



An IOM enumerator conducting household survey on cholera at Azizanya in Ada East District © IOM Ghana 2024

Overview

The cholera outbreak in West Africa has been a significant public health issue throughout 2024, affecting 16 countries in the region, including Ghana.

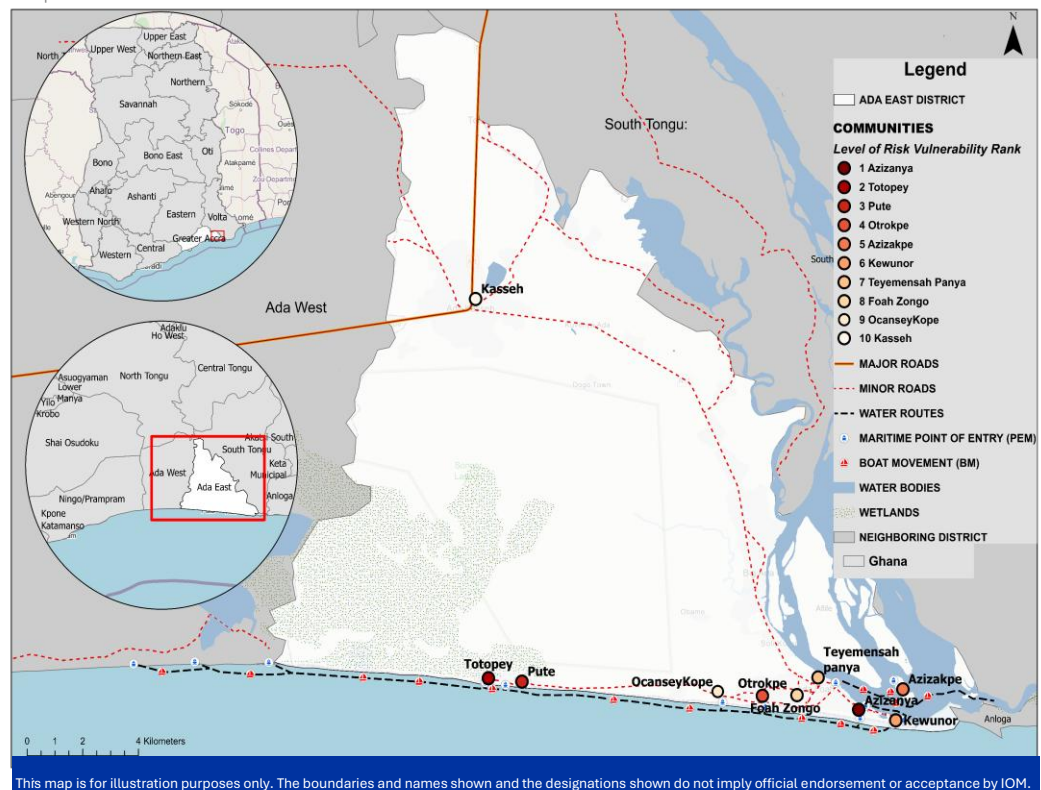
Ghana is currently experiencing severe cholera outbreak which started in late **August** 2024, in the Ada East district of the Greater Accra Region.

According to a report from the Ghana Health Service, as of 14 November 2024, there were 1,726 suspected cases in 32 districts, of which 131 have been confirmed, and 16 deaths have been reported. Most cases are concentrated in the Greater Accra region, with 68 confirmed cases.

The outbreak is worsened by climate-sensitive environments, socio-economic challenges, and complex human mobility patterns. This includes recent internal displacement due to the October 2023 floods around the Volta Basin in Ghana, the spillover of the Sahel crisis, and the economic importance of the Abidjan-Lagos corridor.

The main sources of water in the affected areas, such as unprotected wells, boreholes, lack of hygiene combined with open defecation, have contributed to the spread of the diseases.

Map 1. Vulnerable Locations for cholera in Ada East



This map is for illustration purposes only. The boundaries and names shown and the designations shown do not imply official endorsement or acceptance by IOM.

OBJECTIVES OF PMM

The Population Mobility Mapping (PMM) brings an understanding of mobility dynamics to add to classical approaches of assessing the spread of infectious diseases and risks to public health.

The purpose of the PMM is to provide epidemic preparedness and response actors with information to prevent the introduction or to limit the spread of the disease in the country and border countries.

The specific objectives are:

- ✓ Provide information on the dynamics and characteristics of mobility between the affected areas and the study area.
- ✓ Identify spaces of vulnerability and priority sites for public health measures.

To better understand the human mobility dynamics and public health risks and response to the cholera outbreak, IOM Ghana, under the Rapid Response Mechanism (RRM) in collaboration with the Ghana Health Service (GHS) and the National Disaster Management Organization (NADMO), conducted a one-week pilot of the population mobility mapping (PMM) from 16 to 21 December 2024, in 10 communities of the Ada East District; Pute, Totopey, Ocanseykope, Otrokpe, Azizanya, Azizakpe, Kewunor, Foah Zongo, Teyemensah Panya and Kasseh (Agbedekofi).

This report thus presents the results of the exercise and patterns to define priority sites where active surveillance and health risk reduction responses of cholera outbreak for vulnerable communities are most urgent and Adapt interventions to build the resilience of affected populations in the Ada East District of the Greater Accra region.

Methodology

IOM Population mobility mapping tool collects information from key informants through group discussions and site assessments. This tool is based on IOM's Displacement Tracking Matrix (DTM), anchored into IOM's Health Border and Mobility Management (HBMM) approach aimed to strengthen the prevention, detection and response to infectious diseases with epidemic potential and other health threats along the mobility continuums (points of departure, transit, destination and return). The current version is the result of a collaboration between IOM and WHO. The PMM thus consists of three linked components which are undertaken to inform public health emergency preparedness and response.



PARTICIPATORY MAPPING EXERCISES (PME)

This is a one-day facilitated group discussions with key informants, during which participants share their knowledge of mobility and spaces of vulnerability in relation to an area of interest through illustrations on a base map.



SITE EVALUATIONS

This is a one-day field visit to priority sites identified during the participatory mapping exercise, with the aim of verifying and collecting supplementary information through direct observations and key informant interviews on site.



QUANTITATIVE ASSESSMENT

This is a household survey conducted for a set number of days in the identified community with the objective of collecting data on population flows and mobility characteristics and needs of the affected community.

Participatory Mapping Exercise



To conduct the PME, 38 key informants (22 females, 16 males), were selected from the 10 communities by the GHS, NADMO, and the IOM. These individuals were chosen for their in-depth knowledge of the communities, population mobility patterns, and public health issues at local and regional levels. The informants represented diverse sectors, including the formal and informal economy, health and education sectors, local communities, and community leadership.

The exercise began with a presentation by the Ada East District health directorate of the GHS, outlining the cholera epidemic, measures taken, mobility-related risks, and the exercise's objectives. Key informants then mapped entry points, health services, mobility routes and congregation points, identifying areas where travelers and locals interact, highlighting potential disease transmission risks.

INTERNATIONAL ORGANIZATION FOR MIGRATION (IOM)

When quoting, paraphrasing, or in any way using the information mentioned in this report, the source needs to be stated appropriately as follows: "Source: Population Mobility Mapping for Cholera Response of the International Organization for Migration, Ghana Mission, February 2025".

For more information, please contact: iomaccra@iom.int, website: <https://iomghana.int>

Participants then selected priority sites for the implementation of public health measures based on the following criteria: volume of travellers, connections to areas affected by the epidemic and connections with other major localities in the district. Population mobility patterns and dynamics at these points were then characterized (main locations of departure and destination, modes of transport, etc.).

During the group session, questions were divided by health and non-health groups for discussions. This assisted to complete the risk identification and vulnerability evaluation tool in order to rank the top five most vulnerable communities to cholera outbreak.



Key informants engaged in an activity during the participatory mapping exercise in Ada East District © IOM 2024

Site Evaluations



Site evaluation with an informant, Totopey, Ada East District © IOM Ghana 2024

Following the PME, sites evaluation were conducted in the top five most vulnerable communities to cholera outbreak. These communities were; Azizanya, Totopey, Pute, Otrokpe, Azizakpe. Key informant interviews were conducted in these communities to better understand the needs and situation on the ground, and were held at key congregation and points of entry sites including markets, bus stations, schools and churches.

