapt agriculture to climate change, and to prevent and mitigate climate change–induced conflicts.

[24] See Annex 1 for details

[25] OECD DAC QWIDS, Total ODA Disbursements[25] PEOD6, EDIS website at http://edis.ifas.ufl.edu., UF/IFAS Extension; November 1992. Apr

1.2.6 Water, Sanitation and Hygiene WASH in The Gambia

There has been a great deal of investment particularly in the water sector, and previous records estimated access to water source at 85.8% in 2010 (MICS4, 2010), 89.8% in 2013 (GDHS, 2013), and 90.4% in 2018 (MICS6, 2018). This showed that the country was lagging behind the universal coverage on safe water as per that year, and 9.6% of the populations were impacted by safe water scarcity (or obtaining drinking water from non-improved sources). However, sector stakeholders cited that SDG 6 [Ensure availability and sustainable management of water and sanitation for all] is still far-reaching. There are still significant proportion of the populations living in urban slums and remote rural areas without access to improved drinking water sources (piped water, public taps, standpipes, tube wells, boreholes, protected dug wells, and bottled water) – those are the poorest, most isolated and most marginalized.

Access to safe water is still critical for some households both in urban and rural settings, schools, public health centres, markets and mass transit points. With regards to water safety and quality, it is important to recognize that access to improved water sources does not necessarily provide safe drinking water. Although there is progress in access to water, polluted water sources in remote communities and urban slums, and contamination of water from collection to consumption are key challenges in the WASH sector.

Access to improved sanitation facilities in The Gambia was reported at 37% (46% in urban and 24% in rural areas) by GboS in 2014, and 47.1% in 2018 (MICS 2018); which is still lower than the sub-Saharan average of 53% (Armah et al., 2018). Major health priorities in The Gambia are human waste management, personal hygiene and maintaining safe-water-chain to prevent diarrhoea or other faecal-oral transmitted diseases among the local populations. Also, poor food associated with poor hygiene behaviours are common challenges to human health in the country-side.

There are evidences of poor hygiene practices (for example, poor personal cleanliness, poor food handling and storage, inadequate hand washing with soap and use of unsafe water) in urban slums and rural communities[26]. The 2013 integrated household survey revealed that dehydration caused by diarrhoea was a major cause of morbidity among children (17%), and the survey further reported child deaths due to dehydration from diarrhoea caused by lack of access to safe drinking water, sanitary facilities and poor hygiene practices.

[26] KII during the inception phase

2. METHODOLOGY

2.1. Objectives and Scope of the Assessment

The key objective of Annual Sector Performance Review (ASPR) is to develop a national baseline report of the WASH sector as of 2020 and 2021 with combination of reviews and assessment of social, political, environmental, regulatory, and organizational mechanisms to prepare a report that gives details of a baseline and the WASH sector performance for 2020 & 2021.

2.2. The Scope of the Performance Review

This performance review assessed the progress and performance of the WASH sector for the year 2020 & 2021 and defines the way forward for efficiency, effectiveness and sustainable impact. It covered the following three key parameters of the water sector for assessment:

(i) Water supply and sanitation in large systems: Water pumping stations, intakes, storage, conveyance and distribution systems, treatment and desalination plants; sewerage; urban sanitation services including domestic and industrial wastewater treatment plants.

(ii) Basic drinking water supply. basic sanitation and hygiene: Water supply and sanitation through low-cost technologies such as hand-pumps, spring catchment, gravity-fed systems, rainwater collection, storage tanks, small distribution systems; latrines, small-bore sewers, on-site disposal (septic tanks). The review further assessed personal and child hygiene, as well as cover hygiene practices and behavioural change processes at household level.

(iii) WASH sector governance and financing: Water and sanitation sector policy, planning and programmes; WASH legislation and management; institution capacity building and advice; and WASH supply assessments and studies.

The conduct of the performance review was guided by four key evaluation purposes: a) determine whether the sector is meeting the expected targets and outcomes (access and uptake) as per the national development framework and SDG 6; b) determine why these targets were met or not met; c) provide suggestions on programmatic changes that might be necessary; and d) identify best practices and share learning. The performance review covered the following areas:

2.2.1 Water and Sanitation Mapping and Uptake of WASH Services

The performance review assessed sector performance for the year 2020 & 2021 – in the provision of water supply and sanitation infrastructure by providing a comprehensive list of actors (both public and private) in the water and sanitation sector. The list captured useful information such as, year of incorporation, number of facilities installed per year and functionality of the installed facility & usage. The review detailed out areas of interventions by actor, by village, district and region; as well as mapping of WASH facilities in schools, health centres and other public places including *"lumou"* (open markets) per location, district and region and also state the conditions of these facilities with recommendations on the standards and technical guidelines.

2.2.2 Capacity Assessment for Sustainable WASH Services Delivery

The review assessed the institutional capacities of WASH implementing agencies/actors for Sustainable WASH Services Delivery, and further detail out donors and other funding sources for WASH programming looking into their political influences and institutional arrangements. The Evaluation Team (ET) further recommended policy guidelines for all levels of sustainability: Community management and sustainability of services provided. The ET also assessed how the sector is adapting to the changing environment and climate resources, as well as grappling with the cross-cutting human resources and logistical capacity building, including empowering local communities to become active partners

2.2.3 Water Resources Management Linked to Livelihoods

The study assessed the extent to which Integrated Water Resources Management (IWRM) approach is institutionalised in the WASH sector, and linked to livelihoods. The study provided an overview analysis of the types of facilities utilized by sector actors, their functionality and durability by village, district and region. The ET further reviewed available sector data in terms of technology used in providing access to water, sanitation and hygiene, and provide an up-to-date information on the current situation; as well as assess the level of effectiveness of advocacy/public awareness campaigns, and make recommendations.

2.2.4 WASH Sector Governance and Financing

The ET assessed the effectiveness of WASH sector governance detailing out modalities of resource mobilisation for sector financing mechanisms over the last five years. The evaluation provided gender disaggregated data in the WASH sector: state the current role of men, women and youth in WASH activities and given recommendation. The ET reviewed the existing data available for planning and proposed a detailed sector investment plan. The review identified the current Waste Management approach: solid and liquid waste management especially in major urban centres with appropriate guidelines for improvement; and assess the status of Emergency of WASH condition in 2020 and 2021; and provided guidelines for disaster preparedness and emergency WASH response for The Gambia. We have planned to achieve the scope of work through the execution of five key tasks arranged in the logical schedule manner as indicated in Figure 6: Scope of Work

Figure 6: Scope of Work

Figure 7Figure 8.

The approach to execute this assignment is solution oriented and composed of the ET's Technical and Professional Approach (Figure 9: Technical Approach). The Key premises of the ET's Technical Approach are; (a) Participatory Approach of Annual Sector Performance Review; (b) Use of Mix Method for Annual Sector Performance Review (composed of secondary and primary data), (c) Use of Modern Statistical Tools, (d) Leveraging on the ET's experience of working for review of multi-sectorial projects in the Gambia and other African Countries.

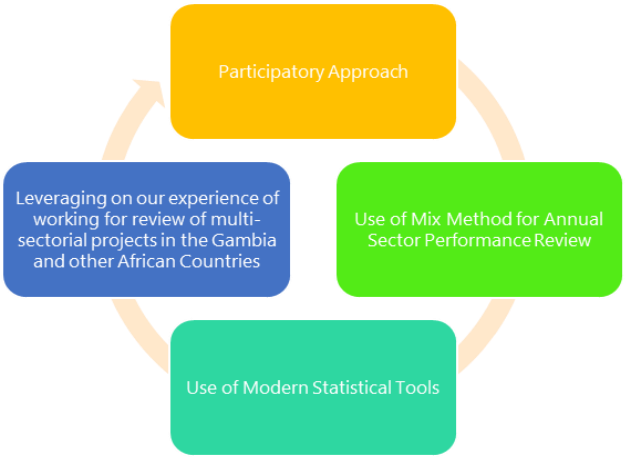


Figure 9: Technical Approach

Participatory Approach - In undertaking this assignment, the ET adopted a participatory approach involving consultations and constructive engagement with all key stakeholders at all levels (policy level to practice). The rationale of adopting the participatory approach will be to allow for relevant sharing and gaining knowledge on various technical aspects.

- **Use of Mix Method for Annual Sector Performance Review:** The mixed-methods approach for ASPR will ensure that the methods are complementary and mutually reinforcing.
- **Use of Modern Statistical Tools:** Use of SPSS, SAS, R Statistical Computing and Advanced MS Excel will enable the ET easily carry out data analysis and produce the desired results.
- **Leveraging on experiences of working for review of multi-sectorial projects in the Gambia and other African Countries -** The Consultants will leverage on experiences of working for multi-sectorial projects, specifically the WASH sector to conduct ASPR.

2.3. Data Collection Methods and Tools

This performance review used a combination of approaches (including participatory, gender-sensitive, and a mixed-methods approach) to capture both quantitative and qualitative information - complementary methods that allowed for obtaining the most reliable findings and conclusions. The application of these methods enabled the ET to respond to each of the evaluation question. The used methods are: 1) literature review of secondary data (qualitative and quantitative); 2) participatory data collection; 3) stakeholder consultations; and 4) household surveys.

2.3.1 Household Surveys[27]

Eight hundred (800) household surveys were carried out in 80 communities; and an interview method employed using structured survey questionnaire. The instruments are first developed in English and enumerators are trained to interpret the questions in local languages. Open Data Kit (ODK) has been used to collect household survey questionnaire data.

[27] OECD DAC QWIDS, Total ODA Disbursements PEOD6, EDIS website at http://edis.ifas.ufl.edu., UF/IFAS Extension; November 1992. April 2009; and June 2013.

a. Sampling procedures

The analytical foundation of the baseline survey was used as randomized sample surveys in the 6 rural regions, the objective of which is to collect information about representative households in randomly selected sample communities. A multi-stage random sampling is applied in this baseline survey, using randomized tables in selecting 80 sample communities (proportionate to the size of individual regions) across the rural regions. The second stage sampling procedure applied at village level in selecting 10 households per community (see table below).

Table 1: Number of Randomly selected communities and households

Region	No. of Districts	Total No of H/H	No. of selected Communities	No. of selected HH (Base: 10 H/H per Community)
WCR	9	87,864	18	180
LLR	6	8,919	12	120
NBR	7	22,407	14	140
CRR (N)	6	9,321	12	120
CRR (S)	5	11,238	10	100
URR	7	15,975	14	140
Total		**155,724**	**80**	**800**

(Source of Statistics: GBoS, 2013, The Gambia 2013 Population and Housing Census Pre-Results)

b. Sample size[28]

The sample size for this baseline survey was determined using Yamane (1967) formula as follow: $n = \frac{N}{1+N(e)^2}$

Where n is the sample size, N is total population in the five regions, e is the level of precision (0.05).

$$n = \frac{155{,}724}{1 + 155724(0.05)^2} \approx 400$$

Based on the proposed scientific formula, the sample size for the household survey was calculated. However, applying the law of central limit theorem, the survey team decided to adjust the sample size by 50%, thus increasing the size to 800 households.

Calculations were made using 95 % level of confidence and +/- 5 level of precision. This adjustment was made to have a larger population coverage in the sampling methodology; as is typical for surveys using this type of methodology.

2.3.2 Participatory data collection

This represents the most important primary data collection method that was carried out during the data collection phase, allowing the collection of qualitative data. Focus Group Discussion (FGDs) using semi-structured interview techniques conducted with cross-sections (women, men and youth) of randomly selected 5 communities per rural region, 3 communities in Kanifing Municipality and 2 in Banjul to generate relevant qualitative data to detail out the baseline on the performance of the WASH sector. The ET assessed access to basic drinking water supply and basic sanitation facilities as well as people's uptake of WASH services at rural level. The ET further assessed access to large systems of water supply and sanitation services in the two Municipalities. Furthermore, semi-structured interviews are conducted with 2 key informant per community to triangulate quality data collected from FDGs. An illustrative interview guide (with research questions) provided to facilitate the process.

[28] PEOD6, EDIS website at http://edis.ifas.ufl.edu., UF/IFAS Extension; November 1992. April 2009; and June 2013.

2.3.3 Data Processing and Analysis

The main thrust of data analysis is to assess comparatively the utility of common WASH measurable indicators (both quantitative and qualitative indicators). For each indicator, this involved assessing the levels of achievements and how well the indicators aligned to the OECD/DAC assessment criteria. The team used multiple units of analysis, depending on the indicator in question – to build up a composite picture of overall baseline information for the WASH sector in each region. Quality assurance measures will be taken at all steps, from selection of the enumerators until data cleaning and analysis.

2.3.4 Validation workshop

The ET will convene a stakeholders' validation workshop to present preliminary report of the WASH performance review to representatives of partner organisations, and other stakeholders from the five rural regions and civil society organisations (CSOs) for validation purposes. Additional data will be gathered from workshop participants on their views of present WASH situations and the factors that account for gaps in services provision.

3. WASH STATUS AS AT 2020/2021

3.1. WASH Governance

The Government of The Gambia is committed to sustainable human development and there are enormous supports from international development partners towards its efforts. The importance of adequate access to the WASH sector as a driver for social and economic development, poverty reduction and public health is fully acknowledged in the country's flagship policy document; National Development Plan. However, the government is unable to meet the increasing demands for social services due to capacity and resource constraints. Social services are often under-budgeted, and WASH governance in The Gambia is fragmented – roles and responsibilities that are shared among several ministries are not clearly defined; and there is virtually no integration of WASH planning and budgeting processes of the recurrent and development budgets.

The Gambia adopted the 2030 Agenda and Sustainable Development Goals (SDGs) in September 2015, and committed itself to working towards Targets 1, 2, 4, and 5 of SDG 6.[29] The SDGs, in combination with sector-specific strategic plans, constituted a framework for the National Development Plan (2018–2021)[30], which is the overarching plan for the country. The government of The Gambia, with support from United Nation Development Programme (UNDP), presented its first SDG report in July 2020 covering the period 2016 – 2019 as its Voluntary National Review (VNR).

3.1.1 Policy, Legal and Strategic Framework (including Policy Shifts and Enforcements)

Table 2: Key sector policies (among others) of relevance to this review are the following

No.	Act/Policy/plan	Dates	Description
1	National Water Resources Act (Water Act)[31],	1979	Legislative framework making *management and rational utilization of water resources.*
2	Local Government	2002	A framework to improve service delivery, and a platform for building capacities of local councils
3	National Water Resources Policy	2006	Planning and management framework for providing secure water resources.
4	Protocol for Community ODF Verification and Certification	2012	Providing non-negotiable standards/criteria that must exist within a community for it to be certified ODF
5	National Water Resources Assessment and Management Strategy	2015	Promoting integrated water resources management (IWRM), & sound water resource devt & utilisation.
6	The Gambia National Health Sector Strategic plan	2014 -2020	Promote and protect the health of the population through equitable provision of quality health care
7	The Gambia National Strategy for Sanitation and Hygiene	2020 -2022	Promoting integrated approach to sanitation and water resources management.
8	Revised National Policy for Sanitation and Hygiene	2020	Aligned to SDG 6 - provision of universal access to safely managed drinking water sanitation and hygiene services
9	The Gambia National Strategy for Urban Sanitation	2020	Accelerate progress in achieving SDG Targets for Sanitation and Hygiene, and reduce by 2/3 incidence of related diseases among the population

[29] Target 1 refers to ending hunger and allowing access for all to safe, nutritious and sufficient food all year around. Target 2 refers to ending all forms of malnutrition. Target 3 refers to doubling the agricultural productivity and income of small-scale producers. Tarte 4 refers to ensuring sustainable food production systems and implement resilient agriculture practices.

[30] The Gambia, National Development Plan. Available at http://ndp.gm/. Last accessed 17.02.2020.

[31] References in this Policy to Water Bill, refer to the revised bill

The National Development Plan subscribed to people's rights to water and sanitation, and this was articulate in the National Water Resources Act[32] and the subsequent Water Resources Policy (2006), which provided necessary legislative framework and made provisions for the management and rational utilization of water resources. The framework is the blue print for providing drinking water; but the integrated water resources management (IWRM) protocols were not adequately mainstreamed, and climate change mitigation and adaptation measures were not well-defined with concrete strategic actions in the instruments. The National Water Resources Assessment and Management Strategy (March 2015), was further designed to promote IWRM, and provide a platform for informed and balanced decision-making on water resource development and utilisation.

Despite the efforts to improve drinking water supply in The Gambia, the sector is yet to operationalize and fully implement measures to support and strengthen the national WASH systems. GLAAS findings highlight gaps and vulnerabilities in the WASH systems, and the need to further strengthen the systems of oversight and support to ensure sustainable and effective WASH service delivery in the country. However, the national policy and strategic plan for drinking water are under development since 2018/19[33]

Box 1: Sanitation and Hygiene Policy

The review found that existing sanitation and hygiene policies/plans outlined key strategies focusing on improving public health by ensuring accessible sanitation facilities for all categories of the populations in rural, urban and peri-urban communities, while underlining clean environment by proper management of wastewater

The Revised National Policy for Sanitation and Hygiene (2020), The Gambia National Strategy for Sanitation and Hygiene (2020 – 2022), and The Gambia National Strategy for Urban Sanitation (2020) were designed to respond to the new and emergent trends and challenges in the sanitation and hygiene sub-sector. The Revised National Policy for Sanitation and Hygiene (2020), The Gambia National Strategy for Sanitation and Hygiene (2020 – 2022) and The Gambia National Strategy for Urban Sanitation (2020) were designed to respond to the new and emergent trends and challenges in the sanitation and hygiene sub-sector. The aims is 100% (of the population) access to improved sanitation facilities, achieved and maintained open defecation free (ODF) status of the country, and to work progressively towards total sanitation, with at least 20% of wastewater treated and properly discharged. According to UN GLAAS 2018/19, both the Sanitation and Hygiene policy, and the strategy plan for sanitation and hygiene were approved in 2019.

These policy and strategic plans were also meant to respond to the challenges identified as part of the results of Multiple Indicator Cluster Survey (2018), Water, Sanitation and Hygiene (WASH) Bottleneck Analysis (2016) and the Urban Community-Led Total Sanitation (U-CLTS) Assessment Report (2019) as well as the goals and objectives of the country's SDG-aligned National Development Plan for sanitation and hygiene amongst others. In these policy and strategy documents, the government further committed itself to reaching very ambitious targets in sanitation and hygiene, among which are to increase the proportion of the population with access to improved sanitation facilities from 64.9% to 75% as well as increase the proportions of households with a place for hand washing with soap and water from 30.3% to 60% (urban) and 26% to 50% (rural).

[32] References in this Policy to Water Bill, refer to the revised bill

[33] UN, Glaas, 2018/19

In a bid to decentralise WASH programming to Regional Administrations, the Local Government Act (2002), provided a framework to improve service delivery to the poor; and provide an opportunity for building the capacities of local councils and communities so that they can play a leading role in supporting government efforts in poverty alleviation and in the financing and managing of local development including the WASH sector.

The legal frameworks addressing the growing challenges of WASH are the National Environmental Management Act (1987), the Public Health Act and Regulations of 1990 (which set health standards and provided a supervisory framework for sanitation), and National Water Resources Act in tandem with the respective policies on WASH programming in The Gambia. The water supply and sanitation sector were both evolving gradually over the last two decades in response to the rising demands, and challenges of maintaining sector related infrastructure due to the changing climate. Important achievements were the formulation and adoption of the National Water Resources Policy in 2006 (which was based on an integrated approach to water resources management), as well as the Sanitation and Hygiene Policies providing the legislation for WASH programming in the country. However, these regulatory frameworks are too weak and the performance criteria of the sector are poorly monitored. Overall, the assessment found that plans and policies are rarely supported by the necessary financial and human resources, which hinders their implementation and intended outcomes for WASH service delivery.

There are policy statements aiming at reforms and regulations of water sector standards and tariffs, water quality testing; as well as improving local sanitation and hygiene practices, but checks and balances in the enforcement of such policies are all ineffective. The Gambia's challenge is to implement the reforms by developing strategies and investment plans, and undertaking the necessary institutional restructuring to further clarify roles and responsibilities, whilst at the same time significantly scaling up resources and systems for better delivery of WASH services. The rate of progress on rural sanitation coverage is slow and at current rates of progress only half of the population will have access to safe sanitation. For the water supply subsector, significant progress has been made but this needs to be sustained to ensure sector goals and targets are met. Finalisation of the water policy and enforcement of the existing sanitation policies and plans supported by adequate human and financial resources would be critical for WASH service delivery in The Gambia.

3.1.2 Key Players and WASH Coordination

i. Key Players

Government units are key policy makers, and are designated to be primary moderators in planning, monitoring and evaluation, and coordination of stakeholders. Donors, NGOs and other CSOs fill gaps in providing resources as well as implementing plans, while communities are involved in the implementation and management of WASH activities to ensure sustainability. A range of large, medium and small-scale private sector operators are also engaged in the sector. The participation of several partners in WASH landscape calls for strong and effective coordination mechanisms from the mandated government unit.

This review found such coordination mechanisms wobbly in The Gambia due to the fragmentation and compartmentalisation of the sector; and there appears to be some variation in approach and programming between the different players. For example, based on information from respondents and observation, while Department of Water Resources (DWR) and some NGOs (e.g., The Gambia Red Cross Society) solicits for active involvement of communities by establishing and training village level water and sanitation committees

(WASH Committees), others (e.g., the private sector) are only concerned with the provision of the infrastructure.
Also, the sanitation-organising unit of the sector appears to be more active in engaging and guiding stakeholders compared with the DWR, who is not very active in sector coordination. There is also a technical coordination platform, the National Water and Sanitation Working Group, which is expected bring together stakeholders regularly to share plans, information and reports, but this group is not meeting regularly.

Key WASH players in The Gambia include government departments, donor/NGO partners, multilateral organisations and local communities. The following are some of the key players in the country:

- The Ministry of Fisheries, Water Resources and National Assembly Matters
- The Ministry of Health
- The Ministry of Environment, Climate Change and Natural Resources
- The Ministry of Lands and Local Government
- The Ministry of Basic and Secondary Education
- Department of Water Resources
- Department of Community Development
- Local Government Area Councils (and the Municipal Councils).
- NAWEC (and other companies engaged in supplying water and electricity)
- NGOS, including Gambian Red Cross Society, Japan International Cooperation Agency, and Saudi Aid
- Multilateral agencies, including UNICEF
- Private sector (including the drilling companies)
- Community-based organisations (Village Development Committees, Water and Sanitation Committees, etc)

ii. Sector Coordination

The organisation of WASH in The Gambia is complex. The Department of Water Resources situated in the Ministry of Fisheries and Water Resources is the government unit responsible for rural water supplies and sanitation, while National Water and Electricity Company (NAWEC) is responsible for urban water supply (mainly, Greater Banjul Area – GBA). However, sanitation and hygiene fall under the Department of Water Resources and Ministry of Health. The former is responsible mainly for infrastructural development or 'hardware', while the latter focuses on 'software' development, including education and communication about behavioural changes, in order to develop better understanding of hygiene and improve sanitary conditions. Such a fragmented organisational approach – while useful for allowing specialisation for different WASH components – may result in a lack of integration and synergy, and would require better coordination to be more effective. It also requires that all departments managing different aspects of WASH to work closely (and together) in planning, budgeting and execution.

Although the requisite structures exist for different roles and responsibilities of stakeholders in WASH governance, this assessment identified diverse institutional challenges at national, decentralized and community levels. They relate to issues of inter-sectoral coordination (WASH sector outcomes require inputs from diverse sectors and Ministries), as well as upgrading of mandate, functions and capacities (in technology, quality and standards) of key technical institutions. It will further require professionalization of internal management systems of related sectors (for Integrated Water Resource Management - IWRM); and building technical capacities of key technical departments and other WASH actors. The effective coordination of a multi-actor and sector platform will be required for improved WASH sector performance.

The existing policies call for institutional reforms (or at least restructuring), and enforcement of other instruments (e.g. the sanitation and hygiene strategy) to strengthen the sector, which is still fragmented among different agencies, with little coordination. It is expected that the reforms will create the needed enabling environment for improved service delivery both in terms of quantity and quality. The delay in policy enforcement and other reforms continues to hamper the sector's performance. Government financial allocation to WASH is still low with the bulk of investment funds coming from donors.

The fragmentation of responsibilities for WASH programming involving citizens and CSOs active in water supply culminating to proliferation of borehole drilling around the countryside, private-sector and municipal councils' participation in sanitation and solid waste management and the emerging sector-wide approach (SWAP) are all calling for revisions - of institutional responsibilities, coordination mechanisms, funding and resource mobilisation arrangements. There is a broad consensus among key stakeholders on the need for the Department of Water Resources to engage on a stronger coordination role. Effective sector coordination and harmonization is essential for tracking sector progress and ensuring targets are met. At the moment, WASH sector activities are undertaken by a wide range of players (see major players) some of whom are delivering poor quality services.

With the different actors and on-going initiatives and projects, the risk of an uncoordinated approach is evident. This risk can be primarily addressed through serious commitments to coordination through different platforms/ meetings at all levels. This review found the following platforms for coordination meetings:

a) An Inter-Ministerial Committee (comprising Ministry of Fisheries and Water Resources, Ministry of Health, Ministry of Environment Climate Change and Natural Resources and Ministry of Local Government) has been established for high level WASH coordination. There is the recognition that even though this structure has not been formally meeting, it emphasizes the need for close high-level collaboration between key Ministries engaged in WASH service delivery.

b) National Technical Working Group (NTWG) – a Sector Coordination Platform, which should meet quarterly. Membership is drawn from key sector stakeholder institutions chaired by the National Coordinator with more hands-on role in coordinating implementation. The NTWG meetings (though irregular) were initially held every quarter with the purpose of developing and reviewing sector strategies and guidelines as well as monitoring sector programming.
c) Regional Technical Working Group – a decentralised regional level technical group with membership primarily drawn from the WASH agencies and allied institutions in the respective regions. This group provides a problem-solving role to enhance effective and timely service delivery at their level.

In practice, some of these structures particularly the NTWG is still being utilized, and has been continually functioning. The same might be true for the Regional Technical Working Groups. However, even if these structures are functioning, their minutes and reports are only shared at the working group level, and the review teams were unable to access such records. There is obvious delink between regional level technical groups, and it is important to share notes and good practices among peers, as well as facilitate feedback sharing process with the national level technical working group - and visa-versa. There is need to regularise the coordination meetings, and improve upon reports on the outcome of these meetings as well as share the results from these efforts.

Generally, effective and consistent sector coordination still remains a challenge in the WASH sector. In the absence of regular coordination meetings, stakeholders can only be better informed on an 'ad-hoc' basis – particularly when there is a need for Government and Stakeholder feedback on specific deliverables of the sector from various initiatives. Good practice dictates that regular coordination meetings need to take place at national and district levels as well as sustained annual review meetings and sector performance reporting that feeds into the annual planning cycle. The Annual Sector Performance Review provides a forum for presenting the progress and challenges in the WASH sector. It should be a relevant part of the sector coordination, and is important to institutionalize the process as an important step in getting the Government lead in sector coordination.