Sites evaluations were undertaken after skill training on data collection was given to the enumerators. Tablets with the software Kobo installed were provided to the enumerators to gather the information collected from the sites. GPS coordinates were then used to record location data and to locate migration routes of health facilities and points of entries, which allowed identifying key sites in the communities and contributing to planning health measures.

Quantitative Assessment



A 3-day household interview was conducted in 437 households in the 10 identified communities in Ada East. The aim of the interview was to understand people's needs in these communities in terms of health, sanitation and water.

The sampling of households per community was determined based on the population data from the Ghana Statistical Service and the community's level of vulnerability. While this approach ensured adequate representation for the assessment, some community members were reluctant to disclose information about their water and sanitation practices due to concerns about stigmatization.



An IOM enumerator conducting household survey in Kewunor in Ada East District © IOM Ghana 2024

INTERNATIONAL ORGANIZATION FOR MIGRATION (IOM)

When quoting, paraphrasing, or in any way using the information mentioned in this report, the source needs to be stated appropriately as follows: "Source: Population Mobility Mapping for Cholera Response of the International Organization for Migration, Ghana Mission, February 2025".

For more information, please contact: iomaccra@iom.int, website: <https://iomghana.int>



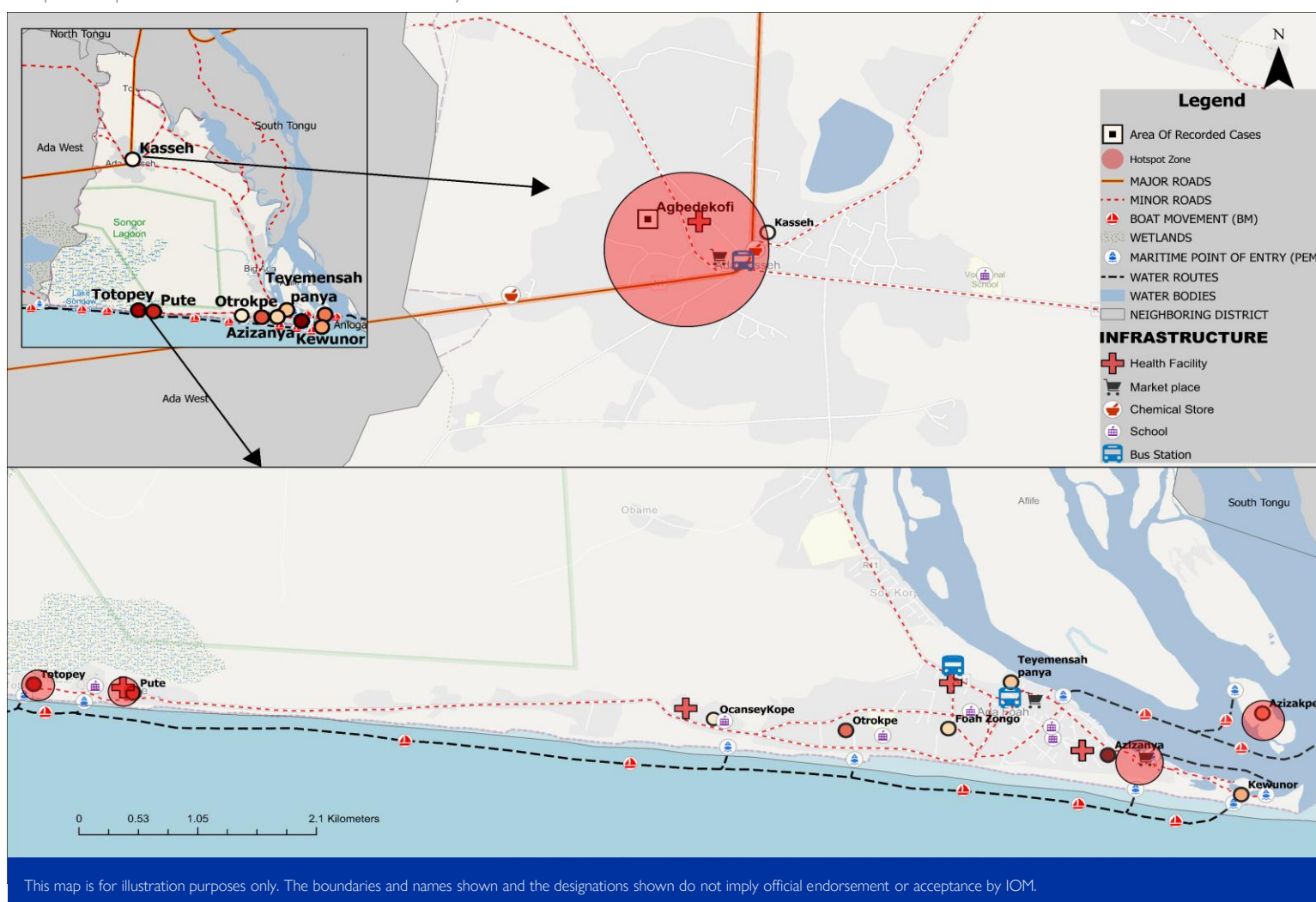
Findings

The three components of the PMM provide a comprehensive analysis of the cholera outbreak, its associated shocks and their connection to human mobility within the 10 communities assessed in the Ada East District. Furthermore, the report identifies and maps Spaces of Vulnerability (SOV) in each community, offering critical insights to guide the prioritization of communities for targeted interventions.

1.1 Participatory Mapping Exercise

The one-day participatory mapping exercise provided critical insights into the vulnerabilities and available resources within the 10 communities assessed. The assessment identified two hospitals serving the district, located in Kasseh and Ada Foah. Additionally, the GHS has established Community-Based Health Planning and Services (CHPS) compounds in Pute, Ocanseykope and Azizanya to enhance healthcare accessibility. Key markets were mapped in Kasseh, Foah and a prominent fish market in Azizanya. Given the proximity of most communities to the sea and river, several maritime points of entry were identified along the coast and riverbanks. Furthermore, a few bus stations were noted in Foah and Kasseh, reflecting limited transportation hubs within the district and other sites like schools and churches were also identified.

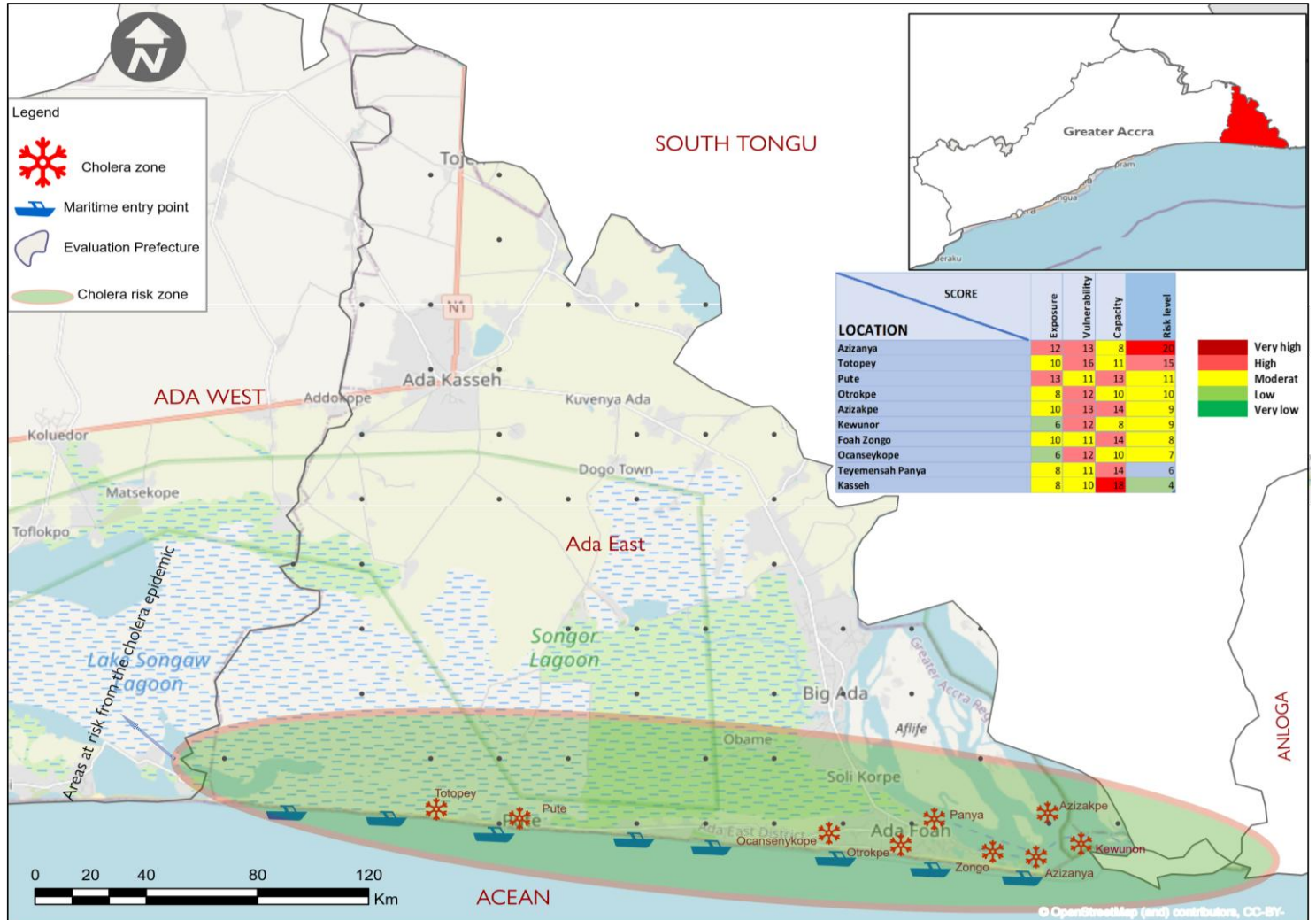
Map. 2 Top 5 vulnerable communities and key sites in Ada East