3.1.3 Planning and Monitoring through the M&E Framework

i. Planning

The Gambia lacks comprehensive source of data for the WASH sector to inform its Management Information System (MIS) for sound decision-making. Major sources of data for WASH planning are the Health Management Information System (HMIS), Gambia Demographic and Health Survey (GDHS), Multiple Indicator Cluster Survey (MICS) and Population and Housing Census, and none of these sources provide comprehensive baseline data to inform WASH planning. HMIS mainly provides epidemiological data, while the MICS and the Census report provide information on only human excreta management, leaving out the other components of WASH such as safe-water, solid waste management, liquid waste management and hazardous and clinical waste management.

The sector lacks a comprehensive development plan for strategic investments. It is, therefore, difficult to establish priority areas for investment and ensure better coordination with all sector development partners. The situation may ultimately be attributed to the absence of adequate, validated, and up-to-date data on coverage.

Donors used different sources of data for coverage figures to make investment decisions in the sector. The need for improving capacity for periodic inventories and functionality studies to update sector performance data cannot be overemphasized. Such an inventory from the water point mapping (commissioned by The Gambia Climate Smart Rural WASH Development Project - CSRWASHDEP in 2021) has been accomplished to provide adequate data for investment planning (table 3)

Table 3: An Inventory of Water Supply Facilities – The Gambia 2020/2021

Stakeholders	Number of facilities per region 2020/2021							No. of Functional Facilities by Region 2020/2021						
	WCR	LRR	NBR	CRRS	CRRN	URR	KMC	WCR	LRR	NBR	CRRS	CRRN	URR	KMC
GoTG	11	8	14	9	16	31	2	10	8	12	1	13	21	2
CSOs	119	43	135	75	73	82	30	114	35	123	72	10	74	27
Private	40	4	22	18	11	19	15	32	2	17	4	6	12	20
Community	19	8	31	9	30	24	4	17	8	28	5	21	20	4
NAWEC	75	2	7	4	0	3	8	75	2	7	4	0	3	8
Total	**264**	**65**	**209**	**115**	**130**	**159**	**59**	**248**	**55**	**187**	**86**	**50**	**130**	**61**

Source: CSRWASH Project (2020/21): Water Point Mapping (Data being processed)

WASH services planning in The Gambia is fund-driven, based on availability of donor grants and loans as there is no government dedicated budget line for WASH sector. Planning is conducted according to the ongoing planning procedures in the respective government ministries and agencies, in the two municipalities

and Regional Local Government Councils as well as implementation plans for the many civil society organisations (CSOs including NGOs) active in WASH.

There are challenges in the coordination and joint planning between players at all levels (Government, Municipal/Regional Councils and other players). There is no national master plan (or WASH Compact Plan) to guide WASH implementation. To a large extent, NGOs and other players are working according to their own plans and not necessarily according to a common national plan. At national level, The Ministry of Fisheries, Water Resources & National Assembly Matters is planning for implementation of projects within its mandate, including the implementation of the AfDB funded Rural Water and Sanitation Project in The Gambia.

ii. Sector Monitoring and Evaluation

According to UN Water (2019), all countries are required to have strong national institutions authorised to set standards for the design, construction and use of wastewater treatment plants and sewers in urban areas[34]; as well as systems in place to carry out regulation and surveillance on WASH services. A key stakeholder in the Ministry of Fisheries, Water Resources & National Assembly Matters alluded that the Department of Water Resources is the regulatory authority, but could not confirm 100% frequency surveillance taking place on drinking-water. Although there is a performance indicator for water quality, there are no indicators for the quality of service and functionality of systems, and no tracking system of key performance indicators for sanitation.

The team found the WASH M&E system in various agencies very much focused around projects and has yet to be developed into an integrated sector-wide system. It has been observed during discussions with staff at various levels that the sector is dealing with issues of performance information. Emphasis is placed on supervision rather than monitoring and evaluation, as the first step in the sequence. One of biggest problems facing the sector, a problem systemic across all players, is lack of indicators of performance beyond the immediate outputs of funding. This lack has severe impact on many aspects of sector functioning, most critically the production of second and third levels of management information.

The Scorecard indicators relating to M&E include the existence of an annual review mechanism for the monitoring of output and consistency of household surveys in monitoring water supply and sanitation outcomes. The team observed that the M&E systems were providing narrative reports on the state of project implementation, reasons for delay and monitor the progress of remedial actions. At no point, is there a systematic collection or processing of data that allows management to see the degree to which the sector activities are translating into immediate outcomes and longer-term impacts. For example, without hygienic monitoring (testing) and treatment of the water-chain (from polluted sources) collection-to-storage, one cannot guarantee safe-water at household level.

The sector has long grappled with the issue of monitoring and evaluation. The Gambia's modest performance is partly due to the absence of a sector review mechanism at the national level for providing analysis, strategic direction, and accountability. Reviews of expenditure against commitments or nationally consolidated output reporting are very rare. Individual projects have their own monitoring arrangements, undertaken by project management units against expected outputs, but there are no performance indicators to monitor sector performance as a whole.

[34] Global Status Report on National Systems to Support Drinking-Water, Sanitation and Hygiene, 2019

The Sector's most serious shortfall is the lack of performance and quality measures, and an overall management information system which incorporates these and addresses intervention, sector policy, strategic performance and impact of its work.
This means that the sector has no means of making its players accountable in terms of developmental concerns and no means of steering their programmes in response to the changing context. It is an urgent priority for the sector to set this system in place. The importance of encouraging players to identify and develop their own indicators, and that of community-based indicators which inform the sector's performance and quality system is so much desired.

The team assessed WASH monitoring reports of some sector agencies, and found that such reports are mainly presenting progress on project implementation to satisfy donor requirements. The reporting systems were found inadequate to show sector performance in response to the changing environment. Some project reports present achievements at input/output levels and none at the outcome/impact levels, which are inadequate, especially for their advocacy and influencing work. There was no system for assessing neither cost-effectiveness nor social cost-benefits of sector programmes. Thus, the relationship between sector programmes and financial reporting frameworks were not measurable.

None of the key players maintain a regularly updated database on water facilities nor does a database on sanitary facilities exists to aid assessing coverage. However, the Climate Smart Rural WASH Development Project is compiling a national inventory of water supply points, which is being analysed. Once completed, it will provide useful baseline data for the rural subsector. NAWEC also maintains a database of all legal household connections and public standpipes in the Greater Banjul Area and provincial growth centres. Efforts to improve existing databases (to include sanitary facilities) through periodic updating is desirable to aid an effective monitoring system that could potentially be scaled up to cover the entire country.

3.1.4 Institutional Capacity

The Gambia has developed sound policy frameworks for the multiple components of WASH to better coordinate programmes and address a wide number of challenges and opportunities of the sector. Until recently, the only legislation guiding the water sector was the National Water Resources Council Act, 1979; which provided a legal framework for the development, utilisation and conservation of Gambia's water resources. The Act also provided for the formulation of a water supply policy and a regulatory process, but this was grossly delayed for two-and-a-half decades, leaving the sector without an overall national policy. In sync with the principles of integrated water resources management, Government prepared and adopted the 2006 National Water Resources Policy, in which it was enshrined that access to water is a human right. The Policy defines the responsibility of the Department of Water Resources (DWR) in managing the resources, which includes licensing, data collection, analysis and dissemination; and provides for WASH coordination at the regional, subnational, and national levels.

However, the response regimes to systematically and accountably implement these policies remain fragmented, incomprehensive and not adequately coordinated and financed. Challenges to policy implementation have led to confusion, duplication and inertia across the sector players (for the different components). Limited policy alignment both vertically and horizontally are issues that require attention. Overlaps, conflicts and inconsistencies among the institutions and their policies tend to curtail cross-sectoral cooperation, collaboration and partnerships. Upgrading these components through the WASH sector lens, and the allocation of sufficient budget and human resources remain an important challenge to systemic

operationalization of WASH in The Gambia. The weak implementation of WASH Policy meant that roles and responsibilities of the different stakeholders and partner agencies are not clearly defined, resulting in overlaps and duplication of efforts.
There are also large numbers of parallel WASH-related investments and programmes between which there is no clearly-defined coordination and collaboration mechanism. This dire situation is exacerbated by the lack of adequate managerial, administrative, technical, monitoring and evaluation capacities resulting in a lot of ad-hoc decisions and programmes.

The WASH sector is still unable to meet increasing demands for sanitation and good hygiene behaviours due to capacity and resource constraints. This assessment found the sector heavily dependent on international aid, and it has been largely compartmentalized among various agencies without a unified strategic approach and direction for addressing the challenges in a holistic and concerted manner. This resulted in poor coordination, uneven response and unnecessary competition for the available meagre resources. The team found many factors influencing the sustainability of WASH in The Gambia, but there are three main interlinked factors that stand out as the shortcomings of the sector;

1. There is a limited capacity in terms of skills, knowledge and resources within communities, local and central government. This means that it is difficult for institutions to keep WASH infrastructure and services working as intended once they have been provided.
2. There is an imbalance between capital investment and recurrent costs. To date, significant amount of international funding received in The Gambia only supports initial capital investment, thus apportioning the recurrent costs to the country. There is no dedicated government budget line for WASH, and the meagre annual allocations (covering the recurrent costs) made through major cost-centres limits quality service provision.
3. The input/out approach to WASH service delivery are target oriented. This means water and sanitation services are handed over to communities on the pretext that they will cope with the poor supply chain of spare parts and inadequate maintenance services to sustain the facilities.

Waste management in the municipalities is constrained by inadequate policy and strategy implementation, and limited resource allocation (subventions) to Municipalities and Local Government Area Councils for refuse collection and disposal. As a result, wastes generated are indiscriminately dumped, or disposed of (in rural towns and growth centres) through open burning and burying. The inadequate municipal housing planning (or physical planning), and poor drainage systems in urban slums culminate to frequent flooding among the local populations. The current landfills are poorly managed and industrial recycling is non-existent. Although WASH players reported that Community-Led Total Sanitation (CLTS) programmes are beginning to register successes in some rural communities, the achievements could be challenged due to community inability to fully deliver on rural sanitation. This calls for institutional reforms of sector players, requiring an urgent need for well-defined institutional frameworks to address the challenges and inconsistencies in the roles and responsibilities among WASH players. This will further require the following:

- Shifting government's focus from being an implementer to policy-maker and facilitator;
- Strengthen the leadership roles of MoFWR and the MoH in the WASH sector delivery;
- Establish a regime for regulating water supply services;
- Establish an entity for water resources management

- Promote active stakeholder participation in the management of planning, construction, ownership, operation and maintenance of community water supply and sanitation schemes.

3.1.5 Local Government and Communities

i. The Local Councils

The Local Government Act 2002, local government finance and audit Act 2004 and their amended versions mandated the regional local government and municipal councils to engage on local development, including WASH programming in their areas of jurisdiction. The core principle of decentralisation is the transfer of power, authority and resources from the government centre to democratically elected Local Councils. The Councils have some regulatory mandate for WASH service delivery in their localities. Ongoing support from the MoFWR and the MoH, is improving understanding of the roles and responsibilities at council level with regards to WASH programming. The interactions have also led to some level of activity harmonisation with the Ministry of Local Government and Ministry of Fisheries, Water Resources and National Assembly Matters The Local Councils are seen to play a pivotal role in the planning and coordination of development activities within their localities, and engaging on WASH programming will provide them a considerable impetus to fulfil their mandate as development partners of Department of Water Resources and other WASH-related agencies. Their development process should inherently be participatory, thus emphasizing a demand driven approach.

Council participation in the WASH sector is aimed at ensuring local populations' access to sustainable safe-water sources and sanitation. In the past, Regional Area Councils have had significant achievements in rural water supply (provision of open hand-dug wells).

FGDs cited that such wells and open water bodies (lakes and creeks) were the main sources of rural domestic water supply until in late 1980s, when CSOs (including NGOs and Religious Agencies) started providing hand-dug wells of improved technology (fitted with hand pumps) with community participation. This approach implies that communities shall cover the Operation and Maintenance (O&M) costs, and that Area Councils may need to support major capital maintenance and replacement costs. However, there were always uncertainties regarding at what stage/ context the councils would need to provide external cost-sharing support, and whether councils budget for such lifetime cost contributions in their annual budgeting.

Although, Regional and Municipal Councils are committed to local development initiatives, their capacities to scale-up WASH interventions are modest. The review found their resource flows inadequate, and therefore unable to meet local demands for water and sanitation services. Except Kanifing Municipality (on sanitation), all other Councils do not have any dedicated budget line for WASH. Financial resource requirements for WASH programming are mainly grant-driven. While some materials, equipment and heavy-duty trucks are available for some Councils, e.g., 24 sanitation trucks with the Kanifing Municipal Council (KMC) and 5 trucks in Brikama Area Council (BAC), overall capacity for all Councils is inadequate to effectively meet local sanitation demands.

This assessment further found that Regional and Municipal Councils still lack competent staff to run the water and environmental sanitation offices due to failure to attract and retain these specialised personnel. The effect of this is manifested in their under developed systems and processes. For example, the fundamental intervention systems in all Councils were found 'top-down', and none is engaged on effective community

level participatory programming. Their centralized decision-making process means, no genuine community participation and partnership in local development would be possible.

ii. Communities

The review found community members actively participating in local WASH programming – constructing their own water points (including boreholes) and latrines at both household and for public use. With closer observations, the team noted the need and passion for quality WASH services, but the level of comprehension and capacity in the communities to sustain available WASH facilities are far-fetching. The team further observed that overall interest on sanitation and hygiene are much lower than for drinking water points, attesting to the fact that that is where government assistance would be appreciated due to high cost of establishing and maintaining water points (e.g. borehole) infrastructure. In The Gambia, there is always an implicit assumption that Operation and Maintenance (O&M) costs will be recovered from users, though in practice this is not always achieved. O&M of WASH facilities have ever been challenging to the local populations due to resource constraints, lack of skilful local pump-maintenance artisans and inadequate spare part supply chains.

The sector made tremendous efforts to establish and build capacities of WASH Committees under purview of VDCs to devolve the management of community level water and sanitation facilities. Majority of WASH Committees comprises 10 members with 60% representation of women. Some VDCs cited that committee members were introduced to water source management, keeping up with general sanitation of the communities, spreading hygiene messages and promoting healthy hygiene behaviours. Committee members were trained on the importance of water quality and safety, water point sanitation and garbage pit/landfill management, and hygiene education. Further trainings with WASH Committees included participatory organizational development back-to-back with institutional management.

The role of WASH Committees at village level has been recognized for its importance among key Government stakeholders and CSOs operating in the sector. The committee represents the social capital at village level: a voluntary form of social organization that takes collective decisions in the management of community-based WASH facilities. As there is no serious involvement of service providers in the management and sustenance of village level WASH facilities, the team found that, it is only through building and utilizing this social capital that project communities can successfully manage and sustain their WASH services. While ensuring a broad-based ownership of the WASH facilities, the committees do engage on community-based sanitation monitoring, conduct monthly hygiene education sessions and coordinate village cleaning exercises on last Saturday of every month.

3.1.6 Private sector and NGO participation

The role of private sector in the WASH sector has been gradually increasing. They are the main contractors in the construction of urban and rural water facilities (boreholes and hand-dug wells fitted with hand pumps) as well as supply of spare parts for maintenance of rural facilities including solar powered reticulation systems. The market for borehole drilling is now completely dominated by the private sector. Private sector – Small and Medium Enterprises (SMEs) – are the main actors in the sanitation sub-sector. They provide services in the construction of on-site sanitation facilities (in both rural and urban areas), solid waste collection (with donkey carts), and septic tank emptying services (in urban areas). Large-scale private investment is lacking due to the still-evolving tariff regulation regime. Despite a relatively competitive domestic market in technology and related services, there is limited contracting of private enterprises to provide specialized sector related services, particularly management and operation of Rural Water Supply (RWS).

The participation of non-governmental organisations (NGOs) in the WASH sector has ever been significant in rural water supply. In the recent past, NGOs were the dominant actors in RWS as Local Government Councils scale-down interventions in the subsector. However, there has been lack of proper harmonization of activities between local governments and the NGO actors in the WASH sector. Therefore, there is a need to develop an effective framework that will seek to define their relationship and ensure that local governments benefit from non-state actors (particularly, the NGOs). Moreover, it will be cost-effective for local governments to harmonize their development activities with the non-state actors.

3.1.7 WASH Sector Service Delivery Systems

The review confirmed a combination of service delivery methods in the WASH sector: direct service delivery; capacity building approach; participatory and mobilization approach; organizational and sustainable systems development (establishing and developing WASH committees etc.); and introducing some elements of integrated water resource management system. Gender mainstreaming and behaviour change communication (BCC) methodologies were tried, but the desired results from these approaches will require further work.

Participatory hygiene and sanitation transformation (PHAST) methodology and approaches to impact knowledge, attitude and practice (KAP) were concomitantly used in the sector, but the desired impact of this approach is far-fetching at community level. The PHAST methodology has been proven effective in promoting collective (and individual) awareness and behaviour change elsewhere. The methodology can raise health awareness and promote good hygiene behaviours, improve sanitation and community management of water and sanitation facilities using participatory techniques. KAP approach was introduced by some CSO partners, and it was found practical and result-oriented in transforming individual and collective hygiene and sanitation practices - such as hand washing practices, garbage collection and disposal, etc.

Well construction and pump installation are a technical and skilled operation, and these are mainly contracted out to the private sector (SMEs). In this way, water points were developed, but the technology transfer to the communities (local artisans) is found not quite effective. At the same time, while progress has been made in accessing the local populations to water, capacity building of water committees remains limited, and new challenges around behaviour change in hygiene practices and gender roles in WASH in general are persistent. More is needed on local capacity building by promoting appropriate gender roles in WASH and improving peoples‟ attitude towards healthy hygiene practices. In such engagements, WASH committees can become agents of WASH management while community members become primary stakeholders in their WASH service delivery, actively taking collective actions and responsibilities in promoting improved hygiene behaviours.

There is no official policy on cost sharing for sanitation, though there is an implicit assumption that communities and households will meet the hardware costs for on-site sanitation. Willingness to pay, and practice of payment for water and sanitation services were found challenging across the country, and particularly in rural areas. 'Willingness to charge' is also a major issue. The review found unwillingness among urban households to contribute payments towards street water taps demanded and managed by ward or town development committees. A Key Informant Interview (KII) with some urban households cited that the process involved collection of funds, and households are often reluctant to pay, with concerns on the transparency and accountability of such payments. Overall, the review found the following three major problems impeding the WASH sector service delivery systems:

- Inadequate public sector coordination and effective regulations for water quality, sanitation health, and environment issues.
- Difficulties in addressing the interdependencies among agencies, jurisdictions and sectors hampering effective public investment programming and sector management.
- Excessive reliance on under-resourced government agencies that have neglected the need for economic pricing, financial accountability, and user participation, and hence have not provided services (water resource management) effectively.

3.1.8 WASH Sector Financing and Funding Mechanisms

Preparing the synthesis of WASH sector financing for this report was extremely challenging, mainly due to the fact that WASH activities within the different ministries and agencies do not all have distinct budget lines. Also, financial data on WASH activities within these ministries and majority of agencies were found difficult to access.

Financing for WASH comes from various sources. In addition to the users' own investments in water and sanitation facilities, the Government provides some funding to the Department of Water Resources and MoH (Public Health – Sanitation Unit) for recurrent and capital costs. The majority of the WASH funding comes from Development Partners that are funding projects, either on-budget within the Government's planning frameworks or off-budget, planned and implemented by the organisations individually. Due to multi-funding mechanism of the sector, it is difficult to get an accurate overview of WASH funding since;

- Government funding for WASH is an integrated part of the funding to various line ministries and not easily identified e.g. in funding for rural water and sanitation, health and school WASH etc.
- Information on Development Partner funding is likewise mostly not separated in the same sub-sectors and often project cover integrated WASH project and therefore not easy to identify e.g. funding for rural water vs sanitation.
- NGO partners with own funding or funding through multinational organisations are often reluctant to reveal budgets and actual expenditures.
- The planning years of Development Partners and NGOs can be different from the Government financial years and therefore the funding and expenditure figures are not comparable for the same timeframes.

The biggest challenge for WASH in The Gambia is that it has always been relegated in planning and budgeting. The sector financing from the Government is negligible – less than 1% of the GDP, and there is no dedicated budget line for WASH programming, and this can be attributed to the fragmented structure of the sector under several government ministries and departments. While there are some indirect government budget allocations in terms of staff time and investment in infrastructure, none of the government stakeholders was able to precisely tell how much of their resources were allocated to WASH-related activities in the current or previous budget years. There is always insufficient funding for WASH programmes. Currently, government is largely paying for staff salaries while donors and NGOs are covering most of the materials and operational expenses. Donors and NGOs fill budget and material gaps (through mainly soft grants, and loans for sector reforms and direct service delivery) for building water infrastructure, and they support sanitation initiatives such as capacity building and school-based initiatives. It is also difficult to track the volume of investments by different stakeholders without undertaking a resource tracking survey.

Budget allocations are made to the relevant government ministries (e.g., Ministries Fisheries, Water Resources & National Assembly Matters, Lands and Local Government, and Ministry of Health) for programming. Such Ministries will reallocate funds from their budgets for WASH-related activities. Fragmentation of WASH financing do pose problems in terms of understanding and tracking resource needs and allocations. According to GLAAS (2018 data), the national WASH expenditure per capita was estimate at US$3.62, and national WASH expenditure as a percentage of GDP was 0.53%. Government's allocations (through the COVID funds) to Ministry of Fisheries, Water Resources & National Assembly Matters in 2020 was GMD11,000,000 (US$203,703.70); and GMD10,270,000[35] (US$190,185.19) in 2021 for the provision of safe and quality drinking water. Donors and NGOs fill budget and material gaps (through mainly soft grants, and loans for sector reforms and direct service delivery) for building water infrastructure; and were also supporting sanitation initiatives such as capacity building and school-based initiatives.

Table 4: Estimated available Funding for WASH programming (for period including 2020/21)[36]

Source	Project Description	Duration	Amount (in USD)
AfDB	Climate Smart Rural Water Supply and Sanitation Project: 144 new solar powered water system & Construction of pit latrines	2018-2023	(UA 27.923 Million) US$35.973 Million[37]
Saudi Fund	Sahelian Programme Phase 4: Rural water supply and sanitation	2017-2020	US$3 Million
JICA	Rural Water Supply Project Phase 4: 20 new solar powered water system	2021 - 2023	US$ 16 Million
Exim Bank of India	**NAWEC:** Asbestos_Replacement and Water systems Expansion in the GBA	2020 – 2021	US$22.5 million
Saudi Govt.	**NAWEC:** OIC Water Supply Project	2020 – 2021	US$22.5 million
GoTG	Total budget allocations to MoFWR&NAM for WASH (plus UNDP support)	2020 - 2021	US$375,370.38
KMC	Kanifing Municipal environmental sanitation programme	2019 - 2021	US$8,100,555.55
Other LGAs	LGA water and sanitation programme	2020 - 2021	US$393,322.17
UNICEF & UNCDF	School & community WASH in response to COVID-19/needs (by DWR & DCD)	2020 - 2021	US$232,230.56
CSOs	CSO (including NGOs) WASH programmes	2020 - 2021	US$409,913.57
Private	Individual citizens sinking private water points in their premises	2020 - 2021	US$106,337.98
Community	Community-based water and sanitation initiatives	2020 - 2021	US$231,662.93
Grand Total	**Total funding available for WASH (during a period including 2020/21)**	**2017 - 2021**	**US$109,821,956**

Sources: MIS on WASH, Dept. Water Resources, CSRWASH Project (Water Point Mapping), KMC, LGAs, NAWEC, and Development partner

It was found difficult to track the volume of investments in the sector by different stakeholders without undertaking a resource tracking survey, see table 4 below. However, estimates of investment requirements suggest that additional funding will be required for capital investment, particularly rehabilitation of existing water points and development of new sanitation facilities.

Table 5: Estimated WASH Sector investments – 2020/2021

Key Player	Water Supply				Sanitation			
	GMD		USD		GMD		USD	
	2020	2021	2020	2021	2020	2021	2020	2021
AfDB	57,395,408	31,320,951.17	1,064,060.22	580,017.60	19,720,364	59,261,151.17	365,598.14	1,098,649.44
GoTG	9,438,889.14	9,756,500	174,988.67	180,876.90	550,000	513,500	10,196.51	9,519.84
KMC	00	00	00	00	145,810,000	145,810,000	2,703,188.73	2,703,188.73
LGAs	8,478,823.20	9,561,225.32	157,189.90	177,256.68	1,525,000	1,650,750	28,272.15	30,603.44
CSOs	8,968,087.59	9,715,430.07	166,260.43	180,115.50	1,657,460.60	1,769,760.10	30,727.85	32,809.79
Private	2,118,219.48	3,617,651.15	39,269.92	67,068.06	00	00	00	00
Community	8,020,198. 36	4,475,700	148,687.40	82,975.53	00	00	00	00
JICA	00	287,662,020	00	5,333,000	00	00	00	00
UN Partners	9,253,603[38]	6, 510,200	171,553.63	120,693.36	5, 550.000	6, 240,250	102,892.10	115,688.73
NAWEC	1,213,650,000	1,213,650,000	22,500,000	22,500,000	00	00	00	00
Total	**1,317,323,229**	**1,576269,678**	**24,422,010**	**29,222,004**	**174,812,825**	**215,245,411**	**3,240,875**	**3,990,460**

Source: MIS on WASH, Dept. Water Resources, CSRWASH Project (Water Point Mapping), LGAs, NAWEC, DCD, and Development partner

[35] Amount including US$5000 of UNDP donation
[36] Central Bank of The Gambia; Exchange Rate: GMD 53.94 / 1 USD, as on July 18, 2022
[37] Source: https://fxtop.com/c/en/XUA; XUA-African Development Bank [ADB Unit of Account]=1.2883 USD-United States [US dollar / $] as on 19 July 2022
[38] UNICEF contributed GMD6,030,250 implemented by DWR; and UNCDF contributed GMD3,223,353 implemented by Dept. of Community Development

3.2. Other Cross-cutting Issues

3.1.9 Gender Dimensions in WASH

The assessment looked at roles and responsibilities of men and women in the WASH sector to determine the workload that each of them carries and implications of these roles and responsibilities on care, productive and reproductive work. It emerged from the study that there is clear division of labour between men and women in the sector which is culturally prescribed. Women spend more time managing the use of domestic water and performing household chores including sanitation, most of which are done manually. Due to the multiplicity of their chores, women are mainly involved in multi-tasking compared to men. Reproductive roles such as cooking, washing, sweeping, fetching water and firewood were regarded as women's roles.

This study found high percentage of women involved in collecting drinking water in rural areas, which is a clear demonstration of The Gambia culture and traditional gender roles. FGDs in rural villages showed that women and girls have the primary responsibility for collecting water for about 90% of households. This creates significant burden, especially when the time taken to collect water is considerable. It may also result in girls missing school. Women and girls shoulder the largest burden in collecting water. The assessment also found the sector making significant strides in encouraging meaningful participation of women on community WASH management committees. This approach is promoting greater leadership of women on community level water and sanitation management, and it has not only improved WASH-related decision-making, but also helped create forums for community discussion on other gender issues such as domestic violence and HIV/AIDS stigma.

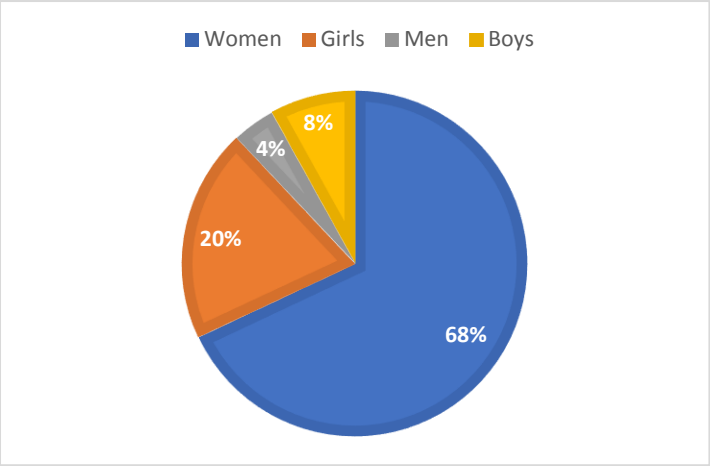


Figure 10: Gender distribution in domestic water collection in CCR (North)

Furthermore, the team found growing gender-sensitive initiatives, e.g., new toilet design standards that emphasizes the needs of girls, including the physical separation of girls' toilet blocks from boys', catering for special needs of girls - washing, changing and sanitary napkin disposal facilities.

3.1.10 The impact of Climate Change on Water Sources

The Gambia is blessed with abundance of water resources (118,000 ha of surface water regimes and two major aquifers of good recharging capacities) presenting huge potentials for universal access to potable water. However, climate change and variability is ushering seven months dry season in The Gambia with rising air temperatures averaging 18 to 33 degrees Celsius; declining trend of average annual rainfalls from 1,200 mm in 1970 to 800 mm in 2020. There are prediction of successive drought years to less than 500 mm rainfall per year by 2100; thus lowering water tables may result to drying-up potable wells. The increasing deforestation in tandem with declining trends of precipitation could affect the carbon cycle; and reduce the quality of drinking water sources through seawater intrusion in fresh groundwater resources in coastal aquifers.

The country's semi-arid climatic condition is characterized by long dry season with prolonged droughts, high humidity and rising temperatures which is subjecting the local populations (and livestock) to considerable risk of water stress[39]. The drying weather conditions are now increasing the frequency of heat-waves, thus reducing the quality and availability of forage; and have increased water scarcity for herders due to drying of lakes and ponds. These conditions made the environment susceptible to desertification, wind erosion and pollution, especially in the eastern part of the country.

i. The Effects of Climate Change on Surface Water

It was cited in almost all FGDs that increasingly erratic rainfall patterns, higher intensity storms, increasing average air temperatures and the rising sea level are leading to increased frequency of weather events impacting on available surface water bodies during the last five years:

a) Focus groups cited that rainfall variability is occasionally accompanied by heavy down pours causing surface run-offs – leading to sedimentation and pollution (with urban waste discharge and chemical residues) in shallow wells of communities in urban slums.
b) Excess runoff eventually causes sedimentation in water sources like open wells, lakes and estuaries, polluting the water supply and limiting water access for humans and ecosystems. It further promotes the rapid growth of algae - resulting to algal blooms clog in waterways with clouds of green, blue-green, red, or brown algae, thus reducing water quality.
c) Declining annual precipitations in addition to the rising air temperature were found reducing soil moisture and lowering natural water tables, which could lead to higher frequency of droughts and increased demand of water.
d) The frequent increase in river flow (flooding) during the rainy season do cause inundation of urban floodplains, gradually changing the water quality and damaging the water collection facilities (e.g. locally dug wells) in Tallinding, Fagi Kunda, Djibo Town, etc.

ii. The Effects of Climate Change on Groundwater

The assessment found that ground water is the main source of the drinking water (piped tap) water, piped boreholes, wells fitted with hand pumps, protected and unprotected wells) in The Gambia, and is used by almost 100% of both urban and rural populations. Majority of Gambians are satisfied with the quality of ground water. However, 9.5 % (urban - 7.6% and rural - 13.1%) local populations have access to unprotected water sources[40], many of which are shallow by depth (less than 6 meters). The study found many of such unprotected wells were abandoned. For shallow ground water the major problem is suspected to be the concentration of nitrates and microbiological contamination, which is most likely caused by infiltration of untreated waste water from pit latrines and poor sewer systems.

Focus group discussions cited the correlation of precipitation and temperature with the quality and quantity of groundwater levels in the rural regions. The poor water quality stems from both gynogenic and anthropogenic impacts with direct connection with the drought. The team's observatory visits found 70% of shallow wells had significantly reduced water level and productivity, while 30% simply dried up. The quality and quantity of water in these wells have not been investigated, but the study assumed that microbiological contamination of these might have increased, as the wells were exposed to environmental influence. In light of climate change, this is a worrying development that would warrant detailed investigations of rainfall and groundwater levels.

[39] NCC, TNC, 2017
[40] MICS, 2018

3.3. Safe Water Supply

According to government records, there has been significant progress on access to safe water sources. At the present rate of increase, there are likelihoods that The Gambia will achieve the SDG targets earlier than envisioned. In 2009, the Joint Monitoring Programme (JMP) recorded that piped water supply constituted more than a half of urban water supply systems; and this is likely to increase to over two-thirds by 2020 based on the past trend, conversely literature showed that access via piped water supply remains limited in rural areas.

The analysis in this study presenting the national coverage targets for drinking-water will be determined by adapting the following descriptions and definitions provided by UN – Water GLAAS[41]; and categorized as a) safely managed drinking-water, b) Basic+ one or more elements of safely managed included, c) basic drinking-water, and d) limited drinking-water services.

Table 6: Defining categories of safe water sources

Category	Target classification criteria	National standards/indicators used to monitor
Safely managed	The target calls for drinking-water from an improved source that is located on premises, and all of the following: water is accessible on premises, water is available when needed and water supply is free from contamination.	Percentage of population with access to improved drinking-water supply includes piped (tap) water inside dwelling/institution; piped (tap) water inside yards; minimum of 25 litres per person per day (24 hours) availability; and free from contamination
Basic+ one or more elements of safe managed included (Basic 1)	The target calls for drinking-water from an improved source, provided collection time is not more than 30 minutes for a round trip, including queuing, and one or two of the following: water is accessible on premises; or water is available when needed; or water supplied is free from contamination.	Percentage of population with access to potable water supplies includes piped boreholes and taps; improved water for other domestic uses; and quality water that is safe to drink with or without treatment. Maximum distance to source: 200 m one way.
Basic 2	The target calls for drinking-water from an improved source, provided collection time is not more than 30 minutes for a round trip, including queuing.	Percentage of population with access to improved drinking-water supply includes wells fitted with hand pumps (within 200 m to 250m).
Limited	The target calls for drinking-water from an improved source for which collection time exceeds 30 minutes (including queuing) for a round trip; and with some contamination	Percentage of population with access to improved drinking-water supply (protected wells or protected spring water) with more than 250m.

3.3.1 Urban Water Supply in Large Systems

The Gambia has a rapidly growing urban population estimated at 3.7% per annum. As a result, The Greater Banjul Area (GBA) experiences major problems with slums and unplanned development. There is a historic lack of investment in expanding, upgrading and sustaining the water supply infrastructure and in particular in controlling non-revenue water and operational efficiencies.

[41]UN-Water Global Analysis and Assessment of Sanitation and Drinking-Water (GLAAS)

Urban water supply is dominated by the NAWEC network which operates under the Companies Act, 2013. Under this Act, any community with more than 5,000 inhabitants may be serviced by NAWEC who are empowered to charge for their supplies. Those in the urban and peri-urban areas that do not have access to the NAWEC network have dug wells (both small and large diameter) in public places or in their compounds. Due to the erratic nature of the NAWEC supply, a lot of people have also supplemented their access with boreholes. Majority of the boreholes are powered by solar panels and pump to an overhead storage tank.

i. NAWEC Large Systems for Water Supply

NAWEC operates large system networks, comprising of several boreholes that tap from the deep aquifer (about 70m average depth). The untreated water, referred to as 'raw water', is conveyed to treatment plants, where they are aerated and lime injected into it to adjust the pH, and chlorine also injected into it to eliminate any pathogens before they are stored in high level tanks. The water is then distributed by gravity. The same principle applies to small towns although at a much smaller scale and the water is not subjected to aeration and chlorination.

NAWEC operates 5 treatment plants and 2 major pumping stations supported by 86 boreholes (**Error! Reference source not found.**), on which the growing urban dwellers (of GBA) estimated at 59.6% of the total population are relying on. Generally, NAWEC's water supply systems do not meet the demand of the growing urban populations. The study found 7 non-functioning boreholes, 8 out-of-use tanks and 4 tanks in Brikama on by-pass in water distribution[42]. The Key Informants (KIs) cited several other tanks on by-pass providing direct water supply to the distribution systems, thus weakening the booster pumps and limiting the capacity of the water supply systems. The KIs further cited that over 35% of the urban populations, particularly those living in the urban slums are without connections to NAWEC water supply; and 70% of the populations are not accessing water for 24 hours of the day without disruptions[43].

ii. Private Borehole Drilling

The rapid urbanisation with proliferation of housing estates in The Gambia overwhelmed the public sector WASH service delivery. This study found water supply and sanitation service delivery undertaken by non-state actors including private enterprises commissioned by the citizens themselves to fulfil their water and sanitation needs. Those who can afford it are engaging private drilling enterprises to fill the gap in urban water supply. The growth of private boreholes, as well as emerging organisations of drillers were found effective in complementing efforts of the public sector.

A Key Informant (during stakeholder consultations) estimated that private drillers have provided over 50 boreholes across the municipalities of West Coast Region and Greater Banjul Area in last 3 years. Despite the important role that they play, these local initiatives were ignored or overlooked as the DWR and its donors are primarily focusing on piped water supplies or new community services.

[42] KI in NAWEC

[43] NAWEC Functionaries

iii. Access to Improved Water Sources in Urban Areas

Although the sector is presenting high access to basic water services for the urban population estimated at 96 % in 2019-20 (GDHS, 2019/20), NAWEC is still unable to meet the demand for urban water supply due to the increasing urbanisation in The Gambia. There are many challenges, including: large discrepancies in access in different locations of Greater Banjul Area and other urban areas, contamination of groundwater through lack of sanitation, high leakage and high percentage of non-revenue water, long periods of downtime and interrupted supply in communities such as Wellingara, Sanchaba Sulay Jobe, etc.; and lack of piped water services in the urban slums of Gjibo Town, Talinding and Fajikunda; and unwillingness to pay and uncoordinated urban planning. Water quality in The Gambia is also of great concern, as 45.3 % of the water sources are contaminated with E. coli, and 73.2 % of the household population had E. coli in household drinking water[44].

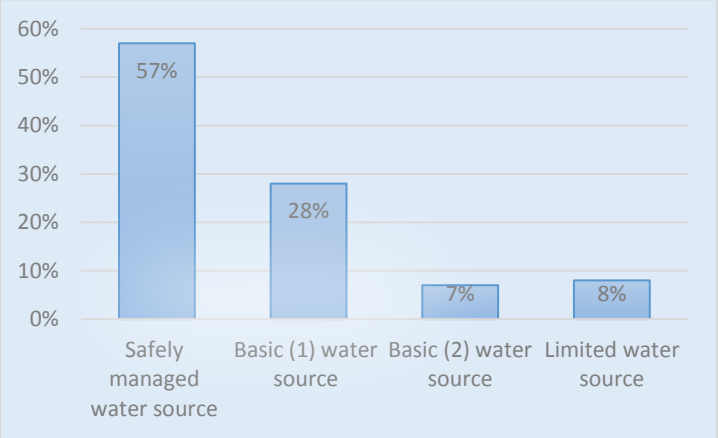


Figure 11: Percentage of urban household (Source of data: MICS, 2018, P366, and UN – GLASS, 2018/19)

A key stakeholder in NAWEC cited that coverage with their large systems network does not reach the urban slums and other new settlements with an estimated 35% of the urban populations due to resource constraints. The review found (figure 10) that only 57% of urban households are accessible to safely managed water sources (where drinking-water supply includes piped (tap) water inside dwelling/institution; piped (tap) water inside yards; minimum of 25 litres per person per day (24 hours) availability; and free from contamination. However, the assessment further found that urban areas are comparatively better served than rural areas. The proportion of the population with access to pipe borne drinking water increased in urban areas, but the gap in access to safe drinking water in the rural areas is still a concern.

3.3.2 Rural Water Supply

Water supply in rural communities is either through wide diameter wells (between 1.0 and 1.5m) and between 20m in the western parts of the country to 60m deep towards the east. They all tap from the shallow aquifer. In the recent past, all wells were covered and fitted with either a hand pump or solar-powered pumps. Those with hand pumps have the water pumped directly into the carrying vessels, while in those fitted with solar-powered pumps, water gets pumped into an overhead storage tank about 6m above ground level. The water then gravitates into either a single tap close to the tank, or to multiple taps, depending on the size of the community.

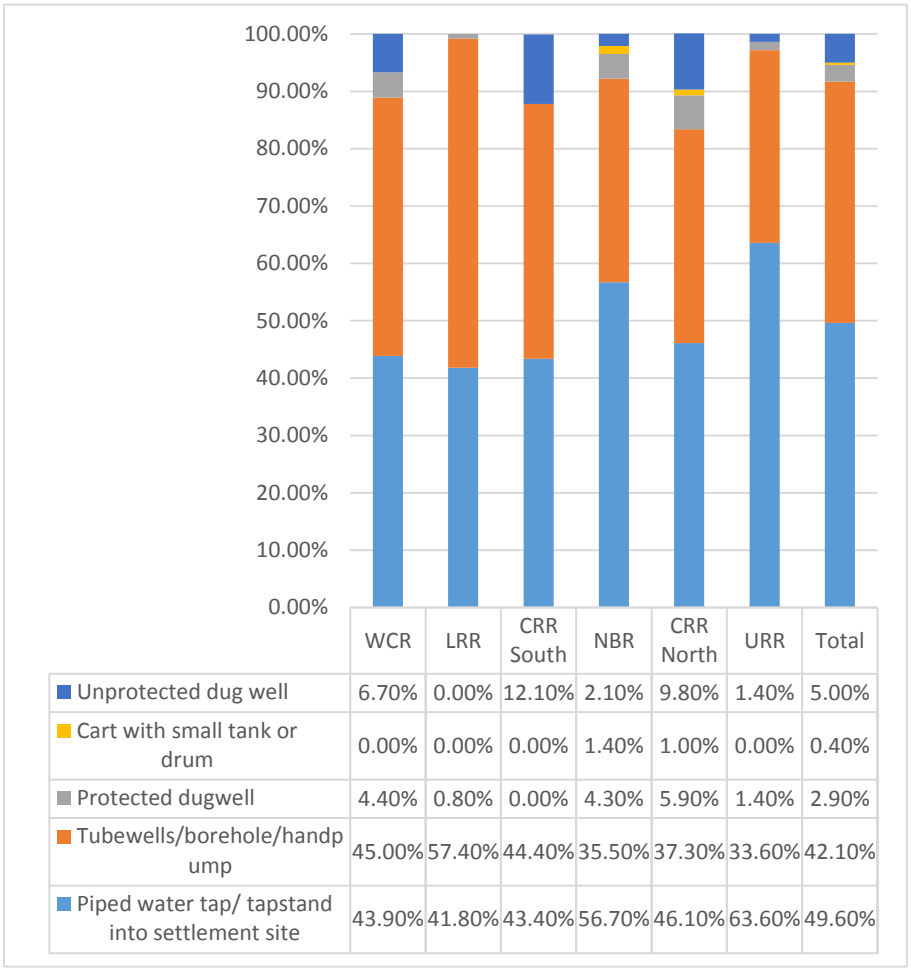
Water supply through low-cost technologies such as hand-pumps is slowly giving way to solar powered, small-bore wells. The solar powered technology was tested in 1985, together with wind energy. The solar technology was found to be more efficient, but the sometimes low rate of solar radiation means that the pumps are not operable for most parts of the day, leading to severe water shortages in these communities.

[44] UNICEF, 2021

Wind power was found far less effective in the Gambia because the wing regime does not support the efficient use of this technology. Water supply through spring catchment, gravity-fed systems and rainwater collection are insignificant. Due to even lower solar radiation rates, water shortage is more acute during the rainy season than in the dry season.

i. Sources of Rural Water Supply

The primary source of drinking water throughout the rural regions are piped water taps or tube wells. A minimum of 80% of households obtain water from these two sources. Most communities visited now have at least one solar-powered tube well either obtained through individual efforts of household members, or through remittances from relatives from abroad. Tube wells donated to communities by agencies are always located in public areas that are easily accessible by all members of the community. In the absence of these two sources, most people in the rural areas rely on unprotected dug wells.



	WCR	LRR	CRR South	NBR	CRR North	URR	Total
Unprotected dug well	6.70%	0.00%	12.10%	2.10%	9.80%	1.40%	5.00%
Cart with small tank or drum	0.00%	0.00%	0.00%	1.40%	1.00%	0.00%	0.40%
Protected dugwell	4.40%	0.80%	0.00%	4.30%	5.90%	1.40%	2.90%
Tubewells/borehole/handpump	45.00%	57.40%	44.40%	35.50%	37.30%	33.60%	42.10%
Piped water tap/ tapstand into settlement site	43.90%	41.80%	43.40%	56.70%	46.10%	63.60%	49.60%

Water through cart with small tanks or drums form a negligible source of supply.

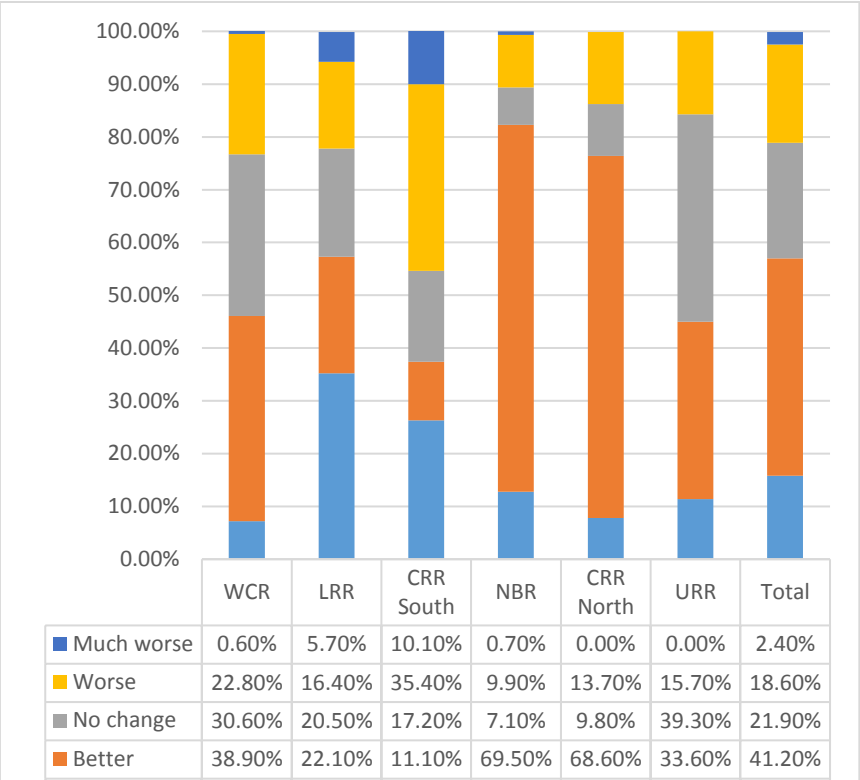
However, this review found that 5% of the rural populations are still relying on unprotected hand dug wells (figure 11), particularly in CRR (North). Many of such shallow open wells dries up during the dry season, whilst others are not used due to the taste of the water therein during the rainy season. Some FGDs further declared that women living in riverine communities are traditionally comfortable of using the open water surface (e.g. River Gambia) for laundry and other domestic purposes as a coping mechanism. Some of these open sources are often polluted as methods of water collection are unhygienic.

It has been proven that major technological challenge in the WASH sector in The Gambia has been the sustainability of hand dug wells fitted with hand-pumps, some of which breakdown before the design lifetime. This review argued that only solar-powered boreholes fitted with distribution pipes and taps may appear resilient to the effects of climate change. However, many such local sources rely on community management, which is associated with high rates of failure and contamination. Climate change will increase

Figure 12: Primary source of drinking water for the household

stresses on community management. Therefore, technologies which appear resilient at technical level may still fail to deliver sustainable drinking water supplies under hash climatic conditions.

The team found no single source of water that is exclusively used for only domestic and hygiene purposes, especially when protected hand pumps are congested. In some communities, the same water points are used for watering domestic animals (e.g. cattle). Here, access does not necessarily mean uptake, especially when safe water points are not adequately meeting the needs of the village populations. During the rainy season, access to water is expected to greatly improve. However, 21% of the population (figure 12) especially those living in the riverine communities reported that their access to water from open shallow wells gets worse during the rainy season, mainly due to pollution and saline water intrusion.



	WCR	LRR	CRR South	NBR	CRR North	URR	Total
Much worse	0.60%	5.70%	10.10%	0.70%	0.00%	0.00%	2.40%
Worse	22.80%	16.40%	35.40%	9.90%	13.70%	15.70%	18.60%
No change	30.60%	20.50%	17.20%	7.10%	9.80%	39.30%	21.90%
Better	38.90%	22.10%	11.10%	69.50%	68.60%	33.60%	41.20%

Figure 13: Household accessing water source compared to rainy season

ii. Technology and Rural Water Point Functionality

The study found that majority of improved water points in The Gambia are boreholes, tube-wells, standpipes and other mechanized water systems supplying potable water to over 65% of the population. In the past, manually-dug wells fitted with hand-pumps, of which 80% are the German Marks (I) & (II), Aquadev and Afridev models. Given the enormous predominance of German Mark pumps in The Gambia, and their life-span of 10 – 15 years; as well as the pump's ability to sustain the local stress provided the sector the opportunity to embrace the model for rural water supply in the medium-term. This further enable the sector to develop the spare-part supply chain and increase the effectiveness of local pump mechanics training. Other available technologies found are the submersible pumps, standpipes, and protected hand-dug wells.

This study carried out functionality assessment of water sources (Table 5), covering 442 water points in 50 sample communities (10 sampled communities in each of the five Rural Regions) generating the following results: The assessment found 57 were non-functioning.

Table 7: Rural Water Point Functionality Assessment (* F – Functioning; NF – Non-functioning)

Region	Number of Communities Visited	Standpipes		Boreholes/ Tube wells		Hand Pumps		Protected dug-well			Unprotected Dug-wells	
		F*	NF*	F	NF	F	NF	F	NF		F	NF
WCR	10	41	7	3	1	12	4	0	0		9	----
LRR	10	35	0	2	2	5	5	2	0		7	1
NBR	10	171	3	13	1	7	4	0	0		22	18
CRR (S)	5	0	0	1	0	5	2	0	0		23	0
CRR (N)	5	4	2	2	1	4	0	0	0		-----	-----
URR	10	1	0	2	1	3	2	1	0		10	3
Total	**50**	**252**	**12**	**23**	**6**	**36**	**17**	**3**	**0**		**71**	**22**

Source: Assessment carried out by Water Motivators of DWR, and Community Development Officers of DCD

This means that 12.9% of these facilities are dysfunctional, majority of which are hand pumps and unprotected dug-wells. Operation and maintenance of WASH facilities (seen as community responsibility), have ever been challenging to them due to resource constraints, lack of skilful local pump-maintenance artisans and inadequate spare part supply chains.

This study is calling for a technological shift, completely from hand dug wells to boreholes, tube-wells and mechanized water systems in the long-term. A major technology challenge in the WASH sector in the country has been the sustainability of hand-dug wells fitted with hand-pumps some of which breakdown before the design lifetime. Many such sources were relying on community management, hence associated with high rates of failure and contamination. Also, climate change stresses are high on them, and technologies which appeared resilient at technical level are still failing to deliver sustainable drinking water supplies. This study suggests that boreholes and tube-wells of commonly used community sources, appeared more resilient to the effects of climate change.

iii. Water Quality, Safety and Consumption

With regard to water safety and quality, it is important to recognize that access to improved water sources does not necessarily provide safe drinking water to households. Access to safe water includes household connections, from collection point (protected hand pumps, tube-wells, boreholes, etc.) to consumption. The team observed that there are still challenges in maintaining the "safe water chain in the target communities. Pollution at improved water sources are found linked to poor sanitation and hygiene behaviours in rural villages. For instance, after getting drinking water from safe sources, storage in a safe manner is fundamental, to avoid re-contamination. The common communal drinking cup on top of the (covered) storage vessel and adults and children in the family dipping this cup into the water, they may touch the water with soiled hands, e.g. from anal cleansing, thus introducing E-coli into water that was originally be rated as sufficiently safe to drink.

The team has not carried-out water quality testing in this evaluation, but a Key Informant at Brikama Area Council cited the presence of E. coli, which is an indicator of widespread faecal contamination. The review found 12.1% of total household population in The Gambia at very high risk of faecal contamination based on number of E. coli detected in source drinking (The Gambia MICS, 2018).

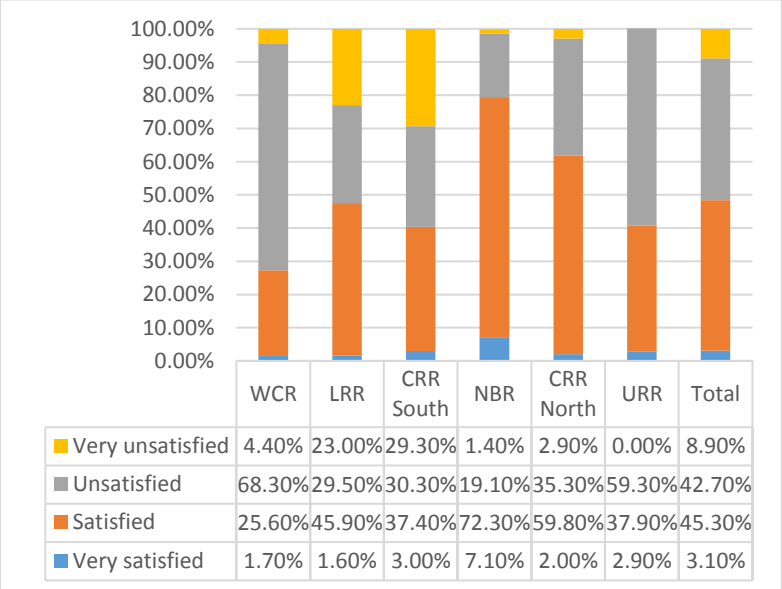
The risk of faecal contamination is shown (in table 8 below) based on the number of Escherichia coli (E. coli) bacteria detected, ranging from low (100 E. coli per 100 mL) to moderate (1-10 E. coli per 100 mL), high (11-100 E. coli per 100 mL) and very high risk (>100 E. coli per 100 mL). Contamination may occur between the source and the household during transport, handling and storage.