Four communities rely predominantly on untreated surface water sources such as rivers and streams, while six have access to boreholes or mechanized wells, though many of these systems require maintenance. Open defecation remains prevalent in three communities due to inadequate access to latrines and public waste disposal sites are often located dangerously close to residential areas, increasing the risk of contamination.

Additionally, only two communities are within a 5-km radius of health facilities capable of managing cholera cases. High-risk areas, or spaces of vulnerability identified during the exercise include flood-prone zones, filthy market centers, fishing hubs with unsanitary conditions, and waste disposal sites near water sources. Seasonal flooding, poor waste management and low public awareness of hygiene practices were repeatedly cited as exacerbating cholera risks.

Map. 3 Exposure of cholera epidemic communities in Ada East



Notice: This map is for illustrative purposes only. The names and boundaries shown on this map do not imply official endorsement or acceptance by IOM.

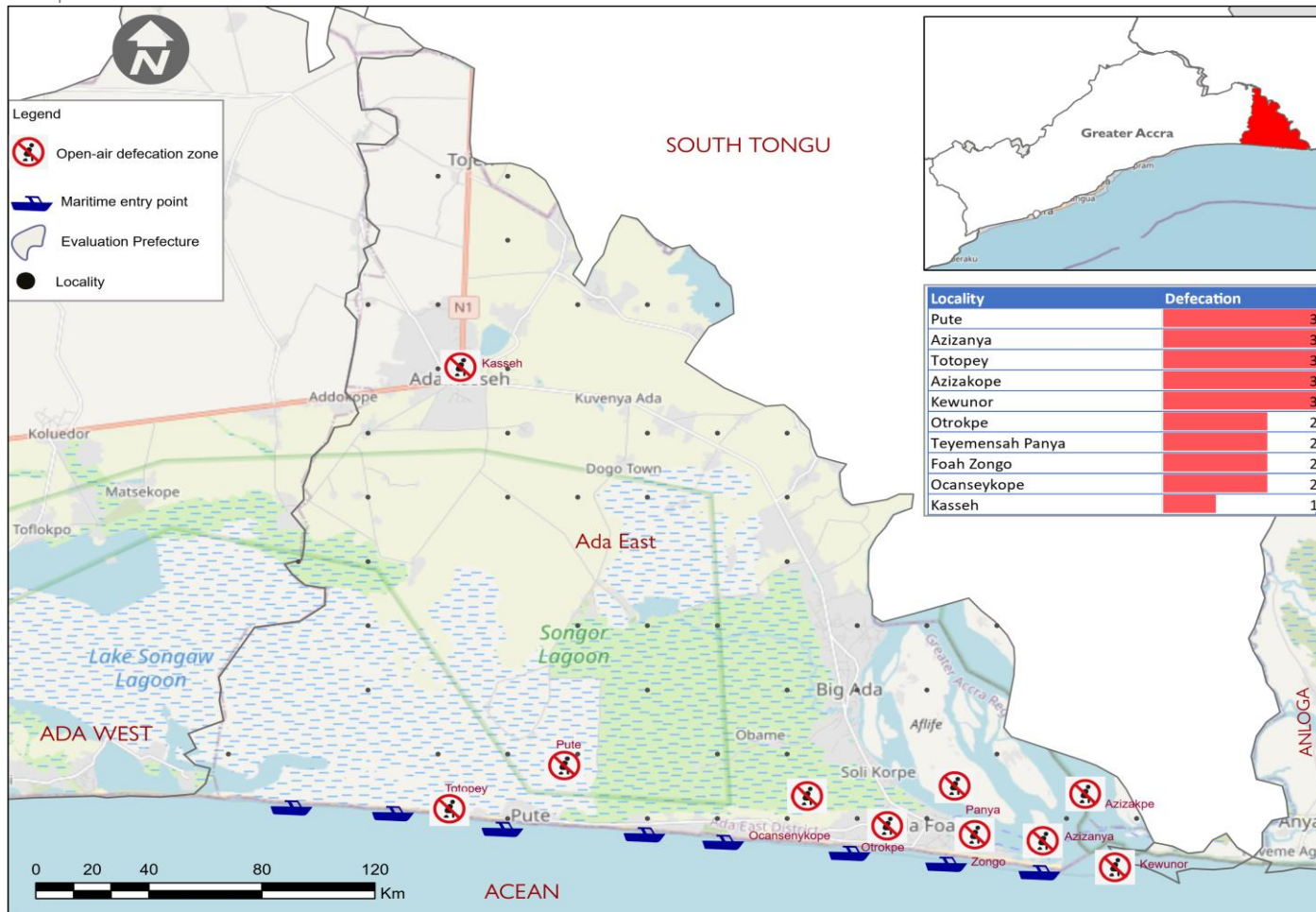
Following the mapping of key sites, participants continued discussions on the level of exposure, vulnerability, and capacity of communities to manage cholera outbreaks. The exposure assessment focused on the number of suspected and confirmed cholera cases, reported deaths, duration of outbreaks, and severity of dehydration among affected individuals. Pute and Azizanya recorded the highest exposure levels, each scoring 13 and 12 points, respectively, classifying them as highly exposed communities, followed by Totopey, Azizakpe and Foah Zongo who exhibited moderate exposure, with scores of 10.

On the other hand, Otrokpe, Teyemensah Panya, Kasseh, Ocanseykope, and Kewunor had lower exposure scores, indicating relatively fewer cases and less severe outbreaks. However, the persistence of cholera cases in some of these areas suggests that transmission risks remain significant, necessitating continued monitoring and preventive measures.

Discussions on vulnerability was assessed based on access to healthcare, water, sanitation, and hygiene (WASH) infrastructure, as well as participation in cholera prevention activities. Totopey emerged as the most vulnerable community, with a score of 16, due to inadequate sanitation and limited access to private toilets. Azizanya (13), Azizakpe (13), Otrokpe (12), Kewunor (12), Ocanseykope (12) followed closely with high scores, indicating weaknesses in WASH infrastructure that increase the risk of disease transmission. Pute, Teyemensah Panya and Kasseh scored moderately, highlighting significant challenges in healthcare access, cholera prevention activities, and hygiene practices. Many residents lack sufficient drinking water sources and access to private toilets, reinforcing the need for urgent interventions in sanitation and hygiene promotion.