Table 8: Percentage of households at risk of faecal contamination based on number of E. coli detected in source of drinking water

Risk level based on number of E. coli per 100 mL				
Area	Low (<1 per 100mL)	Moderate (1-10 per 100 mL)	High (11-100 per 100 mL)	Very high (>100 per 100 mL)
National	54.7	19.6	13.6	12.1
Urban	65.3	13.8	10.9	9.9
Rural	33.7	31.1	18.9	16.4

Source: The Gambia MICS, 2018

The survey also revealed that satisfaction about the source of drinking water is almost equally divided (figure 13). About 48.40% feel satisfied, while 51.60% are unsatisfied. In WCR, where the source is mainly from NAWEC, the dissatisfaction rate is 72.7%. This is due to the erratic supply of the NAWEC supply. The satisfaction rate is highest in NBR, where 79.4% are satisfied with their source of drinking water. The national average of people satisfied with their source of drinking water is 48.4%.

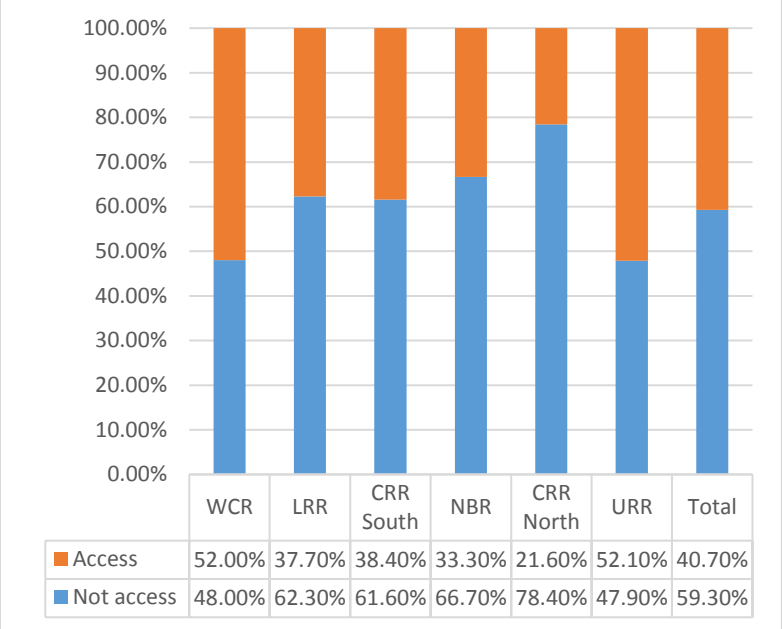


	WCR	LRR	CRR South	NBR	CRR North	URR	Total
Very unsatisfied	4.40%	23.00%	29.30%	1.40%	2.90%	0.00%	8.90%
Unsatisfied	68.30%	29.50%	30.30%	19.10%	35.30%	59.30%	42.70%
Satisfied	25.60%	45.90%	37.40%	72.30%	59.80%	37.90%	45.30%
Very satisfied	1.70%	1.60%	3.00%	7.10%	2.00%	2.90%	3.10%

Figure 15: Proportion of household satisfaction of water sources

The quantity of water, in litres, consumed by each family differs from one community to another. The review carried out a participatory assessment of water consumption in 3 communities and the results showed on average that 21.7% of households each access 20 - 37 litres of safe drinking water per day suggesting 3 – 5 litres per capita daily consumption (based on average family size of 7 members); 40% of households each access 38 – 75 litres per day implying 6 – 11 litres/person/day; and 38.3% of households each access 80 litres - a daily consumption of over 11 litres per family member.

Therefore, access to safe water in these communities is still inadequate, implying that community members are accessing less than SPHERE's minimum standard of 15 litres of water per person's daily use for drinking, cooking and personal hygiene. The quantitative household survey corroborated the above findings in figure 14, in which more than half the household respondents in all the regions lamented the fact that their access to safe drinking water is not adequate. However, about 35.70% of the household respondents cited treating their water before drinking. Households with improved sources accessible on premises, with sufficient quantities of water available when needed, and free from contamination meet the SDG criteria for 'safely managed' drinking water services.



	WCR	LRR	CRR South	NBR	CRR North	URR	Total
Access	52.00%	37.70%	38.40%	33.30%	21.60%	52.10%	40.70%
Not access	48.00%	62.30%	61.60%	66.70%	78.40%	47.90%	59.30%

Figure 16: Proportion of household having access to enough drinking water

iv. Water Collection, Containers and Water Treatment

Collecting water is a major household task in the rural villages regardless of distance and types of water points. Like in most African settings and as cited by literature, women and girls are responsible for fetching water in the 12 communities. This review found these traditional gender roles are not changing. A qualitative data collection method (PRA) in this review (figure 15) affirmed that women fetch 52 % of household water and girls collect 39 %. Boys and men do collect water but only small fractions of the population with 7% and 1.6% respectively.

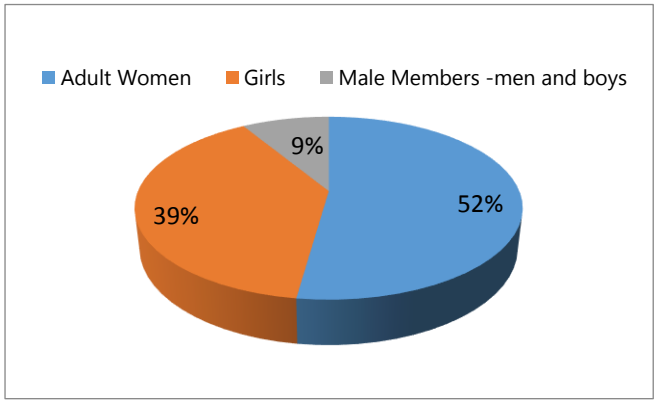
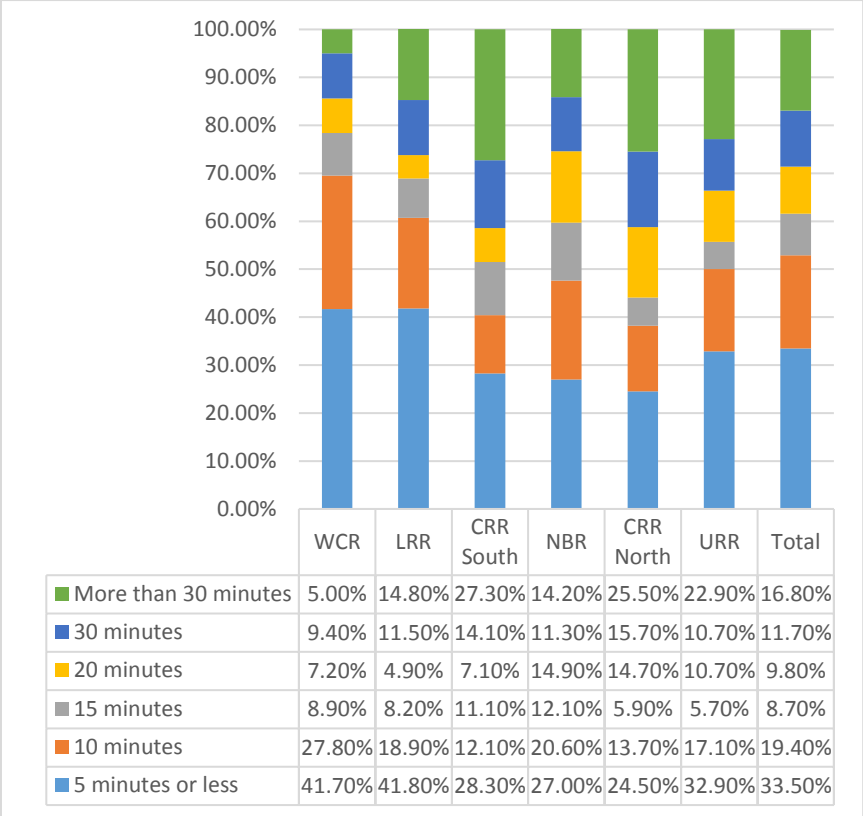


Figure 17: Responsibility for Household Water Collection

The measure of the time it takes to collect water is very important for the definition of access to water. Intrinsically, some water points are located within 500 meters of walking distance. Consequently, 52.9% of household water collectors spend 10 minutes or less on a single trip to collect water, while 27.5% spend 30 minutes or more (figure 16). Household members using improved water sources located on premises or requiring up to and including 30 minutes per trip for water collection meet the SDG criteria for a 'basic' drinking water service. The sources of drinking water in majority of communities are protected hand pump, and therefore perceived as safe for human consumption. The review found that most people in rural regions use buckets and clay pots to fetch and store drinking water respectively. It is still challenging to maintain the "safe water chain" - a series of safe water practices from water point to withdrawing water from storage.



	WCR	LRR	CRR South	NBR	CRR North	URR	Total
More than 30 minutes	5.00%	14.80%	27.30%	14.20%	25.50%	22.90%	16.80%
30 minutes	9.40%	11.50%	14.10%	11.30%	15.70%	10.70%	11.70%
20 minutes	7.20%	4.90%	7.10%	14.90%	14.70%	10.70%	9.80%
15 minutes	8.90%	8.20%	11.10%	12.10%	5.90%	5.70%	8.70%
10 minutes	27.80%	18.90%	12.10%	20.60%	13.70%	17.10%	19.40%
5 minutes or less	41.70%	41.80%	28.30%	27.00%	24.50%	32.90%	33.50%

Figure 18: The time taken for household water collection

There is need to increase understanding of the connectivity in water safety. Once the chain is broken, the domino effect will be towards the end of the chain. Contamination of water during transportation and storage, shared water containers and cooking pots, etc. was found very common among the local populations. This report suggests that a move with simple water quality monitoring/testing can be useful.

Hygienic standards advocated for water management is to scoop drinking water from a storage pot /facility using double cup system, i.e. one cup to fetch and pour into another used for drinking as well as use of a separate cup for visitors. Most recent hygienic practice of water handling at household levels is replacement of open storage pot by a closed system from which water is drawn by pouring through a tap at the bottom.

Although, there are dedicated cups used for drinking in majority of rural households, there still few households that use any mug for scooping drinking water. However, the review found that cleaning and covering water containers are still issues which not every household is practicing. Only 51.7% of the households visited (for observation) have clean water containers. Because of the inconsistency in the practice of cleaning water containers, some households were observed not cleaning water containers (30%) and mixtures of clean and unclean containers (18.3%), water contamination is considered high. While 76% of household were found covering their water containers, the team found 24% not covering their drinking water containers. Many focus groups averred that they do not treat the water used for drinking purposes.

However, water treatment was not found very common in the rural regions. Chlorination is the most commonly known treatment of water in the villages; but some Key Informants cited that, there are small portions of the population are practicing traditional treatment methods such as boiling and cloth filtration.

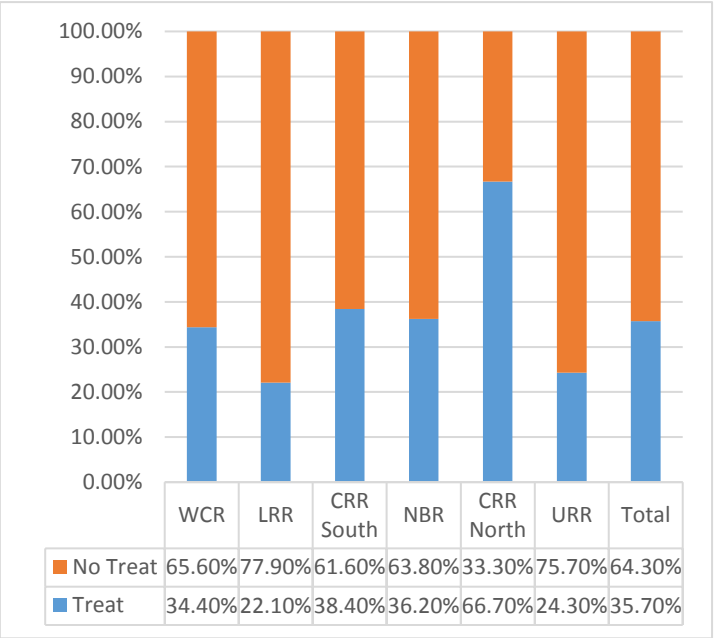


Figure 20: Proportion of Households treating water before drinking

The review found that 35.7% of households are treating water before drinking (figure 17), which reflects their commitment to sustain sound public health practices at local level. Thus, the transformational change in accessing and utilising safe water comes from within the communities. This also gave meaning to the conviction that the poor and marginalized people themselves can be the main actors in their WASH service delivery. Also, there is evidence that the sector enhanced community ownership of the water points and sanitation facilities to ensure their long term sustainability. The sector was also promoting sustainable behaviours in sustainable water management through community level water management committees.

3.4. Sanitation and Hygiene

There were significant efforts to enhance access to improved basic sanitation with a number of interventions undertaken over the years, including: a) construction of a liquid waste (human excreta) treatment plant at Kotu Oxidization Pond[45]; b) development of a National Policy and Strategic Plan on Sanitation and Hygiene (2011 – 2016); c) provision in the current United Nations Development Assistance Framework (UNDAF) for The Gambia to develop Urban Waste Management Plans; and d) establishment of a national Water and Sanitation Committee (WATSAN) housed at the Department of Water Resources (and supported by The African Development Bank - AfDB) to expand improved sanitation and hygiene facilities throughout the country, particularly in the rural communities.

UNICEF supported on the establishment of a WASH Unit at the Ministry of Health; and Rural Water Supply at the Department Water Resources to work closely with the WATSAN Committees. The sector was also making efforts to enhanced private sector and community participation in sanitation and waste management through the fortnightly national cleansing exercise (dubbed "Sett-Setal") designed to improve environmental sanitation and public health in the countryside.

While significant efforts have been made in the provision of safe drinking water, there still remains much to be done in sanitation and hygiene sub-sector. Sanitation and hygiene seems not to be getting the desired policy attention and response resulting to inefficient management and coordination mechanism in the country. Another weakness in policy response to sanitation and hygiene issues has been the lack of a clear-cut institutional home for sanitation.

[45] MoH, 2020: Revised National Policy on Health and Hygiene

The revised National Sanitation and Hygiene Policy (2020) is aiming to address the new and emergent trends and challenges in response to the findings of Multiple Indicator Cluster Survey (2018); Water, Sanitation and Hygiene (WASH) Bottleneck Analysis (2016); and the Urban Community-Led Total Sanitation (U-CLTS) Assessment Report (2019). The policy is further designed to achieve the goals and objectives of Gambia's SDG-aligned National Development Plan for sanitation and hygiene.

Government's national development plan (2018-2021) proposed ambitious WASH targets: a) increased access to improved sanitation facilities from 64.9% to 75%; and b) increased proportions of households with a place for hand washing with soap and water from 30.3% to 60% (urban) and 26% to 50% (rural). However, inadequate availability of sanitation and hand-washing facilities (with soap and running water) in public places (including schools and health care facilities), remains a challenge in the Gambia. In spite of 84 % of primary schools having wash facilities that met national standards, there are significant disparities between the urban and rural schools. Ensuring provision of gender separated facilities that meet the specific needs for girls is grossly inadequate and remains a key focus for the sector.

MICS, 2018 presented the distribution of household (H/H) population according to type of sanitation facility used (table 7), with 1% of H/H population engaged on open defecation; 62% using improved sanitation facilities (which is a decline from 64% as reported by MICS, 2013); and 38% of those H/H using unimproved sanitation facilities. Those using shared or public improved sanitation facilities are classed as having a 'limited' service for the purpose of SDG monitoring. Households using improved sanitation facilities that are not shared with other households meet the SDG criteria for a 'basic' sanitation service, and may be considered 'safely managed' depending on how excreta are managed. Table 7 below showed improved sanitation (74% access) in urban areas compared to rural areas with 36% accessing improved facilities.

Table 9: Percent distribution of household population according to type of sanitation facility used

Type of sanitation facility used by households							
	Improved sanitation facility				Unimproved sanitation facility		
	Flush/pour flush to			Ventilated improved pit latrine			
Area	Piped sewer system	Septic tank	Pit Latrine		Pit latrine with slab	Pit latrine without slab	OD
Urban	1.9	36.7	8.0	1.7	25.4	25.5	0.6
Rural	0.0.	2.2	2.9	1.9	29.5	61.4	2.0
Total	1.3	25.5	6.4	1.8	26.8	37.1	1.0

Source: The Gambia MICS, 2018

Despite recent improvements in the Sanitation and Hygiene sub-sector, equitable access to sanitation and hygiene services is still inadequate particularly for rural populations and the poorest quintile of society. Sanitation service provision by Local Government Authorities such as solid and liquid waste collection, treatment and disposal; facilities for human excreta management in public places and the maintenance of drainage facilities in urban settlements, are generally insufficient across the country. Sanitation programmes were generally focusing on improving the sanitation situation in the Greater Banjul Area in order to prevent disease epidemic such as cholera in agglomerated settings. This has led to a wide disparity in coverage among various geographic regions of the country. There is no provision of public basic sanitation facilities and services in most rural communities. This, coupled with poor housing and sanitation facilities in those communities, puts their sanitation status very low, which is a major contributor to morbidity.

The Gambia Demographic and Health Survey (GDHS) (2019/20) reported that 72 % of households use improved sanitation facilities, although use of such facilities is higher in urban (80%) than rural (44%) areas. Also, by residence, 59% of the population in urban areas has basic sanitation service, as compared with 32% of the rural population. Despite this, The Gambia recorded the lowest rates of open defecation free (ODF) in Africa (1%), but some stakeholders are still critical with the accuracy of this achievement, especially where GDHS, 2019/20 presented 10% open defecation (OD) in Central River Region - North. This review found that sanitation (especially refuse disposal systems) in some communities and rural towns are poorly organised. The main disposal method used in these areas is either burying or surface dumping.

Government records presented the following trend of sanitation coverage at national level: 41 % in 1990, increasing significantly to 55 % in 2009 and then to 74 % in 2018 (MICS, 2018), but slightly declined to 72% in 2019 (GDHS, 2019/20). Despite the intensive investigations, this review could not confirm availability of formal national standards for sanitation and wastewater treatment. To have safely managed sanitation in all contexts, it is important to have regulations and standards that cover both sewered and non-sewered sanitation and take the entire sanitation service chain into consideration.

3.4.1 Urban Sanitation and Hygiene

The team focused on solid waste management (including toxic waste release and sewerage release) and sanitary systems (toilet facilities) in urban sanitation assessment. Nonetheless, this study suggests an increased investment on sanitation hardware, which was needed to meet the 2020 target and decisively work towards achieving the SDG sanitation targets by 2030. This is primarily relevant for sewerage where the expected household contribution is insignificant, despite the fact that it is unlikely to benefit the urban poor. However, there appears to be a general expectation that households will make major contributions towards provision of on-site domestic sanitation. This is only significant, where urban households are paying affordable user-fees to municipal trucks assigned to refuse disposal.

Although significant efforts are underway to improve urban sanitation, this study found urban sanitation characterized by poor solid, liquid and industrial waste management. Improved conditions would be calling for significant revision of the institutional responsibilities, coordination mechanisms, and funding and further resource mobilization arrangements. There is a broad consensus among key stakeholders on the need for a stronger emphasis on sanitation and hygiene in order to meet the revised national objectives as outlined in pillar 2.5.2 of the sanitation infrastructure plan for urban areas.

While infrastructure in the urban areas has generally been deteriorating due to increasing urbanization, poor maintenance culture, poor collection of waste continues to be challenging for decades. Government has treated sanitation as a private matter, thus public investments in sanitation infrastructure and services is very low. However, However, Kanifing Municipality made a significant progress in the recent past in the sanitation sub-sector with 24 compactor trucks, 2 open trucks and 2 tractors on refuse collection and disposal throughout the length and breadth of the municipality; 2 skip trucks with 10 skip bins located at different dumpsites and markets; 8 tricycles for street cleaning; one septic emptier for public places (including worship places); and 10 electrical tricycles (donated by UNDP through Ministry of Environment, Climate Change and Natural Resources) for collection and transportation of organic waste to women's vegetable gardens.

Sanitation services in the rural towns is found negligible - with barely 1% of the population accessing sewerage facilities. While most households have toilet facilities in their premises, wastewater discharges are untreated or partially treated into open drains; or by dumping solid waste in streets and waste water in nearby water bodies including the river and ponds.

Generally, there is an increasing wastewater generation with increasing water logging and stagnant pools of water in many towns and urban slums due to lack of functioning or efficient drainage systems. Increasing urbanization, coupled with poor urban planning and weak enforcement of the Physical Planning Act, has resulted in unauthorized construction of buildings along flood plains, natural drainage ways and reservations. This is exacerbated by the lack of drainage system for sludge and storm water conveyance, causing flooding in many localities during the rainy season.

i. Sewerage Release

The sewerage system in Banjul comprises compounds and public toilet facilities, inter-connected network of sewer pipes, an intermediate lifting pumping station, with a terminal pumping station from where the sewage is pumped through the sea outfall and discharged into the sea. The system consists of 2.25 km of main sewer, 35 km of sewer network, 15 km of house connections and 1.8 km of sea outfall pipe. There are 1,107 compounds and 10 public toilet facilities that were connected to the sewerage system as at 2007[46]. The study did not find any changes in this sewerage system since 2007.

The Kotu sewerage scheme located along the Atlantic Coast, consists of a separate collection system and waste stabilisation ponds having total effective volume of about 69,000 m^3. The PVC pipe network consists of 3.5 km of pumping mains and 1.1 km of gravity mains. The scheme, with a maximum capacity of 4,212 m^3 per day, provides services to hotels and restaurants and other commercial entities within the Tourism Development Area (TDA). However, sewage and liquid waste management is yet to be under control. The management responsibility has been shifting between the Municipal Councils and private sector agents. Currently, both the Municipal Councils and Private Agents (with vehicle-tanks) are providing the disposal services. However, water quality in the beaches is still within WHO Standards in spite of the fact that the sewage system empties into the sea through a sea outfall pipe. Septic tanks, soak ways and pit latrines are used by many urban household for sewage management.

ii. Solid Waste Management in Urban Areas

Solid waste management and drainage structures are inadequate in GBA, with huge quantities of uncollected waste finding its way into watercourses, causing blockages, thus exacerbating annual flooding hazards, particularly in the slum communities: Ebo town, Fagi Kunda, Tallinding and Nema Kunku. There is evidence of stagnating wastewater on the streets, and dumping of solid waste in the sewers and drains common practices in these communities.

Methods of waste collection in the urban areas vary. In 2019, pilot urban CLTS assessment shows that with regards to solid waste management, 29.62% of the surveyed compounds employ a private collector to dispose-off their solid waste. However, 22.3% use communal dumps, while 9% bury their household waste pits and 29.62% indiscriminately dump their refuse. Around 35% of compounds store their solid waste in polythene bags, while dust bins were used in 20% of households. (WASH unit, MoH, 2019). However, refuse or solid waste remains a big challenge to the municipalities. With the emerging of collection trucks and strollers in Banjul and Kanifing municipalities, there are some improvements in solid waste management.

[46] UNDP CO, 2007: Hazard Profile of The Gambia

Wastewater, sludge and storm water collection is still a problem, due to poor drainage systems. With open drainage systems available in many other smaller towns frequent drainage blockages are not uncommon due to refuse dumping into the drains. Untreated wastewater from urban households and industrial processes are being collected by cesspool emptier and dumped into the streams behind Kotu stream, through which the wastewater is flushed to the Atlantic Ocean. The study found many urban households inaccessible to proper drainage facilities, causing regular seasonal flooding in Gibo town and some metropolitan urban centers such as Basse. The presence of large quantities of sewage and uncollected garbage exacerbates the problems of already inadequate drainage networks.

Urban waste management is constrained by inadequate resource allocation for collection and disposal. As a result, there many small sanitation operators running donkey carts in providing collection service for urban households. The current two main landfills in the GBA are poorly located. Industrial recycle is also non-existent. Thus the present state of waste management encourages proliferation of pests, offensive malodours and pollution of the air by smoke and smog affecting nearby residents. People living at Bakoteh Housing Estate, Manjai-kunda, and the Children's Village are exposed to high risk of future infections.

Also, the team observed that healthcare waste (perhaps from the numerous down town pharmacies) are dumped in the same landfills. Thus, many scavenging children are exposed to high risks of hepatitis B, C and HIV through cuts and other forms of injuries. The use of waterborne toilets is well established in towns and roughly three quarters of urban households have a toilet. However, local government oversight and regulation is weak and very few households dispose of wastewater safely.

iii. Urban toilet facilities and hygiene

Toilet facilities (for households, public and institutions) have been part of urban sanitary systems for many years. The pilot urban CTLS study (2019) found majority of households (35.87%) owning traditional pit latrine, 23.19% owned pour flush toilets and 19.2% owned water closets, while 17.75% of households are either sharing with neighbors or using public toilet facilities. Fifty % of the toilets observed by this study have no hand washing facility within the structure.

About 68% of household toilets are connected to septic tanks their liquid waste, with only 1.7% having a public sewer system[47]. This review found that majority of septic tanks are poorly constructed, rarely emptied, and allow untreated or partially treated wastewater to seep into underground water or into open drains and watercourses. Septic tank emptying businesses are common, but many of them dump sludge directly into the river without treatment.

The review found very few public toilets in GBA, Regional cities and towns, mass transit points, transport terminals, and mass public interaction areas (such as markets, fish landing sites and entertainment centres) in The Gambia. Most of the few functioning urban public toilets visited (by the review team) were found without water and soap for hand washing, and care-takers for maintaining them were not always available to help. Women, children and Physically Challenged Persons are the worst sufferers as a result of the lack of such sanitation facilities.

This review has not carried out any intensive assessment of urban hygiene and public health, but literature showed that 31.7% of household populations are using basic hand-washing facilities and 58.8% have access

[47] WASH Unit, MoH, 2019

to limited facilities, while 9.2% have no hand-washing facility available (The Gambia MICS, 2018). However, urban households cited that hand washing with soap at critical times (before eating, and after latrine use) is a common practice – that there are substantial number of people now washing their hands using water and soap. This report is averring that hand washing with soap is one of the cheapest, most effective 'vaccine' against viral diseases, from the seasonal flu, to the common cold.

3.4.2 Rural Sanitation and Hygiene

The service delivery pathway for rural sanitation is less developed than that for rural water supply due to barriers among several upstream resource mobilisation and enabling factors. The sector has just revised the national policy for sanitation and hygiene, but there are still coordination huddles. The sanitation subsector leadership appears to be divided among three ministries—Health, Environment and Local Government—thereby resulting to poor sector coordination and policy implementation.

Review of rural sanitation covered Community-Led Total Sanitation (CLTS), sanitation social marketing, and hand washing in schools, health care facilities and communities. VIP latrines were assessed in schools and public places for their safety and hygiene. The CLTS is a community-based approach which aims at stopping open defecation through use of social/peer pressure and education; collective community action to assist vulnerable people and support public facilities.

Sanitation service provision has been vested on Local Government Authorities, but key stakeholders in the Local Government Area (LGA) Councils cited that solid and liquid waste collection, treatment and disposal is always a burden on them. The study found existing facilities for human excreta management in public places inefficient, and maintenance of drainage facilities in all LGAs were generally insufficient. Sanitation programming efforts of government and development partners are primarily focused on Greater Banjul Area in order to prevent disease epidemic such as cholera in agglomerated settings[48]. This has led to a wide disparity in coverage among various geographical regions of the country.