The assessment of community capacity considered factors such as social stability, disaster resilience, population mobility, access to services, and sanitation practices. Kasseh recorded the highest capacity score of 18, demonstrating strengths in managing cholera risks despite its moderate

Map. 4 Open-air defecation zones in Ada East



Notice: This map is for illustrative purposes only. The names and boundaries shown on this map do not imply official endorsement or acceptance by IOM.

exposure levels. Teyemensah Panya (14), Foah Zongo (14), Azizakpe (14) and Pute (13) followed with scores showing a balanced mix of strengths and weaknesses in mobility, defecation practices, and accessibility of services. Totopey (11), Otrokpe (10) and Ocanseykope (10) showed moderate scores of capacity to manage the spread. Conversely, Kewunor and Azizanya had the lowest scores (8), indicating limited capacity to manage cholera outbreaks effectively. Challenges in social infrastructure, accessibility, and high population mobility make these areas particularly vulnerable to disease spread.

From the overall risk assessment, combining exposure, vulnerability, and capacity scores, Azizanya (20) and Totopey (15) face the highest cholera risk, requiring urgent response. Pute (11) and Otrokpe (10) need strong preventive efforts, while Azizakpe (9), Kewunor (9), and Foah Zongo (8) require WASH improvements. Lower-risk areas like Ocanseykope (7), Teyemensah Panya (6), and Kasseh (4) still need targeted interventions. Strengthened health measures and sanitation improvements are crucial, especially in high-risk communities.

1.2 Site Evaluations

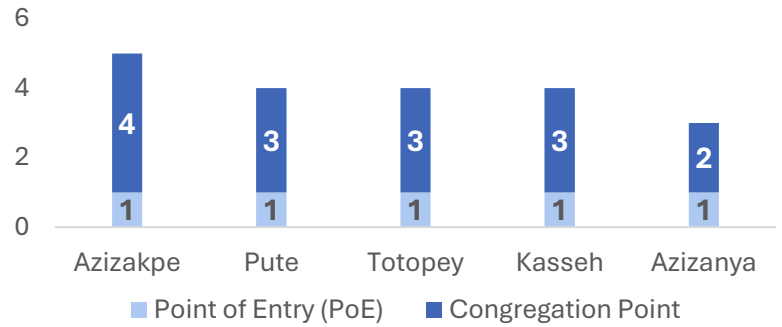


An IOM enumerator conducting site evaluation in Totopey, Ada East District © IOM Ghana 2024

The one-day site assessments were conducted by enumerators in five high-risk communities: Azizakpe, Azizanya, Kasseh, Pute and Totopey. The objective of these assessments was to identify key congregation points and points of entry that contribute to the spread of cholera within the communities and collect information from key informants.

Congregation points included markets, schools, places of worship and community gathering areas, where large numbers of people frequently interact, potentially facilitating the transmission of cholera. Points of entry, such as transit hubs, landing sites and major road access points, were also mapped to understand how population mobility and the movement of goods might influence cholera risks.

Fig.1 Sites Assessed in communities



A total of 20 sites across two categories were assessed in the five high-risk communities of Azizakpe, Azizanya, Kasseh, Pute and Totopey, as shown in Figure 1. Of these, 25 per cent were points of entry (land and maritime), while 75 per cent were congregation points, comprising nine specific locations.

Fig. 2 Types of sites assessed

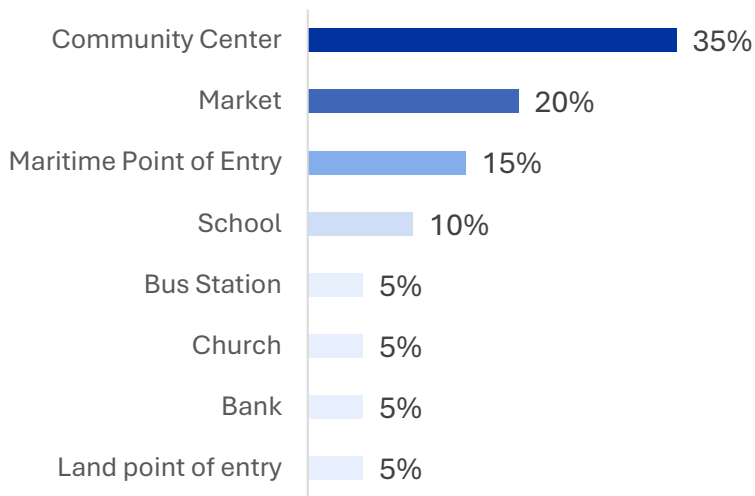


Figure 2 illustrates the types of sites assessed across the five communities. Community centers constituted the largest proportion, accounting for 35 per cent of the sites evaluated, followed by markets (20%). Maritime points of entry made up 15 per cent, while schools accounted for 10 per cent of the sites. Bus stations, churches, banks, and informal land points of entry each represented 5 per cent of the sites assessed.

These findings highlight the variety of critical locations within the communities where public interactions and activities occur.

Fig. 3 Distance from the nearest community

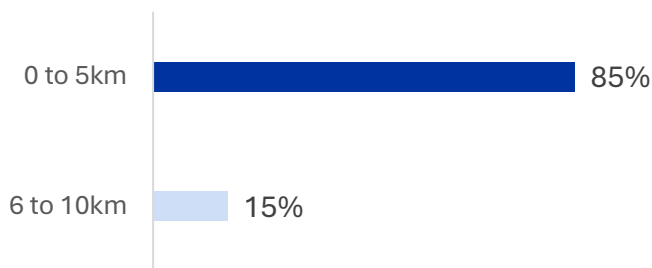


Figure 3 highlights the proximity of the assessed communities to their nearest neighboring community. The findings indicate that 85 per cent of the communities are located within 5 kilometers of the next village and 15 per cent have their nearest community situated between 6 and 10 kilometers away.

Fig. 4 Means of transport

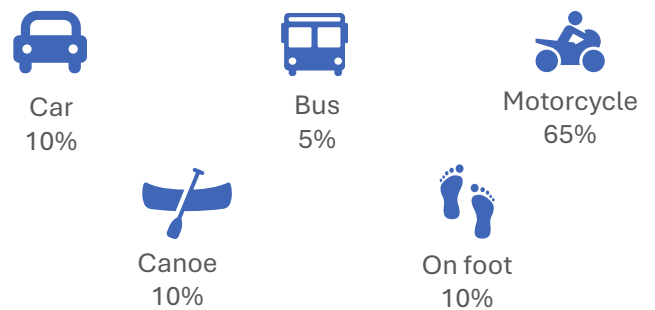


Figure 4 illustrates the primary modes of transport within these communities. Motorcycles are the most common mode of transport, accounting for 65 per cent of usage, followed by canoes and cars (loaded taxi), representing 10 per cent each. Walking is also preferred by community members, accounting for 10 per cent, while buses are the least used, representing 5 per cent. These findings reflect the communities' reliance on locally accessible and practical means of transportation, influenced by terrain and resource availability.

Figure 5 presents the estimated daily flow of people moving in and out of the communities, as reported by key informants. The total estimated flow is 3,411 individuals, with Kasseh accounting for the highest proportion with 55 per cent, followed by Pute (24%), Azizanya (9%), Totopey (7%) and Azizakpe (5%).

The high flow observed in Kasseh is attributed to its prominent business market activities, which attracts a significant number of people from surrounding areas to purchase and trade other goods, while Pute and Azizanya host the main fish markets in the district.

These findings underscore the mobility patterns within the communities, which may have implications for the spread of cholera.

Fig. 5 Estimated flow of people per day

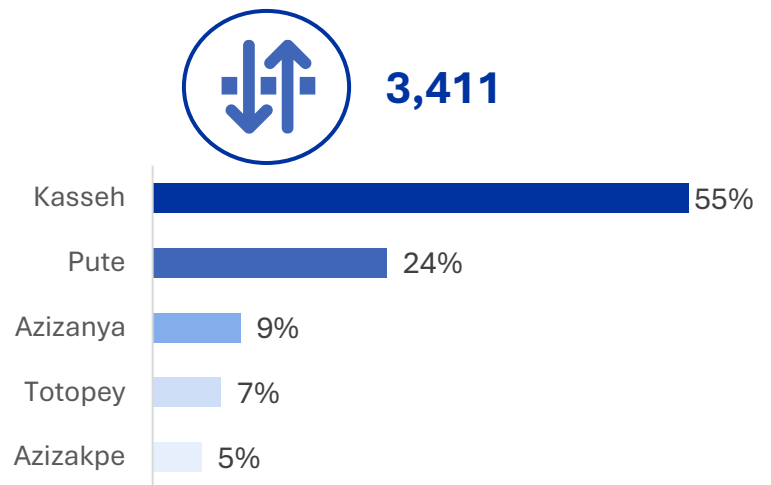


Fig. 6 Seasons of accessibility of sites

Figure 6 indicates that 80 per cent of the assessed sites were reported by key informants to be accessible throughout the year, during both the dry and wet seasons. In contrast, 20 per cent of the sites were accessible only during the dry season, with access hindered during the wet season due to high tides or heavy rainfall.

These seasonal accessibility challenges underscore significant barriers that could impact service delivery and emergency response efforts in the affected areas.

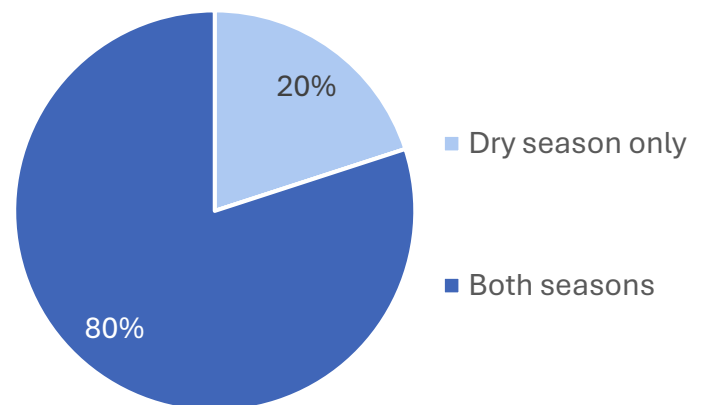
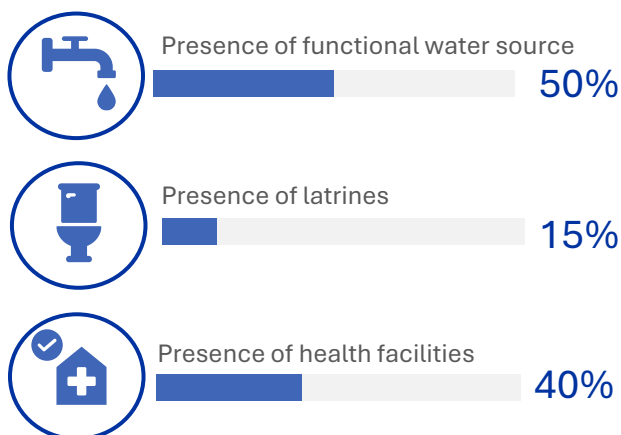


Fig. 7 Presence of key amenities

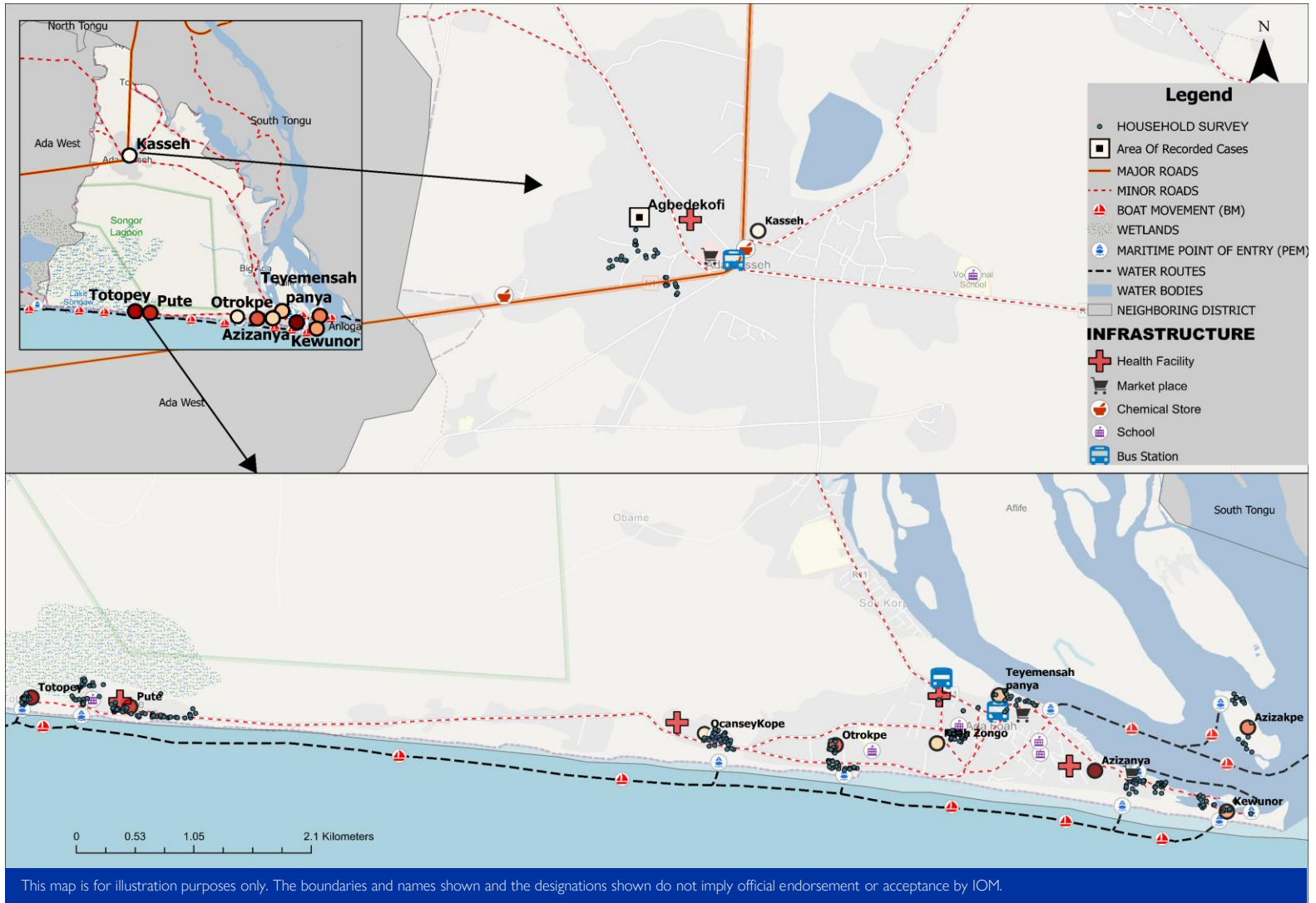


The assessment revealed significant gaps in essential infrastructure across the five communities. Only 50 per cent of the assessed sites had a functional water source, underscoring the limited access to safe and reliable water for drinking, sanitation and hygiene purposes.

Furthermore, the availability of sanitation facilities was found to be critically low, with only 15 per cent of the sites having latrines. However, 40 per cent of the sites were located in proximity to a health post or facility, as shown in Figure 7.

1.3 Quantitative Assessment (Household Surveys)

Map. 3 Households assessed in Ada East



A total of 437 heads of households were interviewed across the 10 identified communities in the district. Of these respondents, 296 were female (68%) and 141 were male (32%) head of households. The assessment revealed an average household size of six individuals, with an average of one child under the age of five per household. In terms of education, 71% of respondents had attained at least some basic level of education or higher, while 28.6% had no formal education. Additionally, most households (98%) were part of the host community, with only 2% identified as recent settlers or migrants.