There is no provision of public basic sanitation facilities and services in most rural communities. This, coupled with poor housing and lack of sanitation facilities in the communities, accorded them very low sanitation status. The low sanitation status of many local communities is a major contributor to morbidity among the populations. The review found households building their own sanitary facilities for human excreta management through self-financing, and they do organise their disposal through the services of private sector sanitary providers. Actual assessment began with examining types of sanitation facilities in the rural areas.

i. Solid Waste Management in Rural Areas

Poor physical planning and housing conditions in the rural areas put their sanitation status very low. The low sanitation status among the local populations is a major contributor to morbidity in many local communities. The review showed that disposal of baby's faeces is mostly in toilets (KII). Other practices of disposing infant's faeces include burying, and throwing into garbage pit/landfill.

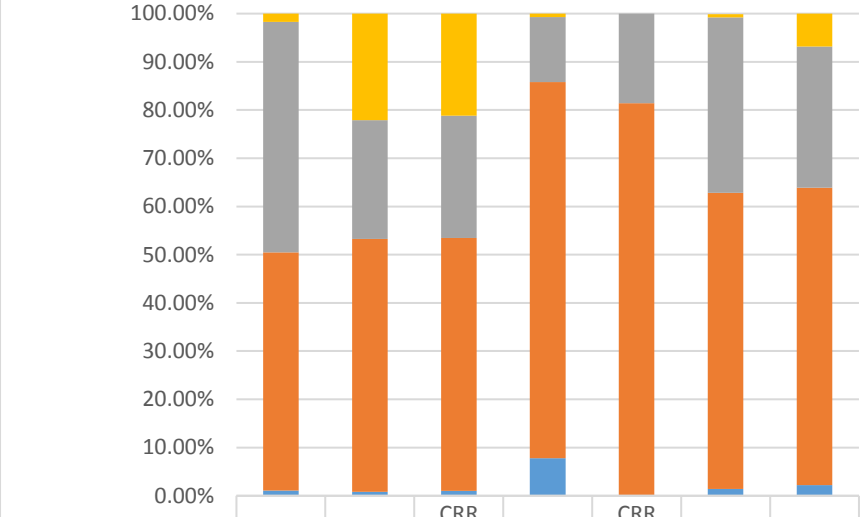
The household waste collection system was found inadequate, and the study confirmed some level of dissatisfaction on the collection

Figure 22: Household rate of satisfaction about their solid waste management

[48] MoH, 2020: Revised National Policy on Sanitation and Hygiene

methods in peri-urban and urban areas. The lack of regular solid waste collection from the premises has also led to the use of garbage heaps, drains and water ways as refuse disposal sites and the escalation of illegal dumping sites.

This has been exacerbated by lack approved landfills and low knowledge, aptitude and practice (KAP) in sanitation and hygiene; with little or no formal sanitation services, and with a lack of adequate resources to deal with the inevitable piling rural waste generation. However, the team observed that community practices of solid waste disposal is improving; as awareness on the importance of sanitation and hygiene among the local populations gradually increasing. Although, FGDs cited that many households are on regular daily cleaning of their premises, women complain of their dissatisfaction on the existing waste disposal system (figure 18).



	WCR	LRR	CRR South	NBR	CRR North	URR	Total
Very unsatisfied	1.70%	22.10%	21.20%	0.70%	0.00%	0.70%	6.80%
Unsatisfied	47.80%	24.60%	25.30%	13.50%	18.60%	36.40%	29.30%
Satisfied	49.40%	52.50%	52.50%	78.00%	81.40%	61.40%	61.70%
Very satisfied	1.10%	0.80%	1.00%	7.80%	0.00%	1.40%	2.20%

ii. Type of Sanitation Facilities for Human Waste (Excreta) in Rural Gambia

The study found and focused on the following sanitation facilities in rural areas: a) traditional pit latrine with slab; b) ventilated improved pit (VIP) latrine c) pour flush toilets flush latrines d) septic tank/ soak-away system and e) conventional sewerage system. The choice of facility at household level depends on various factors:

Table 10: Different Type of Sanitation (Latrines) Facilities in The Gambia

Type of sanitation facility	Characteristics requirement and suitability
Traditional pit latrine with slab	For reasons of cultural acceptability, affordability, especially in rural areas, minor improvements that will reduce flies, odour etc. May be accepted as interim measures. Examples of such improvements include provision of superstructures, covering of the pit opening/squat hole with a slab, plastering of the latrine floor with cement and introduction of a vent pipe to improve the hygiene conditions of the latrine.
Ventilated Improved Pit (VIP) latrine	Have advantages over traditional pit latrines by preventing flies and odour. However, it is not yet popular because of its relatively high capital cost for individuals and communities
Pour flush toilets	Similar to the septic tank/soak-away system in concept except that regular water supply is not envisaged. Waste-water could be used for flushing purposes. The toilet could be squatting or sitting type.
Septic tank/ soak-away system	Already popular in the urban/peri-urban settlements. Has the potential of contaminating ground water where the water table is high. Requires regular water supply and soak-away evacuation for efficient performance.
Conventional sewerage system	Most advanced method of treating human wastes, requires regular water supply, reticulation and treatment works. It is suitable for large cities and estates where

	there is regular water supply and the beneficiaries can afford to pay for its operation and maintenance.

In most cases, the choice of sanitation technology in the rural areas largely depends on the technicians available and the prototype of the facility brought to the community by either a government agent or development projects. However, in reality there are different factors that households consider when choosing a type of technology. The following factors were described in the FGDs:

1. Suitability and adaptability of technologies to the needs and circumstances of the communities is an important consideration in any assessment of the choice of sanitation systems. To ensure this, carefully-planned research will be required to identify feasible technological options and their corresponding management requirements and costs.

2. The operational requirements, value-for-money must be proven including customer acceptability and satisfaction. This must be done before they become part of an extensive programme. To this end, government will identify appropriately qualified and objective agencies to carry out such evaluations against agreed criteria.

3. Affordability is by far the most important consideration influencing the choice of technology at household, community and national levels respectively. As far as it affects technology choice, it must be clear who is willing to pay what amounts for a particular level of service or quality of product.

4. Technology needs to be cost-effective, affordable and appropriate to the needs of children, women, men, the poor and the physically-challenged. This is especially important for example for institutions such as the Area Councils toilet facilities where payments are levied for sustainability for operations and maintenance. Various grants or subsidies may reduce the initial cost to a household, but there is no further subsidy to reduce the running costs.

iii. Sanitation Practices

In reviewing sanitation practices in the sample communities, the teams assessed people's access and uptake of latrines, appropriateness and adequacy latrine facilities, distance of latrines from users, reasons for not having latrines, baby's faeces disposal and household waste management. Other indicators looked at were environment free from human faeces, number of persons per latrine (range is 20 – 35 persons per toilet), available separate, gender sensitive latrines, awareness levels and understanding of risks from vector-borne diseases, and waste/household refuse collection and disposal.

The review found that 74 % of the households own family latrines, of which 29 % are improved facilities; and 24 % share neighbour's latrines for defecation, of which 11% are improved facilities; while 2 % of the villagers are still using the bush. The review further showed 98% uptake of latrine facilities in sample communities. This shows an increase in access to improved facilities by 4% (from the 36% access to improved sanitation facilities reported by MICS, 2018), but there is no significant changes in OD since 2018.

According to MICS (2018), the most common types of toilets are the pit latrines without slab (60%) while pit latrines with slab accounted for the 25%. Other types include VIP (7%), and pour flush latrines (5%) latrines (figure 19). The FGDs confirmed that 80% of the pit latrines without slabs are poorly constructed. Most these toilets are made up of open pits and some concrete slabs that do not have walls as supper structure neither a roof. The fencing materials of many latrines are made up of sticks or empty bags without roofs. In this case, when it is raining people find it difficult to use this type of latrines. The qualitative assessment team in FGD sessions confirmed that some latrine facilities are poorly located.

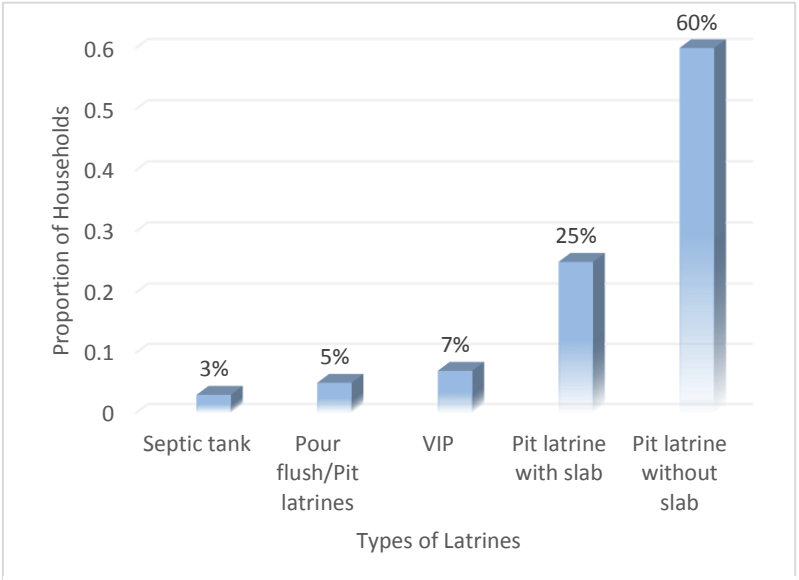
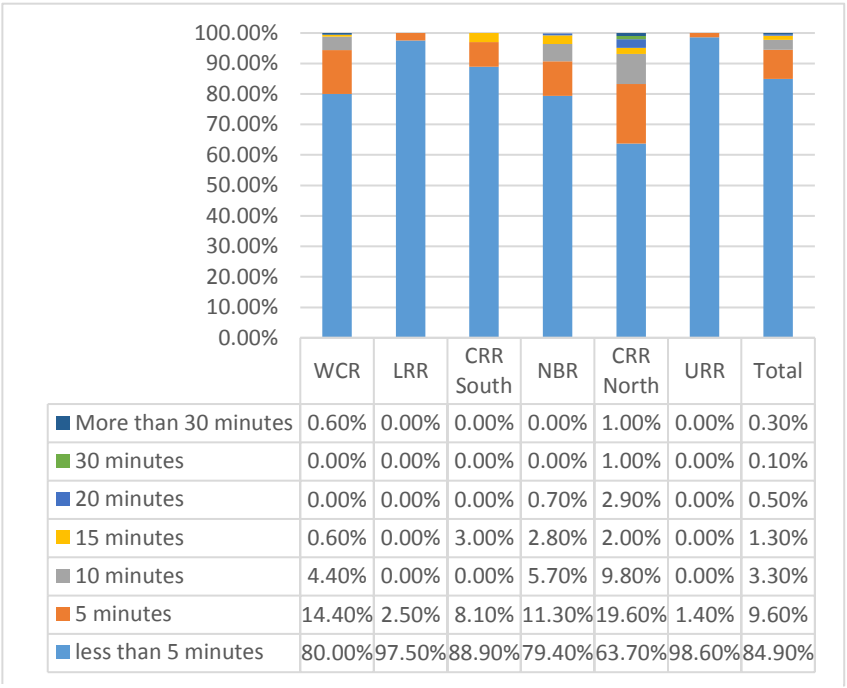


Figure 24: Households with Types of Latrines

This report argues that sanitation facilities that are poorly located can prevent use and also pose risks to the safety of women and children, and difficulties for people that are physically challenged. Also, it has been generally acknowledged that sanitation facilities provided on a supply basis alone (e.g. public toilets that are fully subsidized) often failed because the ownership has been always apportioned to the organization providing the facility. Thus, users often do not assume responsibility for the judicious operation and maintenance of the facilities. These practices suggest significant improvement in handling of household refuse as well as eliminate indiscriminate disposal of baby faeces in the garbage pits, which poses public health risk.

Time taken for household members to access toilet facilities is a critical factor for uptake of sanitation facilities. The study found majority of household members taking less than five minutes to access their toilet facilities. However, 36.3% and 11.1% of households in CRR North and South respectively are taking more than five minutes to access their toilets (figure 20). The access level in the other regions is good, but households in CRR (North) are taking 30 or more minutes' walk to access their toilets. Also, 2.8% of households in NBR and 3% of those in CRR (South) takes 10 to 15 minutes to access toilets.

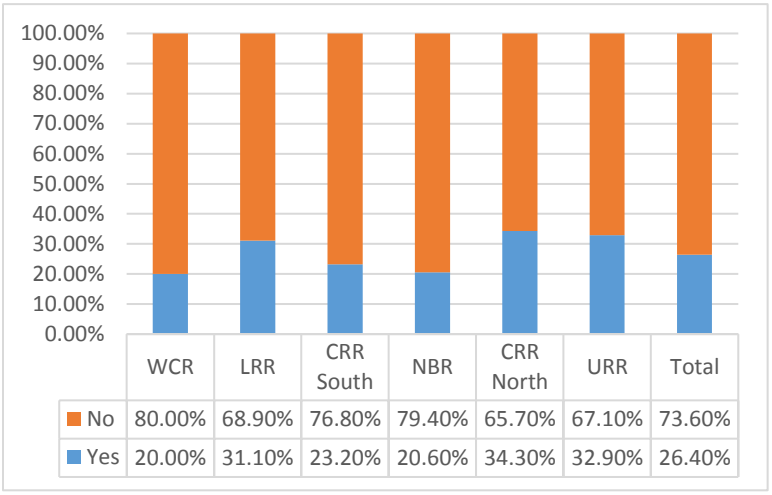


	WCR	LRR	CRR South	NBR	CRR North	URR	Total
More than 30 minutes	0.60%	0.00%	0.00%	0.00%	1.00%	0.00%	0.30%
30 minutes	0.00%	0.00%	0.00%	0.00%	1.00%	0.00%	0.10%
20 minutes	0.00%	0.00%	0.00%	0.70%	2.90%	0.00%	0.50%
15 minutes	0.60%	0.00%	3.00%	2.80%	2.00%	0.00%	1.30%
10 minutes	4.40%	0.00%	0.00%	5.70%	9.80%	0.00%	3.30%
5 minutes	14.40%	2.50%	8.10%	11.30%	19.60%	1.40%	9.60%
less than 5 minutes	80.00%	97.50%	88.90%	79.40%	63.70%	98.60%	84.90%

Figure 26: The time it takes for households to access toilet faclities

Data analysis in this study showed that inadequate access to sanitation, types of available toilets and time taken to access toilet facilities (especially for those households sharing with neighbours) have greater correlation with vulnerability and poverty, thus giving rise to exclusion and inequality due to lack of privacy and indignity.

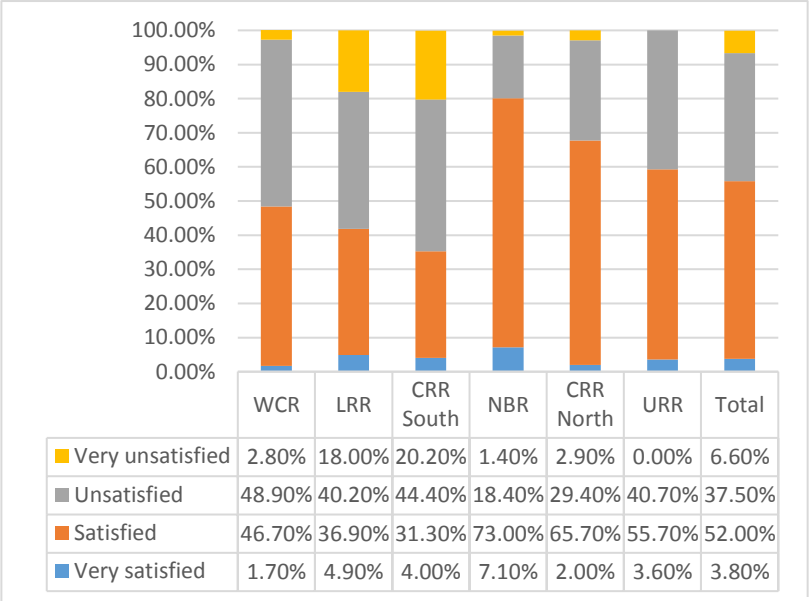
The proportion of women that have problems in accessing toilet facilities (figure 21) is an important factor to determine their toilet habit. It is seen that 34% of respondents in CRR North, 33% in URR and 31% in West Coast Region have problems in accessing toilet facilities in their households. The reasons for key problems could be further explored. Community level FGDs cited that during rainy sessions pit latrines are not considered safe, especially for women folk, as majority of the pit latrines are poorly constructed and risky for women to use during the rainy season; e.g. poor and low quality material are used to construct the superstructure. Household members' satisfaction in using their toilet facilities can increase and sustain uptake of the facility and prevent reneging.



	WCR	LRR	CRR South	NBR	CRR North	URR	Total
No	80.00%	68.90%	76.80%	79.40%	65.70%	67.10%	73.60%
Yes	20.00%	31.10%	23.20%	20.60%	34.30%	32.90%	26.40%

Figure 28: Proportion of household women having problems accessing toilet facilities

The percentage of dissatisfaction with pit latrines without slabs is worrisome in all the regions with varying percentages ranging from 48% in WCR, 44% CRR South, 40 % LRR and URR (figure 22). The key factor of defecting was attributed to odour and poor conditions of the superstructure; and the review found that household preferences are flush/water closet to pit latrines and improved pit latrines with septic tank system compared to the conventional pit latrines. However, the FGDs cited that unaffordability, coupled with poor water service connection in both rural and peri-urban areas are limiting factors of access to improved latrine facilities.



	WCR	LRR	CRR South	NBR	CRR North	URR	Total
Very unsatisfied	2.80%	18.00%	20.20%	1.40%	2.90%	0.00%	6.60%
Unsatisfied	48.90%	40.20%	44.40%	18.40%	29.40%	40.70%	37.50%
Satisfied	46.70%	36.90%	31.30%	73.00%	65.70%	55.70%	52.00%
Very satisfied	1.70%	4.90%	4.00%	7.10%	2.00%	3.60%	3.80%

Figure 30: Household rate of satisfaction on their toilet facility/latrines

ii. Community Led Total Sanitation

Stakeholder consultations at policy level on CLTS cited government's formidable drive to end open defecation, and this is also reflected at country level. Sanitation programmes were driven by the local advocacy efforts, as well as by local awareness creation (by Ministries of Health, and Fisheries, Water Resources & National Assembly Matters supported by donors and partners) to encourage commitments to end open defecation.

Public awareness of open defecation was found necessary to achieve a critical mass of behaviour change to usher in CLTS in The Gambia. As a reflection of this interest, an increasing number of non-state actors (especially NGOs), and decentralised Local Government Authorities (LGAs) were actively involved in the call to end open defecation. Key stakeholders at both policy and LGA level emphasised efforts in continuing support and promotion of Community Approaches to Total Sanitation (CATS) model. Partners such as UNICEF supported government to scale up the CATS approach, which in fact is mainstreamed in the national policy frameworks (e.g. the Revised National Policy on Sanitation and Hygiene).

At community level, the review found households building their own sanitary facilities for human excreta management through self-financing, and they do organise their disposal through the services of private sector sanitary providers. It has been observed in many households that there is a latent desire to have their own latrine, particularly from female members of the family. This is particularly strong in communities where there are already a few working latrines. Community led Total sanitation (CLTS) has been implemented in The Gambia for quite some time now. The concept was introduced in The Gambia in 2005, using a range of Participatory Rural Appraisal (PRA) methods and techniques to ignite a change in behaviour. The approach started from the most basic options and what they could afford; offering ideas and options for upgrading the households' latrine in stages through sanitation marketing by using social marketing approaches. It has so far been triggered and has been scaled up in rural regions of The Gambia.

A combination of approaches are being supported with a drive to encourage the end of open defecation through igniting communities and encouraging natural leaders from within communities to lead the process of putting a stop to open defecation and for households to build their own latrines. Although evidence on the effectiveness of the methodology is still emerging, the principle of mobilising local communities to switch from open defecation to a relatively better sanitation practices were found promising.

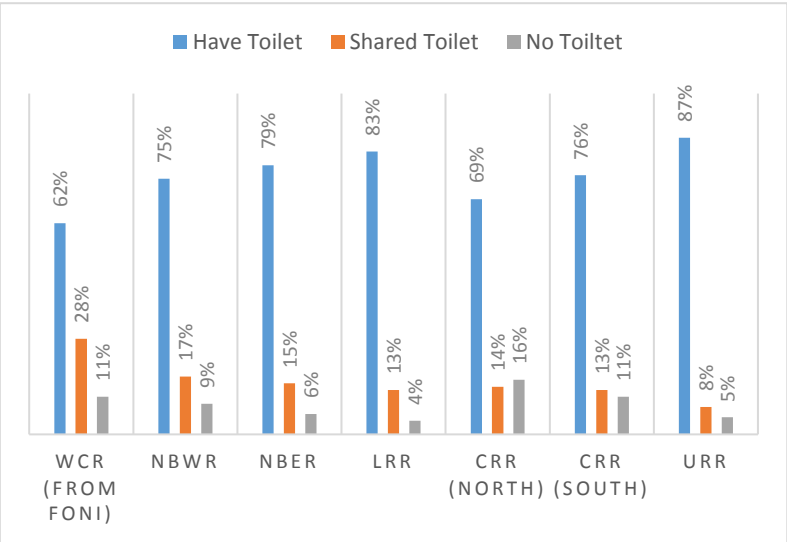


Figure 31: OD/ODF in the Regions

The study noted that The Gambia has made progress towards ending open defecation and is on track to becoming the first country to achieve National ODF status in Sub-Saharan Africa well before the SDG target date of 2030. This is because significant progress has been made in all the health regions with an increasing number of communities attaining Open Defecation Free (ODF) Status, mainly using the Community Led Total Sanitation (CLTS) approach. Since the introduction of CLTS, Open Defecation rates in The Gambia have declined from 4.4% in 2010 to 2% in 2014 to 1% in 2018 (MICS, 2018). Assessment in the rural regions (UNICEF CO, 2021) showed that 92% of households have either toilet in their house or shared toilet facilities. This relatively high rate corroborates MICS, 2018 survey showing 98% of ODF for the overall country. Figure 23[49] above shows the existence of toilet in each rural region.

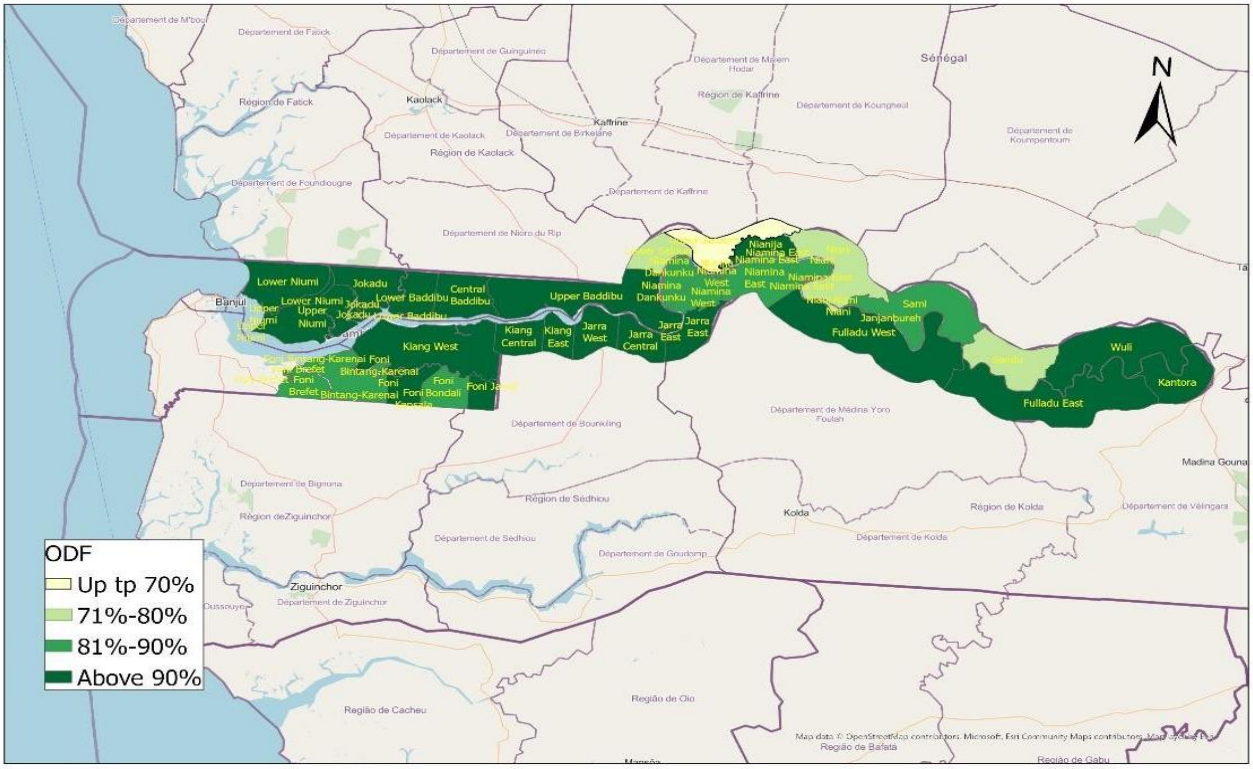
[49] Source of Data: UNICEF CO, 2021

Figure 24[50] presents a map depicting the ODF percentage in different districts, which shows certain areas with relatively lower ODF percentage. In addition to CRR there are districts in western and URR that have a lesser percentage of ODF and needs attention at the community level.

iii. Disposal of baby diapers

The safest place for faecal matter of adults or babies is in a public sewage or private septic system, where it can be effectively processed and avoid coming in contact with the general public. Since baby's diapers harbour human waste (faecal matter), its disposal is an important sanitation practice, otherwise it has potential to be a public health hazard. Baby diapers are commonly used in the country, especially in urban settlements, however, disposal of diapers was found to be inadequate in most communities visited during the sector review. The diapers are simply wrapped and thrown in the waste dumpsites, where they exist.

Figure 32: ODF Map of The Gambia



Source: UNICEF CO, 2021

However, CLTS activities were mainly concentrated in the rural part of the Gambia with little or no information on open defecation status in the urban, public places and institutions in the country. This notwithstanding, one major challenge the sub-sector is faced with has to do with the issue of inadequate data to provide evidence on the reliability of these statistics. Furthermore, a National Open Defecation Free Roadmap has been signed by Minister for Health, Minister for Environment, Natural Resource and climate Change, and Minister for Fisheries, Water Resources and National Assembly Matters in October 2019, (WASH Unit/MOH, 2019). The CLTS approach is non-subsidy, which mobilises the community (mainly through shame disgust and mutual understanding about the negative effects of open defecation) in order to eliminate open defecation in communities and encourage self-supply of latrines and hand-washing facilities. The approach has virtually taken the form of community mobilisation, and the use of 'natural leaders' in the communities to drive the process.

[50] Consultancy Services to Mobile Data Collection and GIS Mapping of WASH Facilities and ODF Communities in The Gambia, UNICEF, 2021

The MoH has updated its policy on Sanitation and Hygiene (2020), and also their Strategic Plan for Sanitation and Hygiene (2020 – 2022); and would be further encouraged to graduate the current CLTS process into CLTS+ (mainstreaming sanitation into community way-of-life), while completely eliminating open defecation (OD) in The Gambia. Whilst the exact approach to be followed for community sanitation to be finalised, it is likely that Ministries participating in the National Open Defecation Free Roadmap would increase their roles in sanitation and hygiene promotion, to include Sanitation Marketing and community financing mechanisms.

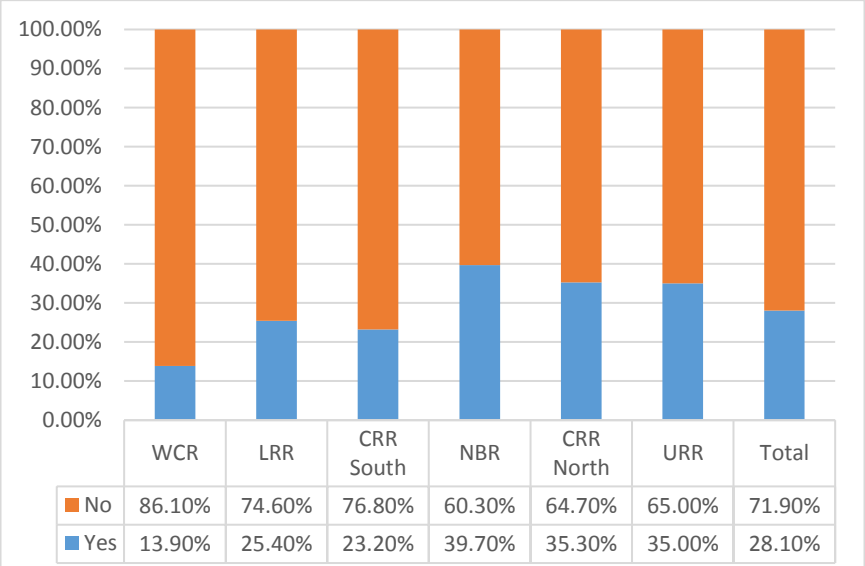
3.4.3 Hygiene Promotion

The review team examined if the sector employed a systematic approach to enable people to take collective and individual actions to prevent and/or mitigate water, sanitation and hygiene-related diseases. The team further assessed if rural communities are making best use of the improved water points, sanitation and hygiene-enabling facilities provided by the sector; and if they are judiciously utilizing and maintaining the facilities.

The review recognized that the sector facilitated and ensured community participation in the implementation process and utilization of their water points. The overall sector programming drew on the population's knowledge, practices and resources to address issues of public health concerns. Mutual sharing of information and knowledge was found significant for the sector. Community mobilisation was the key emphasis - encouraging people to take control and protect their health.

i. Hygiene Training

FGDs in majority of sample communities cited of not benefiting from any hygiene training. The only hygiene-related training they could remember participating in was on exclusive breast feeding methods and this assisted in improving the sanitary and hygiene condition of many women during breast feeding. However, FGDs in few (28.1%) sample communities reported participating in NGO hygiene trainings.



	WCR	LRR	CRR South	NBR	CRR North	URR	Total
No	86.10%	74.60%	76.80%	60.30%	64.70%	65.00%	71.90%
Yes	13.90%	25.40%	23.20%	39.70%	35.30%	35.00%	28.10%

Figure 33: Proportion of households ever participated in hygiene training or demonstrations

Inadequate hygiene training and demonstrations with local communities undermines the efforts of the sector. West Coast Region (WCR) (especially in Foni) have had least coverage (13.9%) in hygiene trainings (figure 25). Hygiene training and demonstration are very valuable in preventing diarrhoeal diseases and COVID-19. It is seen that on average only 28% of the respondents ever participated in hygiene training and demonstration which is very insignificant percentage in awareness creation. However, team observed that Participatory Hygiene and Sanitation Transformation (PHAST) and Child Hygiene and Sanitation Transformation (CHAST) approaches were employed by some NGOs for hygiene and sanitation promotion in some communities. A number of tools were also used to support the implementation of hygiene promotion initiatives.

These include, Designing for Behavior Change (DbC); and Communication Strategy on Water, Sanitation & Hygiene for Diarrhea & Cholera Prevention, complimented by IEC materials (especially in schools and health facilities).

Health education through participatory hygiene and sanitation transformation (PHAST) methodology in raising community awareness of risks related water borne disease and methods of preventing their spread has been the solid foundation of the sector. There are evidences that the sector enhanced community ownership of water points and sanitation facilities to ensure their long term sustainability. The participation of community leadership in steering the sector is instilling a heightened sense of ownership over WASH commodities, and also helped to ensure that the facilities are appropriate to their needs. The review found that the communities are now responsible for funding the on-going operations and maintenance costs and in managing the facilities.

3.4.4 Hygiene Behaviour (KAP)

Compiling data from FGDs across sample communities, the team found that the participatory hygiene and sanitation trainings approaches offered some levels of desirable outcomes with majority of community members washing their hands at key times: sixty percent (60%) of the respondents wash their hands after using the toilet and 58 % before eating (figure 26). Of the total respondents who wash their hands after using the toilet most, 25 % have hand washing stations by the latrines (confirmed by the team through physical observations), and 70 % carry water with them when going to the toilets to wash their hands. Seventy percent (50%) indicated that they wash their hands with ash and water while 20 % of the respondents wash with water and soap. All the respondents who use ash instead of soap said they do so because soap is expensive.

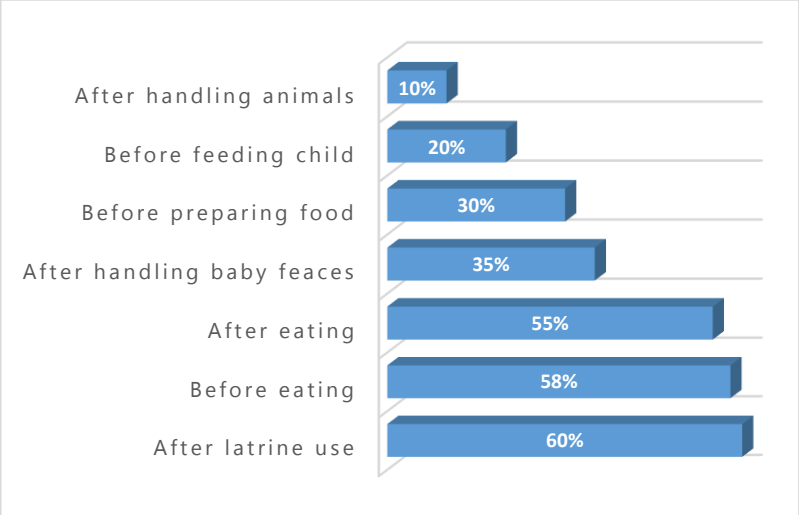


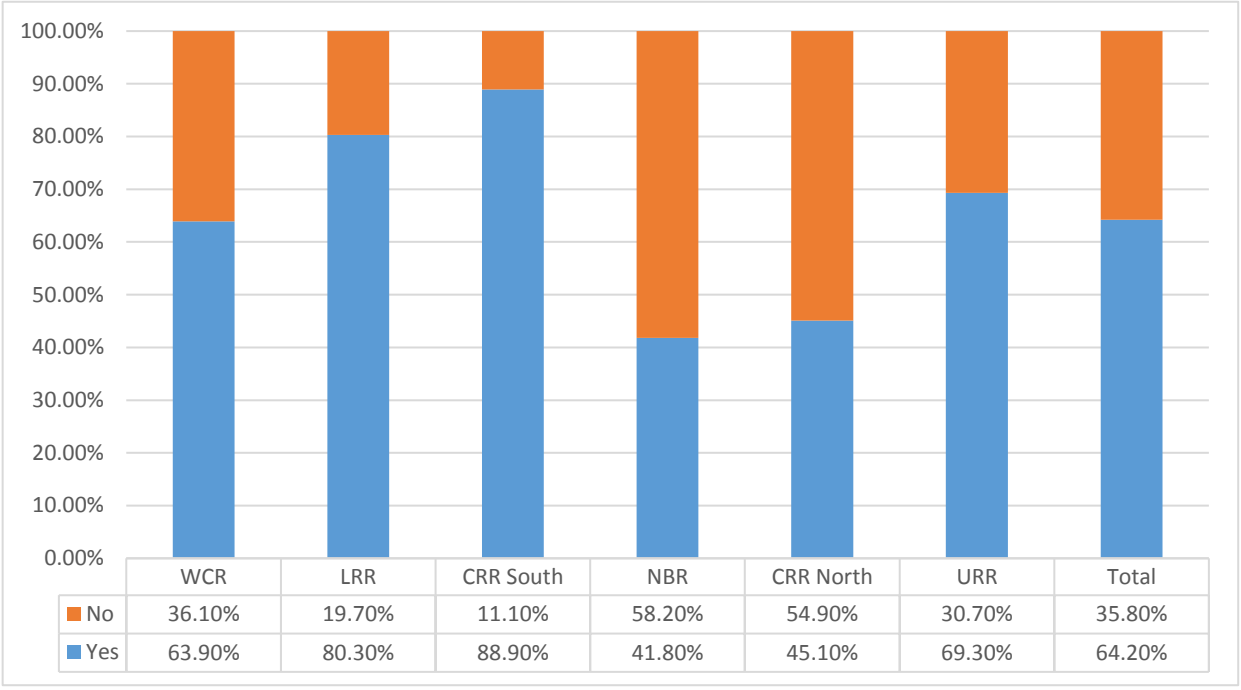
Figure 34: Key Times for Practicing Hand Washing

Changes in personal hygiene behaviours are reflections of people's sanitation practices and declining clinical records on related diseases. The review found significant improvement on access to improved sanitation facilities; household refuse management and general cleanliness within the households. The greatest progress has been made with access to latrine facilities in which the country registered 98% coverage. However, at FGD level, there agitations for increasing household ownership and access to improved latrine facilities (i.e. reducing use of unimproved latrines and sharing facilities neighbouring families). The decline in the population practicing open defecation was attributed to the performance of the sector.

i. Menstrual Hygiene

The effects of the project on promoting good menstrual hygiene are negligible. Generally, people view menstruation as a normal natural process. There is no known taboo about this but women and girls are reluctant to publicly discuss their issues.

The most common practices for managing menstrual menses include the use of pieces of cloth and bathing and cleaning. Sanitary pads are not commonly available and used in many of the rural villages. Aside from the pain, the most common effect of the menstrual period is the feeling of embarrassment when in the public. For girls, they feel hindered from mingling with their playmates and friends.



	WCR	LRR	CRR South	NBR	CRR North	URR	Total
No	36.10%	19.70%	11.10%	58.20%	54.90%	30.70%	35.80%
Yes	63.90%	80.30%	88.90%	41.80%	45.10%	69.30%	64.20%

Figure 35: Proportion of households facing challenges in accessing menstrual hygiene materials

Modern menstrual pads are not sufficiently available in some remote villages, and the team observed acute shortages menstrual hygiene materials in all regions (figure 27), especially CRR South, LRR and URR. Access and using such menstrual hygiene materials by the female folk is an indication of attaining high level of hygiene practises. The data shows that having access to menstrual hygiene material is easier in NBR, CRR North, and WCR respectively. In LRR, only 19% of the respondents have access to menstrual hygiene material. However, having access to menstrual hygiene materials affects the female students and educated women folk. Most women use traditional method of menstrual hygiene and they use clean used clothes to clean themselves up.

3.4.5 WASH in Public Places

High population growth rate and urbanization is continuously undermining the ability of the sector to keep pace with demand for WASH services, especially in public places. Poor maintenance culture of water and sanitation systems further exacerbate this, resulting to some level of deprivation, exclusion and inequality of access to WASH services in, and around public places. The government showed its commitment to improve and ensure equitable access to safe and affordable water, sanitation and good hygiene practices for all in its national development framework (NDP, 2018 – 2021). This partly includes strategies and activities related to WASH in public places intended to contribute to:

a) Increasing the number of institutions with access to water on premises and improved and well maintained and cleaned sanitation facilities,
b) Increasing the number of institutions with hand-washing facilities with water and soap, and
c) Improving solid waste management in institutions.

This section will report the findings of WASH facility observatory assessment conducted in public places across the regions (table 9).

Table 11: Observatory Visits: Number of public places covered by region

Region	Schools	Health Facilities	Regular Markets	"Loomo"/"Sandika" Markets	Place of Worship (Mosques/Churches)
WCR	2	2	1	1	1
LRR	2	2	1	1	2
NBR	2	2	1	1	2
CRR (South)	2	2	1	1	2
CRR (North)	2	2	1	1	1
URR	2	2	1	1	1
Kanifing Municipality	2	2	1	1	2
Banjul Municipality	2	2	1	0	2
Total:	**16**	**16**	**8**	**7**	**13**

In assessing the status of WASH services, the team focused on: **i) Water** - availability of water in the facility, functionality and ability of source to meet the water demand of the facility; **ii) Sanitation** - availability of functional latrine at facility, drainage system for collection and disposal of waste and storm water; and **iii) Hygiene** - availability of hand washing facility and personal protective equipment. For comparison as well as for complementarity, the team also accessed data from other studies, such as the recent Data Collection and GIS Mapping of WASH Facilities and ODF Communities in The Gambia conducted by Amit Epstein (GIS and spatial data Services, management & consulting) for UNICEF.

This review however, found almost total absence of public toilets in some cities, towns, transport terminals, mass transit points, and mass public interaction areas (such as markets, fish landing sites and entertainment centres) in The Gambia. Furthermore, in many functioning toilets, water and soap is not always available and, caretakers for maintaining them are not always available. Women, children and physically-challenged persons are the worst sufferers as a result of the lack of such sanitation facilities.

The study was more critical on WASH in schools, which is essential to ensure a conducive learning environment. Schools without water supply, sanitation or hand-washing facilities or whose facilities are out of order, lead to time being lost from lessons, indignity for pupils having to use the bush including particularly girls, an increased risk of WASH related diseases, as well as older girls being less likely to attend during their monthly menses. Effective WASH in schools requires a number of key elements:

- Establishing governance systems for the management and O&M of the WASH facilities
- Accessible water supply with good drainage and provision of safe water for drinking
- Gender and child sensitive sanitation (separate girls and boys toilet blocks, smaller drop holes for small children), providing adequate safety and privacy as well as hand-washing facilities with water and soap nearby; at least one drop hole for girls and one for boys should also be accessible for children or teachers with disability by incorporating simple modifications to the designs (more space, wider door, hand-rails and a cleanable seat)
- Appropriate solid waste collection and disposal mechanisms
- Hygiene education and promotion as part of the curriculum
- A room or space that is private where girls who have reached menses can keep themselves hygienic, ideally with a water supply or a bucket with water inside the room and a mechanism for safe disposal of sanitary materials.
- If food is prepared on the premises, then a kitchen and dining area that is hygienic and cleanable should also be available

i. Water Supply in Public Places

Water accessibility and availability in public places continue to be a challenge in The Gambia. Hardly a day passes without the running or supply of water systems getting interrupted. Some community members in Ndunkukebbeh, Kerr Pateh and Wassu Loomo Markets, Jangjanbureh Ferry and Car Park, Brikamaba Loomo and Health Center and Bansang Hospital cited limitations with their solar systems and the low pumping capacity of their boreholes as the causes of inadequate water supplies.

In general, most of public facilities don't have water source in-house or yard. Only 47% of the public facilities has in-house water source. Presented in Table 10 are public places covered in this study across the Regions. Water sources in 16 schools and 16 health facilities were assessed showing that 13% and 6% of these public institutions respectively are accessing drinking water from unprotected sources.

Table 12: Observatory Assessment: Number of Functioning Water Points Covered

Public Place	Number Visited	Standpipes	Boreholes/ Tube wells	Hand Pumps	Protected dug-well	Unprotected Dug-wells	No Water Point
Schools	16	3	4	5	2	2	0
Health	16	5	3	6	1	1	0
Regular Markets	8	2	1	1	0	0	4
"Loomos/ Sandikas"	7	0	0	2	0	0	5
Place of Worship	13	4	4	3	1	1	0

The team confirmed that the sector improved access to safe drinking water sources in health and learning institutions. However, a single source of water in any of such institutions (e.g. a lone hand-pump in a school) was reported inadequate, as such hand pumps are always been congested during breaks for school meals, as averred by the staffers. Here access does not necessary mean uptake, especially when safe water points are not adequately meeting the needs of the increasing school populations. By physical inspection of all water points in the 16 schools and 16 health facilities, the team further found few dysfunctional wells, which were frequently drying-up due to congestions and seasonally dropping water tables.

However, the assessment shows majority (87.5%) of the schools surveyed had access to an improved drinking water source. Access to basic water according to the SDG target (access for all) is attainable for all the schools by 2030, but more investment would be required going by WHO standard (250 persons/safe water point), especially where there are one or two water points in larger schools of higher student populations. To avoid congestion over a single water point in larger schools, the study found pupils either trekking longer distances to fetch improved drinking water, or would have no access to improved water service in or near the school premises (13%). It is thus crucial that WASH stakeholder needs to double their effort to deliver safe water to schools

Furthermore, the study found larger schools such as Gambia High school, Armitage Senior Secondary School (SSS) and Ndungu-Kebbeh Upper Basic School (UBS)/SSS experiencing low water pressure, and where electricity is used, the schools incur high cost in buying cash power to increase the pumping pressure of their water supply. Due to low pressure, Gambia Senior Secondary School with an enrolment of 2600 students do experience acute water shortage to the extent of not using their toilet facilities, and hence affecting student performance. Talinding Upper Basic School with a student population of 3000 is situated on a lowland prone to flooding during raining season and 80% of the school environment remains wet and muddy throughout the year. The toilets are built on a soak-away (tank) but their conditions are deplorable and the taps in the toilet facilities are not running. The toilets for both boys and girls were found filthy and unhygienic.

Accordingly, every health facility should have a functioning water supply source located at the point of health service delivery. The assessment therefore investigated the availability of a water source at facilities. The results showed a varied picture across regions. GBA and WCR were the most served, with 96.7% and 84.5% of facilities with water sources respectively. In-house water sources are only available in few rural health facilities, and majority of them are accessible to only one water point in premises. Therefore, CRR (N) and URR are the least served on availability of water source (estimated 68% and 60% respectively). Facilities are mostly served by hand-dug wells and bore holes with pumps.

Access to safe water sources in both regular and weekly "loomo" markets remain a major challenge in The Gambia. The study found no source of safe drinking water in 50% of the regular markets and 71% of "Loomo" markets visited. Village water points, some of which are located within 500 meters of walking distance are the main sources of drinking water for dealers in both regular and weekly "Loomo" markets. Consequently, it takes majority of the marketers interviewed (65%) approximately 15 minutes to fetch water. Some of the sources are protected hand pumps (hand-dug wells), and therefore perceived as safe for human consumption. Hence, 90% of the respondents in public places averred that they do not treat the water used for drinking purposes. However, water treatment is not that very common in rural Gambia.

ii. Sanitation and Hygiene in Public Places

Effective sanitation in public places is essential to ensure a healthy environment with good infection control. As public places are meant for gatherings and interactions, cleanliness and infection control is critical. A number of key sanitation elements are crucial for public places, and these include:

a) Existence relevant sanitation facilities; and their governance systems for the management and operation and maintenance of such facilities, particularly the cleanliness of latrines and keeping hand-washing facilities functioning
b) Existence of public latrines with functioning hand-washing facilities with soap and good drainage, which must be accessible to people with disabilities or people with limited mobility
c) Cleanable bedpans, potties and / or other vestibules for containing faeces or vomit should be readily available as well as a plentiful supply of disinfectants and soap
d) Appropriate solid waste collection and disposal mechanisms including separate safe disposal for medical and infectious waste through incineration or disposal in sealed pits and safe disposal of sharps

A sanitation mapping commissioned by the Climate Smart Rural Water and Sanitation Project presented the following inventory of sanitation facilities in public places (Table 13)

Table 13: Inventory of Sanitation Facilities in Public Places

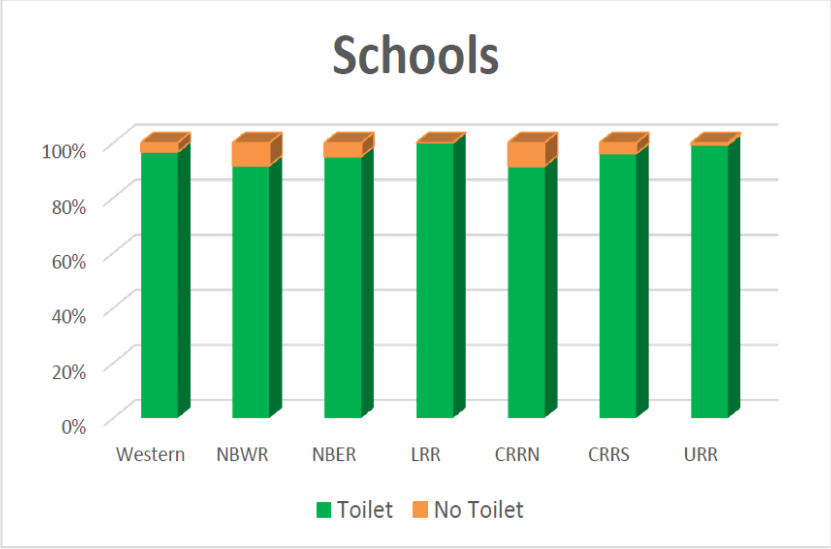
Regions	Number of sanitation facilities in Public Places by Region					
	Health Centers	Markets	Schools	Workshop Centers	Others	Total
Banjul Municipality	5	7	22	Not assessed	14	48
Kanifing Municipality	82	39	280	178	85	664
West Coast Region	76	33	241	195	134	679
Lower River Region	26	6	72	46	30	180
North Bank Region	56	16	153	92	109	426
Central River Region (S)	27	5	66	49	20	167
Central River Region (N)	16	4	38	28	34	120
Upper River Region	67	8	182	93	25	375
Grand	355	118	1,054	681	451	2,659

This study assessed sanitation conditions in a number of sample public places: schools (16), health facilities (16), regular market places (8), weekly "loomo" markets and agricultural "sandika" markets (7), and places of worship (13). As stated above, the study focused on availability of functional latrine at the facilities, drainage system for collection and disposal of waste and storm water; as well as assessing availability of hand washing facilities and other personal protective equipment in assessing the sanitation and hygiene conditions. Generally, the teams found sanitation and hygiene conditions better in schools and health centres than other public places.

a) Sanitation and Hygiene in Schools

Literatures classified that over 80% of schools are ODF (figure 38)[51] with the high access to latrine facilities, irrespective of size of schools in relation to the number of such facilities located on the premises. The team further realised that access to a latrine is not defined as improved or unimproved in line with the WASH Sector definitions.

Figure 36: ODF percentage in schools' in each region



Source of Data: UNICEF CO, 2021

This assessment focused on the existence of basic sanitation facilities in schools that are with improved sex-separated latrines on the premises (with water available at the time of the visit), which are usable (functional, accessible and private). The team was also critical on the application of internationally accepted standard for pupil-latrine ratio of 25 girls per latrine hole and 50 boys per latrine cubicle. Data from this assessment presented the following highlights of findings:

- All the 16 schools visited have latrine facilities on the premises or about 60 meters away, but with an average 130 boys per latrine and 115 girls per latrine (while the internationally accepted standard for pupil to latrine ratio is 25 girls per latrine and 50 boys per latrine).
- About 80% of the latrine facilities visited were unhygienic and are gradually dilapidating
- Distance of toilets from classroom are approximately 40-50 meters, and some latrines are located outside the school premises.
- 80% of latrines facilities visited do not have hand-washing facilities, and students have to come along with water for use at the toilet or use latrine without water.
- Only 1 out of 16 schools visited have a disability-user-friendly latrine

WASH packages provided by UNICEF, Red Cross and other actors to enable schools set-up hand washing facilities/stations in response to COVID-19. However, the team found such facilities in only three schools, and it was noticed that the facilities were without soap and water (have not been re-filled), and in used for some time (probably for many months).

[51] Consultancy Services to Mobile Data Collection and GIS Mapping of WASH Facilities and ODF Communities in The Gambia, UNICEF, 2021

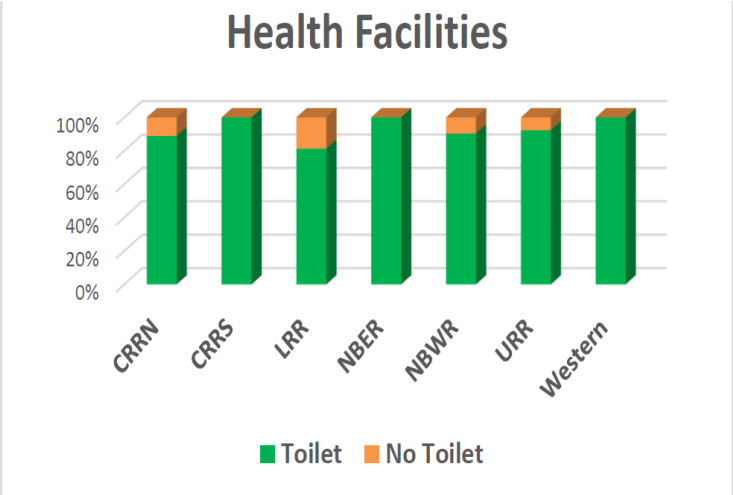
Urban Solid Waste Management (SWM) in almost all the schools visited were totally inadequate and is potentially resulting to some public health concerns. Waste collection services are not adequately provided, thus resulting in the creation of informal waste dumps in the schools. In addition, where selected waste disposal sites exist, there are no operational management and environmental protection measures. Waste heaps are usually burnt in and around the premises of those schools visited, exposing students to inhaling smug and smoke, and consequently risking them to respiratory diseases.

b) Sanitation and Hygiene in Health Facilities

Effective sanitation in health facilities is essential to ensure a healthy environment with good infection control. As health facilities are the places where people who are sick go to be treated, cleanliness and infection control is critical. This assessment examined the following key elements to determine the status of the 16 health facilities visited:

- Established governance systems for the management and operation and maintenance of the sanitation facilities, particularly the cleanliness of latrines and keeping hand-washing facilities functioning
- Latrines for patients and staff (separate if possible) with functioning hand-washing facilities with soap and good drainage, which must be accessible to people with disabilities or people with limited mobility
- Appropriate solid waste collection and disposal mechanisms including separate safe disposal for medical and infectious waste through incineration or disposal in sealed pits and safe disposal of sharps
- Availability of appropriate IEC materials and tools to promote hygiene education

Figure39: ODF percentage in health facilities in each region



Source of Data: UNICEF CO, 2021

All the 16 health facilities visited have latrine facilities, but without functioning hand-washing facilities with soap and good drainage. Uptake of the facilities were found very high. Nonetheless, nine (out of 16 health facilities) lacks basic sanitation services due to poor latrine conditions in use. There are no sex separated toilet with menstrual hygiene facilities; and almost all the health centres lacks latrine facilities that are user-friendly for people with limited mobility. However, current measurable indicator for access to basic sanitation used in The Gambia is the presence of improved latrine facility on the premises under assessment. Figure 39[52] depict the percentage of OD/ODF in regions for health facilities and schools.

[52] Consultancy Services to Mobile Data Collection and GIS Mapping of WASH Facilities and ODF Communities in The Gambia, UNICEF, 2021

All the health facilities visited do not have functional incinerators, even though the standards require every health facility to have a functional incinerator. The health facilities mainly rely on burning pits for disposing off medical waste. While burning pits can perform this function effectively, the pits could be saturated/flooded with surface runoff or ground water during the rainy season, making them unusable.

4. CONCLUSION AND WAY FORWARD

This review measured not only the immediate impacts[53] of the sector, but also sought to gain insight into more intermediate impacts[54] that the sector may have. Immediate impact indicator categories included: increased and equitable access to safe drinking water and sanitation facilities, processes and systems in place to maintain WASH facilities and services, uptake of WASH facilities and services provided and people taking action to reduce public health risks.