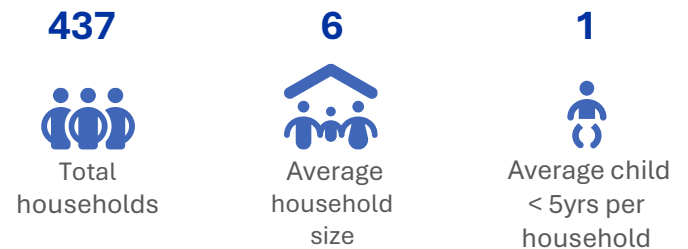
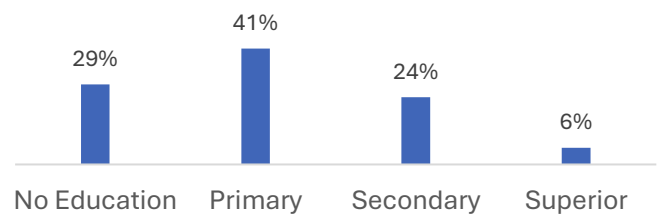
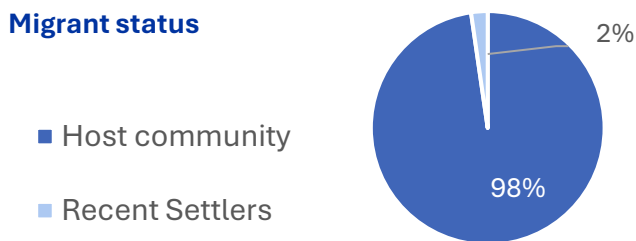


Fig. 9 Level of education of respondents



The household survey conducted across the 10 communities highlighted the level of access to basic amenities and technology among residents as seen in Figure 10.

It was revealed that 85% of households had access to electricity, enabling the use of essential appliances and devices. Among these households, 63% reported having a functioning television, 51% owned a working radio, and 35% had a refrigerator, reflecting moderate access to information, entertainment, and food storage facilities. Additionally, 93% of households owned mobile phones, indicating widespread access to communication tools.

Fig. 10 Household Technology

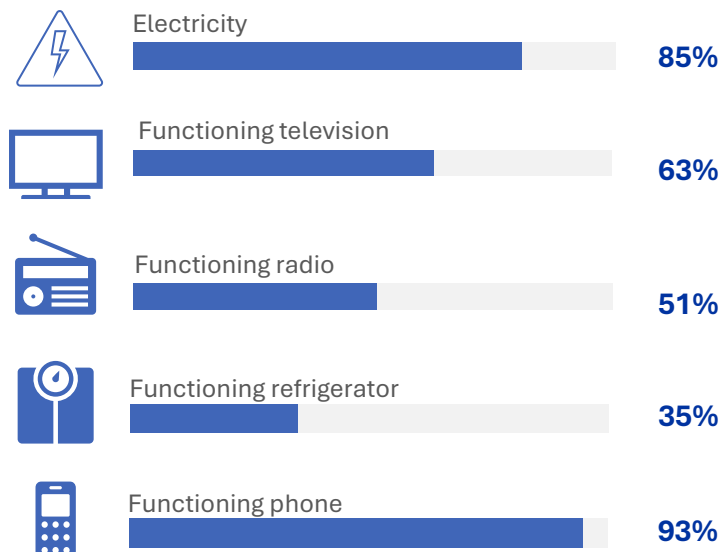
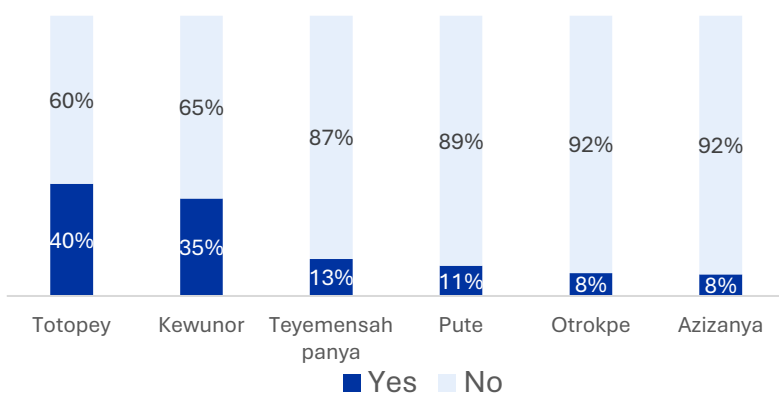


Fig. 11 Top communities with cases of diarrhea in the past week



The assessment of diarrhea cases in the past week across the surveyed communities revealed notable variations in reported cases.

Totopey recorded the highest prevalence, with 40% of households reporting cases, followed by Kewunor (35%) and Pute (11%).

Other communities, including Teyemensah Panya (13%), Otrokpe (8%), and Azizanya (8%), reported lower but still notable cases. Foah Zongo and OcanseyKope each had 5% of households reporting diarrhea cases, while Azizakpe recorded 3%.

Kasseh, however, reported no cases, with 100% of households indicating no incidence of diarrhea.

Table 5. Knowledge of household on causes of diarrhea/cholera

Communities	Causes of diarrhea/cholera						No. of Responses
	Drinking poor quality water	Eating bad food	Unwashed fruit/vegetables	Flies/insects	Poor hygiene/not washing hands	Don't know	
Azizakpe	82%	56%	13%	77%	62%	3%	39
Azizanya	38%	48%	2%	33%	69%	6%	52
Foah Zongo	57%	53%	24%	29%	60%	10%	58
Kasseh	75%	83%	8%	25%	89%	0%	36
Kewunor	35%	70%	17%	61%	70%	9%	23
OcanseyKope	100%	100%	100%	100%	100%	0%	37
Otrokpe	56%	72%	33%	43%	72%	7%	61
Pute	86%	81%	19%	40%	81%	2%	83
Teyemensah panya	82%	74%	45%	53%	82%	11%	38
Totopey	30%	50%	0%	10%	30%	20%	10

N.B Multiple choices possible

The assessment revealed varying awareness of diarrhea and cholera causes across communities. Poor hygiene and lack of handwashing were the most cited causes, especially in Kasseh (89%), Teyemensah Panya (82%), and Pute (81%). Contaminated water was widely recognized, particularly in OcanseyKope (100%) and Pute (86%), while unsafe food consumption was a major concern in OcanseyKope (100%) and Kasseh (83%). Flies/insects were noted in Azizakpe (77%) and Kewunor (61%), while unwashed fruits/vegetables had lower recognition. Knowledge gaps persisted in Totopey (20%) and Teyemensah Panya (11%), highlighting the need for enhanced health education.

Table 6. Knowledge of household on how to prevent diarrhea/cholera

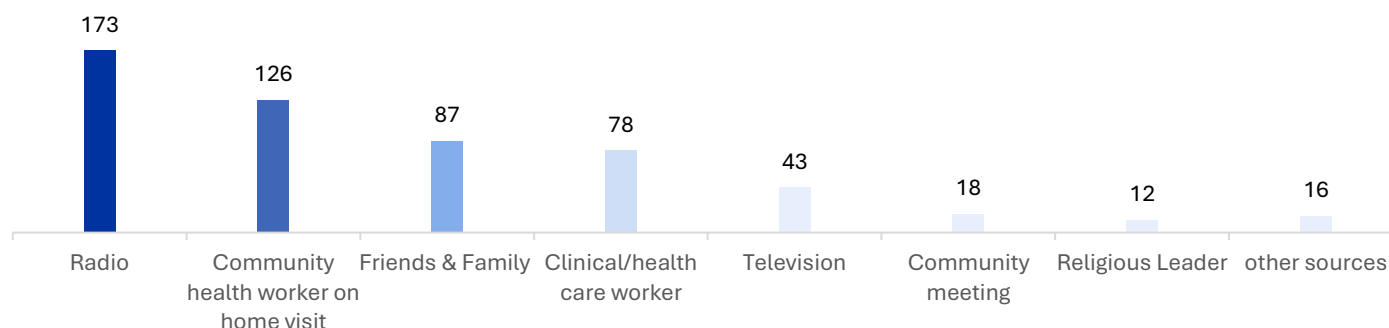
Communities	HOW TO PREVENT DIARRHEA/CHOLERA											No. of Responses
	Wash your hands with soap and water	Cook food thoroughly	Washing vegetables/ fruits	Properly dispose of human waste	Boil the water	Clean cookware and containers	Treating water with chlorinated products	Cover food to keep it safe from flies	Cholera vaccine	Impossible to prevent	Don't know	
Azizakpe	82%	21%	31%	44%	38%	0%	54%	62%	5%	0%	5%	39
Azizanya	83%	50%	4%	2%	2%	2%	0%	48%	0%	0%	4%	52
Foah Zongo	90%	41%	38%	43%	14%	10%	3%	7%	2%	0%	10%	58
Kasseh	97%	81%	22%	75%	22%	28%	3%	75%	0%	0%	0%	36
Kewunor	65%	87%	17%	9%	13%	30%	4%	43%	9%	4%	9%	23
OcanseyKope	100%	97%	100%	100%	76%	97%	11%	100%	0%	0%	3%	37
Otrokpe	70%	54%	38%	31%	39%	33%	23%	41%	2%	0%	5%	61
Pute	87%	65%	35%	43%	66%	24%	0%	31%	0%	0%	1%	83
Teyemensah panya	97%	61%	61%	82%	55%	34%	5%	53%	3%	0%	3%	38
Totopey	50%	30%	0%	0%	20%	0%	0%	10%	0%	0%	30%	10

N.B Multiple choices possible

Table 6 presents households' knowledge of diarrhea and cholera prevention, highlighting the most stated responses per community. Handwashing with soap and water was the most widely recognized measure, especially in OcanseyKope (100%), Kasseh (97%), and Teyemensah Panya (97%). Cooking food thoroughly was also frequently mentioned, notably in OcanseyKope (97%) and Kewunor (87%). Proper disposal of human waste was emphasized in OcanseyKope (100%) and Teyemensah Panya (82%), though less so elsewhere.

Awareness of water safety practices, such as boiling and chlorination, was inconsistent, with moderate recognition in Pute (66%) but minimal in Azizanya (2%). Protecting food from flies was commonly cited in OcanseyKope (100%) and Kasseh (75%). However, knowledge of the cholera vaccine remained low, peaking at just 9% in Kewunor. Notably, gaps in awareness persist, as some households in Totopey (30%) and Foah Zongo (10%) reported not knowing how to prevent diarrhea or cholera, underscoring the need for targeted health education.

Fig. 12 How have you heard about diarrhea prevention and treatment?



To understand the role of diverse communication channels in disseminating health information to communities, households were asked how they received information about diarrhea prevention and treatment. The most common source reported was the radio, mentioned by 173 households. This was followed by community health workers on home visits, cited by 126 households, and family members or friends, noted by 87 households. Clinicians or healthcare workers were identified as sources of information by 78 households, while 43 households relied on television. Community meetings were mentioned by 18 households, and religious leaders were noted by 12 households. Additionally, 16 households reported receiving information through other sources.

Table 7. Knowledge of household on how to treat diarrhea/cholera

Communities	HOW WOULD YOU TREAT DIARRHEA/CHOLERA								No. of Responses
	Getting to the cholera treatment centre	Getting to the clinic/hospital	Use an oral rehydration solution	Use a homemade sweet and savory solution	Go to a traditional healer	Home Remedy	Do Not Process	Don't Know	
Azizakpe	74%	95%	49%	0%	0%	3%	0%	3%	39
Azizanya	21%	71%	2%	0%	0%	10%	0%	0%	52
Foah Zongo	5%	88%	10%	0%	0%	0%	3%	3%	58
Kasseh	6%	67%	47%	8%	0%	17%	0%	0%	36
Kewunor	4%	83%	17%	4%	4%	26%	0%	0%	23
OcanseyKope	8%	92%	54%	3%	0%	30%	0%	0%	37
Otrokpe	34%	64%	33%	5%	3%	30%	2%	2%	61
Pute	8%	55%	52%	13%	0%	20%	0%	0%	83
Teyemensah panya	5%	71%	55%	24%	0%	34%	0%	3%	38
Totopey	10%	60%	40%	0%	0%	0%	0%	0%	10

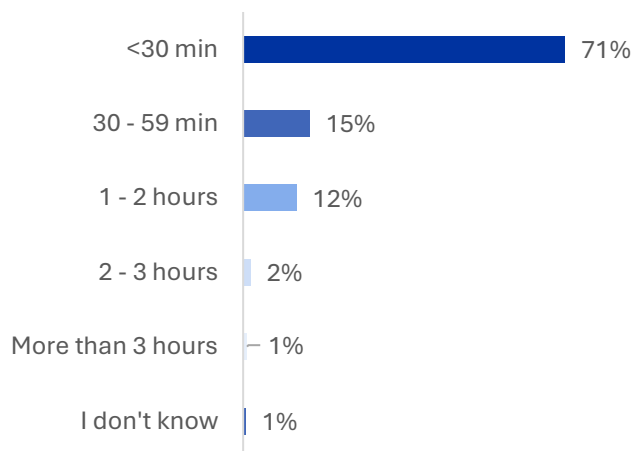
N.B Multiple choices possible

Table 7 presents households' knowledge of treating diarrhea and cholera, offering valuable insights into the communities' understanding of appropriate responses. Seeking treatment at a clinic or hospital was the most commonly mentioned response, with high recognition in Azizakpe (95%), OcanseyKope (92%), and Foah Zongo (88%). Visiting a cholera treatment center was also reported, particularly in Azizakpe (74%) and Otrokpe (34%), though less frequently in other areas.

The use of oral rehydration solutions (ORS) was moderately recognized, with higher mentions in Teyemensah Panya (55%), OcanseyKope (54%), and Pute (52%). However, the use of homemade sweet and savory solutions was minimal, reported by only 24% in Teyemensah Panya and 13% in Pute. Traditional healing methods were rarely cited, with minor mentions in Otrokpe (3%) and Kewunor (4%).

Home remedies were reported in some communities, notably in Teyemensah Panya (34%) and OcanseyKope (30%), while Kewunor (26%) and Pute (20%) also showed reliance on such methods. A small proportion of respondents in Otrokpe (2%) and Foah Zongo (3%) admitted to not taking any action, and some in Azizakpe (3%) and Foah Zongo (3%) stated they did not know how to treat diarrhea or cholera. These findings underscore the need for targeted public health education on appropriate treatment measures and timely healthcare access.

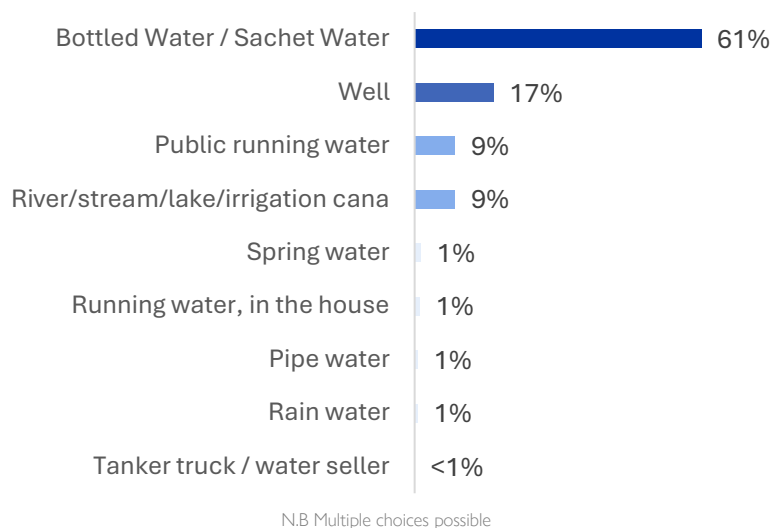
Fig. 13 Distance between health center and homes



The assessment revealed varying levels of access to health centers across the surveyed locations. A total of 71 per cent of households reported that health centers were within 30 minutes of their homes, while 15 per cent indicated a travel time between 30 and 59 minutes, 12 per cent reported a distance of 1 to 2 hours, and 3 per cent noted that health centers were over 2 hours away.

Notably, 1% of households either were unaware of the proximity of health centers as they had never visited one. These findings highlight disparities in healthcare access and utilization of health services.

Fig. 14 Sources of drinking water for household



The assessment revealed that households relied on multiple sources for drinking water across the surveyed locations. Sachet or bottled water was the primary source for 61 per cent of households, while 17 per cent reported using wells, both protected and unprotected. Public running pipes accounted for 9 per cent of water sources and 9 per cent of households relied on natural water sources such as rivers, streams, lakes, or irrigation canals.

Smaller proportions reported using spring water (1%), running water pipes within their homes (1%), tanker trucks (1%) and rainwater (1%).

These findings highlight how, in some cases, communities rely on potentially unsafe water sources, emphasizing the need for improved access to clean and safe drinking water.