4.1. Progress on WASH Service Delivery and Challenges

Overall, The Gambia has recorded a mixed performance on progress towards the SDG water targets. The country has exceeded in meeting the MDG on access to water sources (by 88% in 2015), and progressing on SDG 6 (universal access). According to The Gambia Demographic and Health Survey (GDHS) 2019/20, 95% of households have access to improved drinking water sources (piped water, public taps, standpipes, tube wells, boreholes, protected dug wells, and bottled water), with access being similar among urban (96%) and rural (92%) households. The percentage of households using an improved source of drinking water increased slightly from 91% in 2013 to 95% in 2019-20. This study further found piped-borne water as the most common source for urban households, while rural households obtain drinking water mainly from public tap/standpipe (55%) or tube well/borehole (19%).

GDHS, 2019/20 further showed that 72% of households use improved sanitation facilities [flush/pour flush toilets, pit latrine; ventilated improved pit (VIP) latrines; pit latrines with slabs, etc] although use of such facilities is higher in urban (80%) than rural (44%) areas, where the majority of households (54%) use unimproved sanitation facilities. Also, by residence, 59% of the population in urban areas has basic sanitation service, as compared with 32% of the rural population. Although, nationally only 1% of the population engages in open defecation, 10% of rural populations (especially in CRR-N)) are still practicing OD.

Inadequate safe-water supply, poor sanitation and lack of hand-washing facilities (with soap) in schools, health care facilities, and public places remains a challenge. In spite of 84% of primary schools having WASH facilities that met national standards, significant disparities exist between the urban and rural schools. Ensuring provision of gender separated facilities that meet the specific needs for girls remains a key focus for the sector. Water quality in The Gambia is also of great concern, as 45.3% of the water sources are contaminated with E.coli, and 73.2% of the household population had E. coli in household drinking water[55]

4.1.1 The Overall Governance: Policy, Legal and Programmatic Framework

The water supply and sanitation sector has been evolving gradually in the last two decades, in response to rising demand of the increasing population, as well as challenges of maintaining sector related infrastructure constructed as a response to the changing climate. The sector has progressed on the overall legal frameworks with the formulation of the National Water Resources Policy in 2006, Revised National Policy for Sanitation and Hygiene (January, 2020), The Gambia National Strategy for Sanitation and Hygiene (2020 – 2022) and The Gambia National Strategy for Urban Sanitation (January 2020); and is now facing the challenges of operationalizing the instruments for service regulation, and service provision, as well as for integrated approach to water resource management.

[53] Short-to-medium term impacts that project may achieve, as defined by the national SDG framework

[54] Longer-term impacts that the project may achieve, that go beyond the specified national SDG goals and targets.

[55] UNICEF, 2021

The new frameworks call for institutional restructuring in order to harmonise and regulate the fragmented governance of the sector. Any delay in implementing these and other reforms would continue to hamper the sector's development. The team found the revised sanitation policy and strategy comprehensive enough for programming and achieving the sanitation-related SDG and plans for the urban WASH subsector. The frameworks prescribe comprehensive capacity development for National Level WASH Sector Coordination - but they are yet to be operationalized. As a result, sanitation continues to be fragmented among different agencies, with little coordination.

It is expected that the reforms will create the needed enabling environment for improved service delivery both in terms of quantity and quality. The Gambia's challenge is to implement the reforms by undertaking the necessary institutional restructuring to further clarify roles and responsibilities, whilst at the same time significantly scaling up resources and systems for better delivery of services. The sector would need adequate resources and capacity to implement a truly Government-led sector coordination and planning framework.

4.1.2 Sector Financing and Planning

It is presently difficult to get an accurate overview of WASH planning and funding, since Government funding for WASH is an integral part of Ministerial allocations, and not easily identified e.g. separate funding or cost-centre for sanitation, water, school WASH etc. Information on Development Partner funding is likewise mostly not separated in the same sub-sectors and often projects cover integrated WASH activities and therefore not easy to identify e.g. funding for rural water vs rural sanitation. NGO partners with own funding from multinational organisations are often reluctant to reveal budgets and actual expenditures.

However, Government financial allocation to the sector is still low with the bulk of investment funds coming from donors. Estimates of investment requirements suggest that additional funding will be required for capital investment, particularly rehabilitation of existing facilities. For sanitation, there is no official policy on cost sharing, though there is an implicit assumption that households will meet hardware costs for on-site sanitation but not for sewerage. This underscores the need for an improved promotion and marketing program to encourage households to invest in sanitation as well as a reassessment of the equity of publicly funded sewerage.

The planning cycle of Development Partners and NGOs can be different from the Government financial years and therefore the funding and expenditure figures are not comparable for the same timeframes. Despite all these difficulties, this 2020/21 Sector Performance Review (SPR) attempts to provide an overview of the WASH funding. The estimated overall funding is US$7.83 million (external) and US$0.3 million (Government allocation) for 2018 with the majority, about 96% is from Development Partners. In conclusion, the present planning is dis-jointed with many implementers doing their own planning without adequate coordination at national and regional levels - and without reporting on physical and financial progress. Achieving the SDGs will need coordination and comprehensive effort by all partners including openness and transparency in the planning and reporting on financial aspects. It will need increased funding but most of all it will require improved effectiveness in the service delivery

The Gambia lacks a comprehensive overall water supply and sanitation sector development programme — this makes it difficult to establish sector investment priorities and ensure better coordination with donors. There is also no structured mechanism for sector monitoring and performance evaluation.

It is expected that the introduction of Sector Wide Approach (SWAp) as already proposed by the government will help address some of these constraints. In addition, coordination, disbursement, and expenditure of finance can still be improved to make the most of government and donor allocations to the sector.

4.1.3 Monitoring Evaluation and Learning (MEL)

As part of its programming, the sector developed a monitoring, evaluation and learning (MEL) framework housed at the Department of Water Resources (DWR) to provide a structured means of ensuring accountability to the WASH stakeholders, as well as the opportunity for management decision making. The MEL framework seeks to support partners to improve the project outcomes and efficiencies by producing information to support decision making, draw lessons and share information. However, the WASH sector's M&E system is very much focused around projects and has yet to be developed into an integrated sector-wide system.

The M&E system includes the existence of an annual review mechanism for the monitoring of output and consistency of household surveys in monitoring water supply and sanitation outcomes. The team found that this is the first annual WASH sector performance review.

Perhaps the overall sector performance as reported in literatures is partly due to the absence of a sector review mechanism at the national level for providing analysis, strategic direction, and accountability. Reviews of expenditure against commitments or nationally consolidated output reporting are very rare. Individual projects have their own monitoring arrangements, but emphasis are placed on supervision rather than monitoring and evaluation, as the first step in the sequence. Progress has been made on the input/output levels, but there are no performance indicators to monitor sector performance as a whole.

A sector development plan emphasizing M&E will need to be developed and capacities strengthened for effective M&E of ongoing and future projects and programmes. UNICEF, a key partner to the sector provided substantial support to strengthen the monitoring system that could potentially be scaled up to cover the entire country. The team is not convinced that the DWR is maintaining a regularly updated database on water facilities nor does the Department for Community Development have a database on sanitary facilities to aid determination of coverage. However, the Ministry of Health is privileged with adequate information on sanitation and hygiene subsectors. As a private company, the NAWEC has its own mechanism for annual performance reviews. However, these reviews are guided mostly by commercial considerations.

4.1.4 Equitable Utilization of WASH Facilities and Services

The sector programmes encouraged communities to participate in the development of their water and sanitation systems, and hygiene promotion. This study found the sector reaching marginalized families in remote rural communities. It demonstrated scalable models of integrated approach to WASH as a right. The Gambia's approach to implement CLTS was effective, and this encouraged popular uptake of latrine facilities and reduced open defecation in the communities. Links and exchanges between WATSAN committees, which were positively encouraged provided the opportunity to maximise learning and increase synergy in hygiene promotion among them.

While progress is made on access to water, high population growth rate and urbanization has weakened the ability of water and sanitation services to keep pace with demand. Poor maintenance culture of water systems further complicates this. Other factors include inadequate investment and funding; weak institutional capacities and poor coordination and low hygiene and sanitation practices. The proportion of the population with access to pipe borne drinking water increased in urban areas, but the gap in access to safe drinking water in the rural areas is still a concern. Furthermore, national coverage for improved sanitation has dropped and per capita waste generation outweighs the capacity of the municipal councils resulting in severe challenges in waste management.

Functionality and seasonality of some water points due to the changing climate are serious and growing problems for rural water services. Water sources based on shallow groundwater are increasingly not providing water year-round; and the functionality of such water facilities needs attention. Additional focus is needed on capacity building for community management and private sector maintenance services. The on-going water point mapping will present a comprehensive picture of rural water source functionality.

The urban slums seems to remain the "forgotten middle" – and there are challenges with the management and the sustainability of WASH service provision in these settlements. The sector is dealing with many of the same challenges in rural towns; and there seems to be need for development of a comprehensive programme and investment plan for urban slums WASH programming. Improvements are needed in monitoring and reporting from the many implementers as well as from the Regions for the sector to be able to accurately monitor progress including unit costs and implementation efficiencies.

4.1.5 Sustaining Water and Sanitation Services, and Good Hygiene Behaviour

Sustainability of services could be ensured through social marketing and community participation in all aspects of the sector, and communities and their WATSAN Committees have to demonstrate their willingness and ability to sustain the facilities. While substantial impact has been achieved, it is absolutely clear that there is a great amount of work required in sustaining the achievements. Healthy hygiene behaviours, environmental sanitation and safe-water chain are somehow shown, but a lot more thinking and innovative initiatives are essential to consolidate the gains so far. On-going attention, capacity building and input to this area are required. The gains may slip through the net and there can be a "roll-back", if efforts are left hanging. Adequate coordination and collaboration among key actors, with a premium placed on proper community participation is integral to sustainable community-based WASH services.

4.2. Summary of Recommendations

This assessment aims to provide a comprehensive analysis of the service delivery pathways of safe water supply and sanitation services in each of four subsectors: rural and urban water supply, and rural and urban sanitation and hygiene. This section pulls together critical assessments from the review to reflect on the key results areas of the sector based on its initial indicators, targets and assumptions. By the National Development Framework (NDP – 2018 to 2021) the sector intends to focus on building institutional and human resource capacity for increasing WASH services to the unserved and maintaining existing services; create and track specific budgets for sanitation; improve monitoring and establish national WASH Management Information Systems; scale-up community based sanitation programs in priority districts for elimination of open defecation, improve WASH in schools, health and nutrition and encourage multi-stakeholder participation in decision making around WASH, through consultation with users and regular reviews.

The following emerging issues were found inhibiting the realisation of these laudable objectives:

Table 3: Key emerging issues and recommendations

Emerging issues	Recommendations
Good sector governance	
(i) Tardy implementation of sector reforms and restructuring	Implement sector institutional restructuring in order to harmonise and regulate the fragmented governance of the sector.
(ii) Weak inter-agency coordination, thus weak enforcement and regulation of policies and regulatory frameworks	MoWR should seek to improve institutional coordination and collaboration with MoH and other partners delivering on their mandates in harmony; define institutional roles and responsibilities.
(iii) Inadequate human resource capacity coupled with lack of skills to implement the undertakings	MoWR to engage on capacity building and recruitment of technically competent staff to complement the existing human resource;
(iv) Limited financing mechanisms to support implementation of existing policy frameworks	MoWR & MoH, through the different department and agencies scale- up resource mobilization through proposal developments. International climate financing opportunities (i.e. Adaptation and the Green Climate Fund) may interesting targets
(v) Inadequate programme M&E to inform the management information systems (MIS)	Institutionalise the annual sector performance review: Emphasize monitoring and evaluation of subsector performance; Enhance adoption of needs-based investment planning.
(vi) Insufficient budget allocation to Local Governments & Municipal Councils to implement their mandate. This limits their capacity to implement existing policy frameworks thus poor extension service delivery, weak supervision, monitoring and enforcement	a) With support from CSOs, MoWR should lobby for increased budget allocation to the WASH sector. This should involve exploring various finance mechanisms for the sector; b) MoWR & MoH should lobby for WASH subvention for Regional Local Government Authorities and Municipal Councils to implement existing policy frameworks for rural water supply and sanitation
Fast-track rural water supply for universal access to safe water	
(i) Low capacity of Local Government Authorities in the WASH sector	Develop Local Government Area capacity to assume overall responsibility and better manage provision of water supply facilities in rural communities.
(ii) Poor subsector coordination at Regional and implementation level	Improve subsector coordination and investment planning, and implement measures for periodic (annual) reviews alongside increased subsector funding.
(iii) Coverage/access to water sources is high but poor database on functionality of water points	Enhance targeting of rural water supply investments by developing and implementing a database to monitor coverage/functionality of rural water supply systems.
(iv) Poor maintenance culture water points in rural areas	Build private sector capacity and enhance greater private sector participation in the development, repair, and maintenance of water supply facilities.
(v) Limited contribution in the management and maintenance of village water points (especially, the hand pumps)	Promote greater sensitization for full community ownership of facilities and standardize technologies to facilitate availability of spare parts.
Urban water supply	
(i) Limited access to safe water in communities living in urban slums	Adopt a Sector-Wide Approach for subsector development and to improve subsector coordination.
(ii) NAWEC is still unable to meet the demand for urban water supply due to the increasing urbanisation and long hours of interruption of water supply	a) Increase coverage by increasing connections, especially in urban slums; b) develop a clear pro-poor strategy to facilitate access for the poor including adoption of budget allocation criteria for equitable distribution of available resources.

Emerging issues	Recommendations
Urban sanitation and hygiene	
(i) Sanitation and hygiene seems not to be getting the desired policy attention and response	Complete adoption of the national sanitation policy and implementation strategy, ensuring that they enhance sanitation and hygiene promotion.
(ii) Urban sanitation characterized by poor solid, liquid and industrial waste management	a) Develop decentralized low cost sewerage options in smaller urban centers; b) implement policy provisions regarding institutional roles and responsibilities.
Rural sanitation and hygiene	
(i) The low sanitation status of many local communities is a major contributor to morbidity among the populations	Enhance adoption of corporate governance principles and raise funds from domestic and external sources for increased subsector funding - rural sanitation and hygiene

ANNEXES

Annex 1 - Evaluation Matrix: WASH Sector Performance Review 2020/21

Dimensions of Analysis	Lines of Inquiry	Indicators	Data Sources	Data Collection Techniques
Evaluation Question 1: To what extent has WASH sector met people's needs as well as national and international targets?				
1.1 To what extent has WASH sector facilitated access to improved water supply and sanitation services?				
1.1.1 Sustainable access to safe drinking water and sanitation infrastructure and services, and hygiene	The extent to which service providers met national and international targets on access and uptake of safe drinking water and sanitation facilities	• Number of water points and sanitation facilities per technology by actor and by location • Number of communities per location, district and region with access to safe drinking water and sanitation facilities • Number of safe water points and sanitation facilities provided per com by district & region • Number of health facilities and schools having access to basic WASH services • Number of WASH facilities in Health Centres per location, district and region. • Number of WASH facilities in Schools per location, district and region. • Functionality of water supply points & uptake of sanitation services	• Government: MFWR, PMU-Project Coordinator, DWR; MoLG-LGAs, MoH – Directorate of Health Promotion & Edu DCD, MoBSE, GBoS • State Owned Enterprise: PURA, NAWEC, • Donors: AfDB, ADF, WB, EC, • UN Country Team: UNICEF, UNDP, WHO • Civil society and NGOs: GRCS, ADWAC, NACOFAG, AAI, FIOH, Africa Muslim Agency, *Gambia Islamic Union* Gamworks, ADRA, WSDA, etc. • National Development Plan, • AfDB - Africa Info Highway, IPRs, JMP Reports, MICSV, IPRs	Individual semi-structured interviews Document review Observation
1.1.2 Sustainable access to safe drinking water supply	The extent to which sustainable access to safe drinking water supply have been achieved by 2020/2021	• Number of people gaining access to a basic drinking water service.	• Government: MoBSE, MoH, Schools, Health Centres, Gamworks,	Document review Key Informant Interviews Observations/FGDs

Dimensions of Analysis	Lines of Inquiry	Indicators	Data Sources	Data Collection Techniques
		• Number of people gaining access to a safely managed drinking water service. • Number of people receiving quality services from safely managed drinking water services	• Civil society and NGOs: GRCS, ADWAC, NACOFAG, AAI, FIOH, Africa Muslim Agency, ADRA, WSDA, • CBOs: SMCs, VDCs & Women's Groups	Household surveys
1.1.3 Sustainable access and use of sanitation services	The extent to which sustainable access to sanitation services have been achieved by 2020/2021	• Number of communities certified as open defecation free (ODF) • Number of people gaining access to basic sanitation services • Number of people gaining access to safely managed sanitation services • Number of basic sanitation facilities provided in health facilities and schools • Percentage of households with soap and water at a hand-washing station on premises. • Number of people receiving improved and quality sanitation services.	• Government: Regional PH Offices • LGA Councils and Municipalities • Civil society and NGOs: GRCS, ADWAC, NACOFAG, AAI, FIOH, Africa Muslim Agency, Gamworks, ADRA, WSDA, etc. • CBOs: School Committees, VDCs, Women's Groups, Mother's clubs • Households' surveys	Document review Key Informant Interviews Observations/FGDs Household surveys
1.2 To what extent are current WASH programmes aligned to national policies, plans, strategies and goals, including achievement of national Sustainable Development Goals?				
1.2.1 Alignment to national frameworks & SDGs	The extent to which quality of WASH sector services (and technologies) were aligned with Government SDG goals and targets The extent to which the WASH sector is aligned with the national policies and strategies	• Capacity & quality of points matching the prescribed standards of NDP and national SDG goals and targets • Quality of technology used aligned to the prescribed standards of national frameworks	• Government: MFWR, PMU-Project Coordinator, DWR; • Civil society and NGOs: GRCS, ADWAC, NACOFAG, AAI, FIOH, Africa Muslim Agency, Gamworks, ADRA, WSDA, etc.	Document review Semi-structured interviews FGDs and observations
2. To what extent have sector programmes remained relevant in light of changing environment and climate, national capacities and needs?				
2.1 To what extent are the achievements in the WASH sector likely to be sustained with the changing climate?				

Dimensions of Analysis	Lines of Inquiry	Indicators	Data Sources	Data Collection Techniques
2.1.1 Climate change resilience WASH infrastructure	The extent to which the changing climate threatening the sustainability and quality WASH infrastructure	• Degree of climate change impact on WASH infrastructure • Degree of climate change effects on quality of water in water-points, by type and location • Number of water points affected by climate change, by technology type & quality of water	• Government: PMU-Project Coordinator, DWR; • CBOs: School Committees, VDCs, Women's Groups, Mother's clubs • Households' surveys • IPRs, JMP Reports, MICSV, IPRs	Document review Semi-structured interviews FGDs and observations
2.2 To what extent has the WASH sector contribute to the achievement of cross-cutting aims (climate change adaptation, gender and other equity considerations)?				
2.2.1 Relevance of current WASH programmes to the identified needs of vulnerable groups	The extent to which the needs of the most vulnerable, including disabled, were appropriately assessed by the WASH sector	• Appropriateness of WASH infrastructure to: - Gender sensitivity - Disabled groups of society - Resilience to climate change - Emergency response - Corresponding national capacity	• Government: Government: MFWR, PMU-Project Coordinator, DWR; • Cooperating partners: DCD, ADWAC, AAI, WASDA, Schools, Health Centres • Households, Women's Groups • MICS, GDHS, ODF protocols & guidelines • WASH in The Gambia, HBS-WASH Gambia Case study, CSRWASHDEP Pro. App. Report, ESMF-CSRWASHDEP	Individual semi-structure interviews Focus Group discussion KII, H/H surveys Case studies Document review
3. To what extent has the WASH sector mobilize the resources (human and financial) and used such resources efficiently in sustainable WASH service delivery?				
3.1 To what extent is the current WASH sector delivering on Integrated Water Resources Management (IWRM) Approach?				

Dimensions of Analysis	Lines of Inquiry	Indicators	Data Sources	Data Collection Techniques
3,1,1 WASH Sector Governance	The extent to which the WASH sector is able to mainstream integrated management of water resources	• Number of water and sanitation sector institutions strengthened to implement IWRM and sanitation services • Existence of political will and sound policy environment to implement IWRM and sanitation services • Effectiveness of cross-sectoral and multilevel coordination and stakeholder involvement in IWRM and sanitation services • Number of people benefiting from the adoption and implementation of IWRM	• Government: Government: PMU-Project Coordinator, DWR; • WASH partners: DCD, ADWAC, AAI, WASDA, • Households, Women's Groups • MICS, GDHS, ODF protocols & guidelines • WASH in The Gambia, HBS-WASH Gambia Case study, CSRWASHDEP Pro. App. Report, ESMF-CSRWASH	Individual semi-structure interviews FGD, Key Informant Interviews Household surveys Document review
To what extent has Government been able to mobilize adequate, predictable and flexible resources to finance the WASH sector?				
3.2.1 WASH Sector Financing	Value of funding mobilized for the development of water and sanitation sectors	• Total annual budget for WASH investment • Annual budget for recurring costs • Donor financing for WASH infrastructure and ongoing costs of management.	• Government: MFWR, PMU-Project Coordinator, DWR; MoLG-LGAs, MoH – Directorate of Health Promotion & Edu DCD, MoBSE, GBoS • State Owned Enterprise: PURA, NAWEC, • Donors: AfDB, ADF, WB, EC, • UN Country Team: UNICEF, UNDP, WHO • Civil society and NGOs: GRCS, ADWAC, NACOFAG, AAI, FIOH, Africa Muslim Agency, *Gambia Islamic Union* Gamworks, ADRA, WSDA, etc.	Document review Individual semi-structure interviews
4: What were the factors that explain WASH performance and the extent to which it has achieve the desired goals (e.g., National Sustainable Development Goal 6)				

Dimensions of Analysis	Lines of Inquiry	Indicators	Data Sources	Data Collection Techniques
4.1 To what extent did the WASH sector engaged in partnerships and collaborations with other actors that positively influenced performance and results?				
4.1.1 Appropriateness of the geographical and beneficiary targeting to the needs identified	The extent to which the WASH sector provided greater flexibility in dynamic operational contexts The extent to which the WASH sector catered for the identified needs of the most vulnerable, including disabled	• The degree of geographic (especially rural) coverage to address the identified needs • Level of satisfaction of government and cooperating partners and beneficiaries on the coverage of the WASH sector • The degree of special efforts made to leave nobody behind (elderly, disabled, school girls?)	• Government: MFWR, PMU-Project Coordinator, DWR; MoLG-LGAs, MoH • Cooperating partners: DDF, ADWC, AVS, FWEGC, NRCRCS, AAI, TGBD, WSDA • Civil society and NGOs: GRCS, ADWAC, NACOFAG, AAI, FIOH, Africa Muslim Agency, *Gambia Islamic Union* Gamworks, ADRA, WSDA, etc.	Individual semi-structure interviews Focus Group discussion Case studies Literature review
4.2 What are the other factors that can explain WASH sector performance and the extent to which it has achieved the desired goals?				
4.2.1 Main changes in the national context	The extent to which the WASH sector remained relevant in the changing national context, capacities, and needs	• Main changes in the national context that affected WASH programme performance • The changing national policies and programme priorities • The degree of shifting donor priorities in relation to the WASH sector • Evolution of the political and institutional context and turn over in key institutions	• Government: MFWR, PMU-Project Coordinator, DWR; MoLG-LGAs, MoH • Cooperating partners: DDF, ADWC, AVS, FWEGC, NRCRCS, AAI, TGBD, WSDA • Civil society and NGOs: GRCS, ADWAC, NACOFAG, AAI, FIOH, Africa Muslim Agency, *Gambia Islamic Union* • Budget revisions and Country briefs	Individual semi-structure interviews Literature review

Dimensions of Analysis	Lines of Inquiry	Indicators	Data Sources	Data Collection Techniques
4.2.2 Gender	The extent to which gender equality and women empowerment objectives have been integrated into the WASH sector	• Level of mainstreaming of gender equality and women empowerment in the WASH sector • Specific activities aiming at promoting gender equality and women empowerment in the WASH sector.	• Government: MFWR, PMU-Project Coordinator, DWR; MoLG-LGAs, MoH • Civil society and NGOs: GRCS, ADWAC, NACOFAG, AAI, FIOH, Africa Muslim Agency	Individual semi-structure interviews Literature review
4.2.3 Environment	Extent to which potential effects of the changing environment on WASH sector	• Degree of integration of environment and its potential effects on the WASH sector • Level of integration of environment parameters in the WASH sector design • Stakeholder's perception of positive and negative effects of WASH sector implementation on the environment	• Coordinator, DWR; MoLG-LGAs, MoH • Civil society and NGOs: GRCS, ADWAC, NACOFAG, AAI, FIOH, Africa Muslim Agency • Regional and local government offices • Beneficiaries: Households, VDCs	Individual semi-structure interviews Literature review Focus Group discussion
4.2.4 Coordination mechanisms	Extent to which DWR has adequately participated and played a leading role in coordination mechanisms, providing a strong positioning to the department	• Level of participation and role played by DWR in sector coordination mechanisms • Perception of key stakeholders on the extent to which DWR is a key partner and has a clear added value	• Coordinator, DWR; MoLG-LGAs, MoH • Civil society and NGOs: GRCS, ADWAC, NACOFAG, AAI, FIOH, Africa Muslim Agency • Regional and local government offices • Beneficiaries: Households, VDCs	Individual semi-structure interviews Literature review

Annex 2: Key Water Projects Financed by Development Partners in The Country for the Past 20 Years

Funding Source	Project Name	Amount	Description	Period
Saudi Fund Saudi	Sahelian programme Phase 3	US$3 Million	Rural water supply and sanitation for target population of 100,000	2006-2009
Islamic Devt Bank	Water Supply and Sanitation Project	US$5.48 Million	100 water points in 4 divisions	2009-2012
EC/EDF-9	Rural Water Supply Sector Support Programme	Euro 6.8 Million	Rural and Peri Urban water supply and sanitation (wells, boreholes and solar systems)	2007-2011
EC / EDF-8 Rural	Regional Solar Programme phase II	Euro 2.08 Million	water supply(boreholes fitted with solar systems	2002 - 2009
JICA	Integrated Water Use Project Phase 2	US$ 7.256 Million	20 new solar powered water systems and converting 9 diesel powered systems to solar power	2005-2008
JICA	Integrated Water Use Project Phase 3	US$ 11.5 Million	15 new solar powered water system and converting 3 diesel powered system to solar powered	2009 - 2012
UNDESA	Managing Water and Energy Services for Poverty Eradication in Rural Gambia	US$ 2 Million	Expansion and Extension of Rural Water Supply Systems schemes to carter for horticultural activities in 5 villages	2004 - 2008
AfDB	Water Supply and Sanitation Study for The Gambia	UA 1.2 Million	Master Plan for Water Supply and Sanitation in major urban areas and detailed design for priority areas	2006-2008
AfDB	Rural Water Supply & Sanitation Project	UA 4.95 Million	22 new solar powered water system and Construction of pit latrines	2012-2015
AfDB/AWF	National Water Sector Reform Project of The Gambia	Euro 2 Million	Reform of the water sector in The Gambia	2011-2014
Saudi Fund Saudi	Sahelian Programme Phase 4	US$3 Million	Rural water supply and sanitation	2017-2020
AfDB	Climate Smart Rural Water Supply and Sanitation Project	UA 27.923 Million	144 new solar powered water system and Construction of pit latrines	2018-2023
JICA	Rural Water Supply Project Phase 4	US$ 16 Million	20 new solar powered water system	2021 - 2023

Annex 3 - Data Collection Tools

A. HOUSEHOLD QUESTIONNAIRE

My name is _____ and I am doing this work on behalf of Frame Consultants Ltd, DevEmerge Consultancy Ltd and Institute of Social Research and Development (ISRAD), to conduct WASH sector performance review. The key objective of Annual Sector Performance Review (ASPR) is to develop a national baseline report of the WASH sector as of 2020 and 2021. It is expected that combination of reviews and assessment of social, political, environmental, regulatory, or organizational mechanisms will be utilised to prepare a report that gives details of a baseline and the WASH sector performance during the period. We highly appreciate it if you could spare us some time in providing information related to your household in this survey. The information you provide will be used purely for informing and preparing the assessment report of WASH performance review in the Gambia. This will help to identify performance indicators and gaps related to water usage, management, sanitation and hygiene. You may withdraw from the study at any time and if there are questions that you would prefer not to answer then we respect your right not to answer them. You rest assured that your name and information provided will be strictly confidential for this assessment.

Do you consent to participate? Yes/no

GENERAL INFORMATION

1. Date of Survey (DD/MM/Y)----------
2. Time of Starting Interview----------
3. Supervisor name ----------
4. Region----------
5. District----------
6. Village/Town----------
7. Type: Urban Rural
8. GPS Coordinates----------
9. Interviewer Name----------
10. Questionnaire No.----------

N	Question	Choices
Section A: Socio demographics of Household		
A1	Gender of respondent	• Male • Female
A2	Is the respondent the head of this household?	• Yes • No
A3	If no, what is the gender of the head of household?	• Male • Female
A4	What is the educational level of the household head?	
A5	What is the main occupation of the household head?	
A6	Including yourself, how many people live in this household?	*Integer entry*
A7	Does ANY person have a disability or chronic illness that affects their ability to do everyday tasks?	• Yes • No • Don't know
A8	What is the age of this person?	*Integer entry*
A9	What is the gender of this person?	•
A10	Has this person had diarrhoea in the last 2 weeks?	• Yes • No • Don't know

N	Question	Choices
A11	If yes, what did you do? *Read out answers; select as many as apply*	• Take oral rehydration • Take medicine • Go to pharmacy • Go to health facility • Go to traditional healer • Pray • Other
Section B: Water		
B1	What is the primary source of drinking water for your household?	• Piped water tap/ tap stand into settlement site • Tube wells/borehole/handpump • Protected dug well • Rainwater collection • Bottled water • Cart with small tank or drum • Tanker truck • Unprotected dug well • Surface water (river, dam, lake, pond, stream canal, irrigation canals) • Do not know • Other
B2	Do you use a secondary or other source for drinking water?	• Yes • No
B3	If yes, what are the secondary/other sources of drinking water? *Multiple choice*	• Piped water tap/ tap stand into settlement site • Tube wells/borehole/handpump • Protected dug well • Rainwater collection • Bottled water • Cart with small tank or drum • Tanker truck • Unprotected dug well • Surface water (river, dam, lake, pond, stream canal, irrigation canals) • Do not know • Other
B4	What water sources does your household use for other purposes, such as cooking and cleaning?	• Piped water tap/ tap stand into settlement site; • Tube wells/borehole/handpump • Protected dug well • Rainwater collection • Bottled water • Cart with small tank or drum • Tanker truck • Unprotected dug well • Surface water (river, dam, lake, pond, stream canal,

N	Question	Choices
B5	Who normally collects water for the household?	• Adult male • Adult female • Child male • Child female • A neighbour helps • Other
B6	Does your household face problems in collecting water?	• Yes • No
B7	If yes, what are the problems? *Multiple choice*	• Long wait times (queue) at the source • Water source is too far • Path to water source is too steep • The source is only available some times of the day (trucking, water rationing, poor aquifer) • Going to the source/collecting water is dangerous • Water tastes bad • Water smells bad • Water does not look clean
B8	How is your access to water now compared to before the rainy season started?	• Much better • Better • No change • Worse • Much worse
B9	How satisfied are you with access to drinking water?	• Very satisfied • Satisfied • Unsatisfied • Very unsatisfied
B10	How long does it normally take to walk to and from the water source you normally use? (approximately)	• 5 minutes or less • 10 minutes • 15 minutes • 20 minutes • 30 minutes • More than 30 minutes
B11	How long does it normally take to collect water (including waiting time/queuing) at the water source you normally use? (approximately)	• 5 minutes or less • 10 minutes • 15 minutes • 20 minutes • 30 minutes • 1 hour • More than 1 hour • Other
Start of repeat group *Ask to see all the containers the household used to collect water yesterday. For each container, ask the following set of questions*		

N	Question	Choices
B12	What type of container is this?	*Select from list of images of common*
B13	For all containers, measure height [inches]	*Integer - Measure height*
B14	For all containers, measure width at widest point (Centimetres]	*Integer - Measure width*
B15	Is this container covered / protected (i.e., with a lid, plastic, plate)?	• Yes • No
B16	Does the container appear to be clean?	• Yes • No
B17	Is this container used to store water for drinking, water for other uses, or both? *Read out answers; select only one answer*	• Drinking water storage • Non-drinking water storage • Both
B18	How many times did your household collect water with this container yesterday?	*Integer entry*
B19	How long do you normally store water within your household?	• Less than one day • 1-2 days • 3-4 days • 5 days or more
B20	In the past month, have there been times when your household could not access enough drinking water?	• Yes • No
B21	If yes, what type of coping strategies did you use to deal with this?	• Rely on less preferred and unimproved/untreated water sources for drinking water • Rely on surface water for drinking water • Rely on less preferred and unimproved/untreated water sources for other purposes such as cooking and washing • Rely on surface water for other purposes such as cooking and washing • Fetch water at a source further than the usual one • Send children to fetch water • Fetch water at a source that could be dangerous • Other
B22	Does your household normally treat water before drinking?	• Yes • No
B23	If yes, how often?	• Always • Often • Sometimes • Never • Don't know

N	Question	Choices
B24	If yes, which methods do you use? *Read out answers; select as many as apply*	• Aquatabs • PUR sachets • Boiling • Add bleach / chlorine • Cloth filters • Use water filter (ceramic, sand, composite, etc) • Leave bottled water in the sun (solar disinfection) • Let it stand and settle • Other (*specify*)
B25	[If aqua-tabs not selected at B24] Why don't you use water purification tablets (aqua- tabs)?	• Don't know about aqua-tabs • Never received aqua-tabs • Don't know how to use aqua-tabs • Supply of aqua-tabs ran out • Tastes bad • Smells bad • Bad for health • Using aqua-tabs occasionally is sufficient • Forgot to use • Unsafe for pregnant women • Unsafe for children • Water from piped tap stand is already chlorinated • Other
Section C: Sanitation		
C1	What kind of toilet facility do members of your household **usually** use?	• Flush to septic tank • Flush to pit (latrine) • Flush to somewhere else • Flush to unknown place / Not sure / • DK where • Ventilated Improved Pit latrine (VIP) • Pit latrine with slab • Pit latrine without slab / Open pit • Bucket • No facility, Bush, Field
C2	Is this facility located within your dwelling yard or elsewhere?	• Attached to the household • Inside the household • Communal area • Other
C3	How many toilet facilities are there in this household?	

N	Question	Choices
C4	How long does it take to walk to and from the latrine you normally use? (approximately) *Read out answers; select only one answer*	• 5 minutes • 10 minutes • 15 minutes • 20 minutes • 30 minutes • More than 30 minutes
C5	Did the latrine you normally use have soap the last time you used it? *Read out answers; select only one answer*	• Yes • No • Don't know
C6	Do women have problems with accessing latrines?	• Yes • No
C7	If yes, what are the problems? *Do not prompt; select as many as apply*	• Latrine is too far away • Too many people using latrines • Latrine is not clean • Insufficient water at the latrines • Latrine is full • Bad smell/many flies • Open defecation around latrines • Not private (i.e., people can see inside) • No separation between men and women • Route to the latrine is not safe • Latrine is not safe • No lighting • There are ghosts • Animal attacks
C8	Do men have problems with accessing latrines?	• Yes • No
C9	If yes, what are the problems?	• Latrine is too far away • Too many people using latrines • Latrine is not clean • Insufficient water at the latrines • Latrine is full • Bad smell/many flies • Open defecation around latrines • Not private • No separation between men and women • Route to the latrine is not safe • Latrine is not safe • No lighting • There are ghosts • Animal attacks

N	Question	Choices
C10	How access to latrines is now compared to before the rainy season?	• Much better • Better • No change • Worse • Much worse
C11	Does anyone from your household feel unsafe using latrines?	• Yes • No
C12	If yes, which family members? *Read out answers; select as many as apply*	• Adult male • Adult female • Elderly male • Elderly female • Child male • Child female • Unsure • Other
C13	How satisfied are you with your access to latrines? *Read out answers; select only one answer*	• Very satisfied • Satisfied • Unsatisfied • Very unsatisfied
C14	If there are children under 5 who don't use the latrine what is done with their faeces? *Read out answers; select maximum 3*	• Open defecation • Collected, rinsed and disposed in latrine • Collected and put in latrine (not rinsed) • Collected and disposed in an open area • Collected and disposed inside the shelter
C15	Where does your household normally dispose of domestic waste?	• Household pit • Communal pit • Bin in the households/Streets • Designated open area • Undesignated open area • Bury it • Burned • Other
C16	How frequently do you find domestic waste in the vicinity of your household (30 meters or less)?	• Always • Often • Sometimes • Never • Don't know

N	Question	Choices
C17	Who is normally responsible for disposing of solid waste within your household?	• Adult male • Adult female • Elderly male • Elderly female • Child male • Child female • Unsure/ • Other
C18	How satisfied are you with the solid waste management system in your block?	• Very satisfied • Satisfied • Unsatisfied • Very unsatisfied
C19	How frequently do you find visible faeces in the vicinity of your household (30 meters or less)?	• Always • Often • Sometimes • Never • Don't know
C20	How frequently do you find domestic waste in the vicinity of your household (30 meters or less)?	• Always • Often • Sometimes • Never • Don't know
SECTION D: Hygiene		
D1	Where do you normally change menstrual hygiene materials?	• In the household • In the household latrine • In the communal latrine • In the household bathing facility • In the communal bathing facility;
D2	Do you face challenges with accessing menstrual hygiene materials?	• Yes • No
D3	If yes, what challenges do you face?	• Not enough materials provided in distributions • Not enough available in markets • Preferred types not available • Too expensive • Other needs are prioritized • Other
D4	Apart from the materials you are using, are there any other types of menstrual hygiene management materials you would prefer to use?	• Disposable pad • Reusable pad • Piece of cloth • Tampon • Other • None

N	Question	Choices
D5	Has your household participated in any hygiene training or demonstrations in the past 2 weeks?	• Yes • No
D6	If yes, what was the topic(s)?	• Use of aqua-tabs • Safe water chain (collection, transport, storage and handling) • Hand washing with soap (how and when) • Cholera/Acute Watery Diarrhoea • Food Hygiene • Child handwashing • Disposal of household waste • Cleaning latrines • Disposal of child faeces • Menstrual hygiene
D7	Would your household like to participate in more training sessions or demonstrations?	• Yes • No
D8	What types of hygiene promotion training sessions or demonstrations would you like to receive?	• Use of aqua-tabs • Safe water chain (collection, transport, storage and handling) • Hand washing with soap (how and when) • Cholera/Acute Watery Diarrhoea • Food Hygiene • Child handwashing • Disposal of household waste • Cleaning latrines • Disposal of child faeces • Menstrual hygiene management
Overall satisfaction		
D11	How satisfied are you overall with water, sanitation and hygiene conditions within your household?	• Very satisfied • Satisfied • Unsatisfied • Very unsatisfied

B. Focus Group Discussion (FGD) checklist

IDENTIFICATION DATA				
Date of interview:				
Place of interview (region)				
Details of interviewees:				
NO	**NAME**	**TITLE**	**M/F**	**MOBILE**
1				
2				

1. About how many households are in your community?
2. About how many people are in your community?
3. Does your community have access to safe water source?
4. What is community's main source of drinking water?
5. Since when have you had a completed and functioning water system in your community?
6. Who installed/provided the water system?
7. About how many people normally collect water from the same source every day?
8. Is there adequate water at your water source throughout the day/year?
9. If "no", for how many hours a day is there water?
10. If "no", where do you get your water when the source is dry?
11. Do people in your community have easy and safe access to clean latrines/toilets?
12. About how many households have gained access to improved sanitation facilities?
13. What kind of toilet facility does your community have?
14. Are there households in your community that do not receive this sanitation?
15. If yes: What do these households use for sanitation?
16. If yes: Why don't these households receive these facilities?
17. Should you have the chance to decide on the type of a toilet facility, would you choose the same facility?
18. Do you have any suggestions regarding the use and management of your sanitary facility?
19. Has WASH sector integrated climate change in the way that contributes to the achievement of the desired program effectiveness and impact?
20. If so, what specific lessons can be learned for replication in similar programs and that can inform future sector programming in applying integration as a strategic program design?
21. Has WASH sector integrated sustainable resource management in the way that contributes to the achievement of the desired program effectiveness and impact?
22. If so, what specific lessons can be learned for replication in similar programs and that can inform future sector programming in applying integration as a strategic program design?
23. What extent has the WASH sector contribute to the achievement of cross-cutting aims (climate change adaptation, gender and other equity considerations)?
    a. Climate change adaptation
    b. Gender and other equity considerations
24. What extent are the achievements of the WASH sector likely to be sustained?
25. What extent has the wash sector mobilise the human resources?
26. How are the human resources efficiently used in sustainable WASH service delivery?
27. What extent has the wash sector mobilise the financial resources?
28. How are the financial resources efficiently used in sustainable WASH service delivery?
29. What extent is the current WASH sector delivering on Integrated Water Resources Management (IWRM) Approach?
30. What extent was coverage and targeting of WASH interventions appropriate?
31. what extent is available sector data (in terms of technology) used in providing up-to-date information on the current WASH situation
32. what extent has Government been able to mobilize adequate, predictable and flexible resources to finance the WASH sector?

33. what extent were alternative service delivery methods more cost-effective measures considered?
34. What were the factors that explain WASH performance to the desired goals (e.g., National Sustainable Development Goal 6)?
35. What extent to which WASH has achieve the desired goals (e.g., National Sustainable Development Goal 6)
36. What extent did the WASH sector engaged in partnerships and collaborations with other actors that positively influenced performance and results?
37. What extent did the WASH sector provide greater flexibility in dynamic operational contexts?
38. How did WASH operational contexts affects these results?
39. Comments or any other additional information

C. Key Informant Interviews (KII) Checklist

Region: _____ District/Province: _____ Name of interviewees: _____

Title.....

Organization: _____

Interviewer: _____Date of Assessment:

Name of Interpreter (If Applicable): _____

1. Can you briefly describe your work and area of responsibility?
2. Please tell me about water and sanitation programmes in your area/ region
3. Who are implementing the WASH programs?
4. What are your expectations from the WASH project?
5. What major challenges and constraints have the WASH project faced, and how can these be addressed to facilitate implementation?
6. Are local entrepreneurs showing interest in the new technology introduced by WASH project?
7. To what extent are stakeholders involved the in the planning and implementation of the project(s)? – (for WASH field staff)
8. What are the main changes you have noticed as a result of WASH implementation? (local authorities)
9. What changes / adjustments in the strategy and efforts will you suggest to improve project performance? (WASH staff)
10. To what extent has WASH facilitated access to improved water supply?
    - About how many people have gained access to improved drinking water sources (by community/ national/ region)?
    - What is the main source of drinking water for your community?
    - What is the main source of water for other uses in your community (Agric, washing, livestock, etc.)?
11. To what extent has the project increased access to adequate sanitation and hygiene facilities in the project area?
    - About how many people have gained access to improved sanitation (by community/ national/ region)?
    - About how many households have gained access to improve to sanitation facilities?
12. To what extent has WASH facilitated improved hygiene behaviours?
    - About how many people have gained access to improved sanitation (by community/ national/ region)?
    - About how many households have gained access to improved to sanitation facilities?
    - To what extent are the WASH beneficiaries aware of and adopt healthy sanitation and personal hygiene practices?
    - Has there been any type of training about sanitation, hygiene or use of water?
    - Is there a functioning water committee?
    - Are the technologies and new practices introduced or used by the project successful to attain the intended result?
13. Has WASH integrated other development activities (food security, climate change and sustainable resource management) in a way that contributes to the achievement of the program results and effectiveness of the program?
14. How has WASH contributed or likely to contribute to long-term social, economic, technical, environmental changes for the target group(s) and institutions
15. How has knowledge management improved as a result of WASH?
16. Have there been changes in WASH capacity within countries?
17. What is the likelihood of sustainability of key WASH investments, specifically the continued engagement of private sector partners?
18. To what extent has partnerships been sought and established in the delivery of the project?
19. Is there political support to implement and maintain the water supply and sanitation actions?
20. 4.a.iii) What is the level of community ownership, as reflected in their participation in planning, construction and management of water supply and sanitation facilities?
21. Are women taking advantage of the project's services?"
22. "What effect has the project had on the economic conditions of women?"
23. How effective is WASH project management, structure, consortium relationships and staff composition in terms of:
    - a). Communication and coordination?
    - b). The overall project management environment?
24. Are the technologies and new practices introduced or used by the project successful to attain the intended results?

Observatory Assessment of Water Supply Facilities in Five Rural Regions

1. **WEST COAST REGION**: Data Collectors: a) Kombo East District -Almameh Sanneh - Water Motivator; b) Foni Bondali District - Yusupha Manneh CDA

Region	District	Villages	Borehole		Taps		Hand pump		Protected dug well		Unprotected dug well		Remarks
			F	NF	F	NF	F	NF	F	NF	F	NF	
WCR	Kombo East	Kafuta Tumbung	1	0	30 (HH)	0	2	0	0	0	------	------	There are no protected dug well in these communities. There are local/ unprotected wells in many of the compounds in these villages but they are either abandoned or not used for drinking Communities complained of inadequate water supply. Piped water/taps connected to households but the majority do have such access
		Fuffa	1	0	6	0	1	0	0	0	------	------	
		Sanyengha	0	0	0	0	1	1	0	0	------	------	
		Amdalie	0	0	0	0	1	1	0	0	------	-------	
		Jiboro Kuta	0	1	0	7	1	1	0	0	-------	-------	
	Sub total		2	1	36	7	6	3	0	0	-------	-------	
	Foni Bondali	Bondali Tenda	1	0	5	0	1	0	0	0	3	0	The borehole is located in the school and two taps extended to the community. The only other source of water supply is a hand pump.
		Kalimu	0	0	0	0	2	0	0	0	2	0	A small settlement with eleven compounds with two hand pumps as the main source of water supply which is deemed to be inadequate.
		Bisari Madi	0	0	0	0	1	1	0	0	0	0	A cluster bore supported by DWR/WASH project currently under construction.
		Kalang	0	0	0	0	1	0	0	0	2	0	The women of the village are interested in vegetable gardening but are not able to do so due to inadequate water supply.
		Bantanjang	0	0	0	0	1	0	0	0	2	0	The people claim to have been suffering from insufficient water supply for quite a while. They also have concerns about the water quality because during the rainy season when the water table rises, it it contaminated by salt water.
		Sub total	1	0	5	0	6	1	0	0	9	0	
Total for WCR			3	1	41	7	12	4	0	0	9	-----	

2. NORTH BANK REGION: Data Collectors: a) Upper Badibu District - Lamin Marena CDA; b) Lower Niumi District: Sulayman Kruballey - CDA

Region	District	Villages	Borehole		Taps		Hand pump well		Protected dug well		Unprotected dug well		Remarks
			F	NF	F	NF	F	NF	F	NF	F	NF	
NBR	Upper Badibu	Taliya	1	0	4	0	0	1	0	0	1	0	
		Kerr Ndongo	1	0	5	0	0	1	0	0	0	0	Mini borehole
		Yallal Tankong Jala	1	0	20	0	1	0	0	0	0	0	
		Maka Farafenni	1	0	120	0	0	0	1	0	0	2	
		Kerr Sulay	1	0	15	0	1	0	0	0	0	1	Mini borehole
		Sub total	5	0	164	0	3	2	1	0	1	3	
	Lower Niumi	Medina Sotokoi/Sinchu Mutel	1	0	2	0	1	0	0	0	10	0	The borehole is new but capable of meeting the community's water needs Open wells not in good condition but functional.
		Wellingara	1	0	0	0	1	0	0	0	6	9	A private borehole not capable of meeting community water requirements.
		Kerr Jatta	0	0	0	0	0	1	0	0	6	0	Hand pump has a major breakdown and the community is not able to afford the maintenance cost.
		Kerr Galo	1	0	5	0	1	0	0	0	0	2	Community complained of inadequate water supply
		Lewna	5	1	0	3	1	1	0	0	5	4	Five of the boreholes are private and functional. The community borehole is not in good condition and slow in filling the overhead tank.
		Sub total	8	1	7	3	4	2	0	0	21	15	
Total for NBR			13	1	171	3	7	4	1	0	22	18	

3. CENTRAL RIVER REGION: Data Collectors: a) Lower Fuladu West- District - Yaya Jobe; Water Motivator; b) Niani District: Momodou Lamin Manneh Water Motivator

Region	District	Villages	Borehole		Taps		Hand pump well		Protected dug well		Unprotected dug well		Remarks
			F	NF	F	NF	F	NF	F	NF	F	NF	
CRR	Lower Fuladu West	Taifa	1	0	0	0	1	1	0	0	9	0	The borehole and hand pump has water quality issues. One hand pump not functional due to lack of spare parts.
		Boye Fulbeh	0	0	0	0	0	1	0	0	5	0	The hand pump has been removed due to lack of spare parts and being used as an open well.
		Sare Foresiri	0	0	0	0	1	0	0	0	1	0	
		Njie Kunda	0	0	0	0	1	0	0	0	1	0	Open well used only for laundry
		Murtabeh	0	0	0	0	2	0	0	0	7	0	
		Sub total	1	0	0	0	5	2	0	0	23	0	
	Niani	Sinchu Jatali	0	0	0	0	0	0	0	0	1	1	Water supply is grossly inadequate and the community pleads for at least one hand pump to ease the burden
		Pallang Toro	1	0	2	0	1	0	0	0	------	-------	There are local wells in almost all the compounds but not used for drinking
		Kuyara	0	0	0	0	1	0	0	0	5	0	Considering the possibility of fitting some of the local wells with hand pumps
		Ngunta	1	0	2	2	1	0	0	0	1	0	The hand-pump well, at 28 meters was considered to the slow and has since been transformed removed and used as an open well.
		Maka Saderr	0	1			1	0	0	0	-----	-----	Borehole provided by NeMA in a youth garden and currently has some maintenance issues. Capacity of the hand pump said to have diminished. There are local wells in almost all the compounds but not used for drinking
		Sub total	2	1	4	2	4	0	0	0	-----	-----	
Total for CRR			3	1	4	2	9	2	0	0	------	------	

4. UPPER RIVER REGION: Data Collectors: a) Tumana District - Omar Jarjue. Water Motivator; b) Wuli West District: Sainey Mackalo, Water Motivator

Region	District	Villages	Borehole		Taps		Hand pump well		Protected dug well		Unprotected dug well		Remarks
			F	NF	F	NF	F	NF	F	NF	F	NF	
URR	Tumana	Kunkandi	0	0	0	0	0	1	0	0	4	0	
		Njarjofa/Sare Yero Ba	0	1	0	0	0	0	0	0	1	0	A locally drilled bore hole fitted with three solar panels and a 5,000 litre plastic water tank. It has not been functional for almost a year. The villagers are not able to identify the actual problem with the system
		Busura Nyankuma	0	0	0	0	0	0	0	0	1	1	An old traditional open well is the only reliable source of water in the village and because of its depth, water is drawn by donkeys. The second well dries up frequently.
		Tenkoli	1	0	1	0	0	1	0	0	1	0	A private borehole in somebody's compound who extended one public stand tap in the centre of the village. Hence water supply is not adequate. The only hand pump well has not been functional for two years now due to lack of spare parts
		Sendebu	0	0	0	0	1	0	0	0	0	1	
		Sub total	1	1	1	0	1	2	0	0	7	2	
	Wuli West	Sareh Donfo	0	0	0	0	1	0	0	0	0	1	With only one hand pump well, water supply is inadequate for human and livestock consumption and community members take daily turns to fetch water.
		Sinchu Sura	1	0	0	0	0	0	0	0	1	0	A mini bore hole provided by a philanthropist. The well is concrete lined and dries up. A cording to the women and Alkalo water supply is inadequate. Due to the dire situation, they water their animals across the border in Senegal
		Sinchu Jolly/Jam jam Kolley	0	0	0	0	0	0	1	0	1	0	The protected well is fitted with a cylinder and connected to a tank with eleven taps, seven of which are functional and four are non-functional.

		Sareh Teneng	0	0	0	0	1	0	0	0	0	0	
		Sareh Daddy	0	0	0	0	0	0	0	0	1	0	The community has only one open concrete lined well and share the only hand pump in nearby Sareh Teneng.
		Sub total	1	0	0	0	2	0	1	0	3	1	
Total for URR			2	1	1	0	3	2	1	0	10	3	

5. **LOWER RIVER RERGION: a) Kina Central District:** Lamin Ceesay, Water Motivator; b) Jarra Central -

Region	District	Villages	Borehole		Taps		Hand pump well		Protected dug well		Unprotected dug well		Remarks
			F	NF	F	NF	F	NF	F	NF	F	NF	
LRR	Kiang Central	Bambako	0	1	-----	-----	1	0	0	0	1	0	
		Nema Kuta	0	0	0	0	1	2		0	2	0	Communities complains of serious shortage of water
		Kundong Fula Kunda	0	0	0	0	2	0	0	0	2	0	
		Bumari	1	0	6	0	0	2	0	0	----	----	Many of the compounds have open wells.
		Wudeba	0	0	0	0	0	0	2	0	-----	-----	
		Sub total	1	1	0	0	4	4	2	0	5	0	
	Jarra Central	Japinneh	1	0	35	0	0	0	0	0	----	----	Many of the compounds have open wells.
		Kanuma	0	1	-----	-----	1	0	0	0	-----	-----	
		Jobe Kunda	0	0	0	0	0	0	0	0	2	0	
		Kifaya	0	0	0	0	0	0	0	0	0	0	This community is described as facing serious water scarcity/crisis. The village does have any water supply facility of its own. Rather, is served by two stand taps extended from the nearby village of Sitahuma.
		Folloh	0	0	0	0	0	1	0	0	0	1	The hand pump has not functioned for many years. A single protected well is only source of water for the community
		Sub total	1	1	35	0	1	1	0	0	2	1	
Total for LRR			2	2	35	0	5	5	2	0	7	1	