Fig. 15 Sources of water for household activities

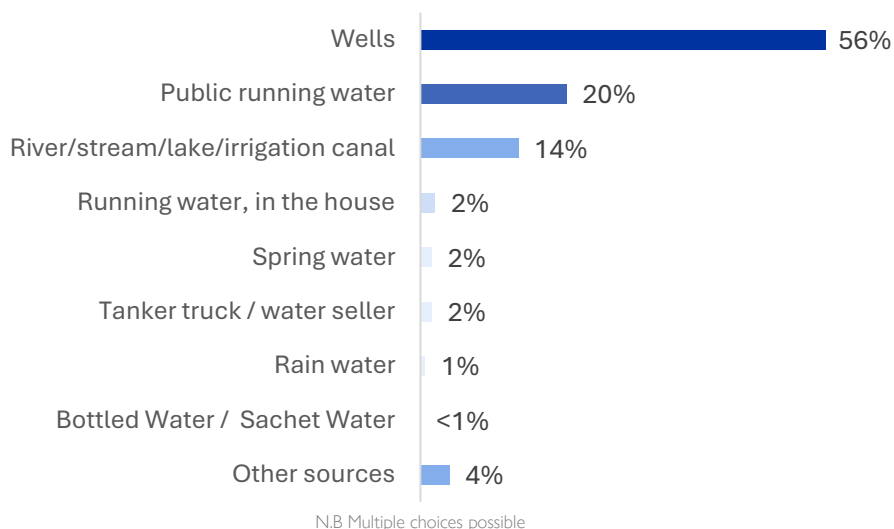
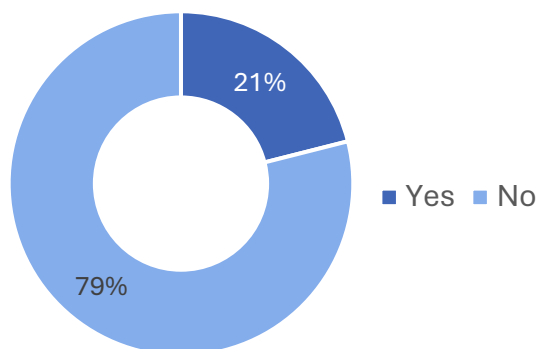


Figure 15 illustrates the various water sources used by households for activities such as cooking and washing. Wells emerged as the most widely used source, accounting for 56 per cent of households.

Public running water was reported by 20 per cent of households, while 14 per cent relied on rivers, streams, lakes, or irrigation canals. Running water within the house (2%), tanker trucks (2%), spring water (2%), rainwater (1%) and bottled water / sachet water accounted for the lowest while 4% recorded other sources.

Fig. 16 Are you treating water to make it safe?



The assessment revealed significant gaps in water treatment practices among households. Only 21 per cent of households reported treating collected water to make it safe for consumption, either by boiling it or using aqua tabs, while a majority (79%) did not take any measures to ensure the safety of their drinking water. Additionally, as shown in Figure 17, 63 per cent of households had containers for storing drinking water, whereas 37 per cent lacked proper storage containers.

Fig. 17 Are there containers to store drinking water?

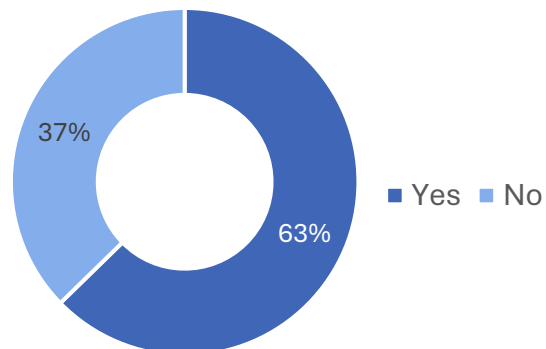
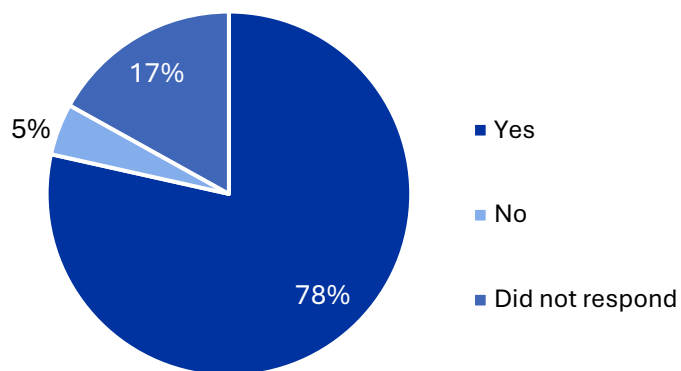


Fig. 18 Are detergents/Soaps available in the household?



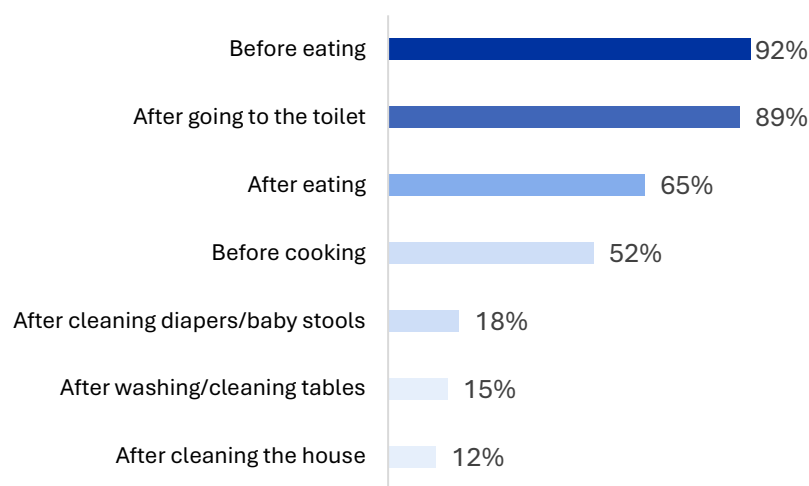
Out of the 437 households assessed in the 10 locations, 78 per cent confirmed having detergents or soaps in the household, while 5 per cent did not have and 17 per cent did not respond.

Though gaps remain in some areas, this highlights the general availability of basic hygiene materials in most households.

With the option for multiple responses, the survey revealed varying handwashing practices among households. While 92 per cent reported washing their hands before eating, only 65 per cent did so after eating. Only 89 per cent also mentioned washing their hands after going to the toilet. Additionally, 52 per cent washed their hands before cooking, and just 18 per cent washed after cleaning diapers or baby stools.

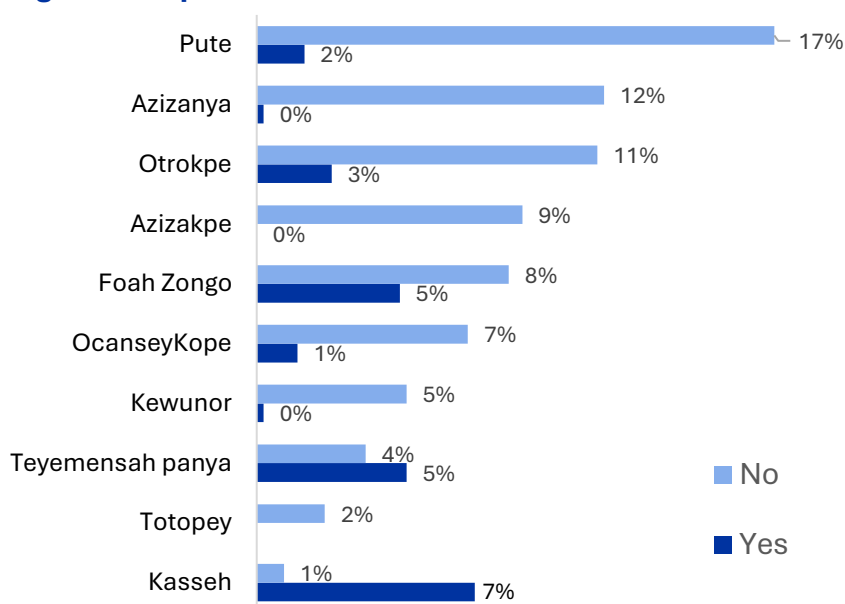
Other practices included washing hands after cleaning tables (15%) and after cleaning the house (12%). This highlights some gaps in critical hand hygiene practices.

Fig. 19 When do you wash your hands?



N.B Multiple choices possible

Fig. 20 Are pit toilets or latrines in the household?

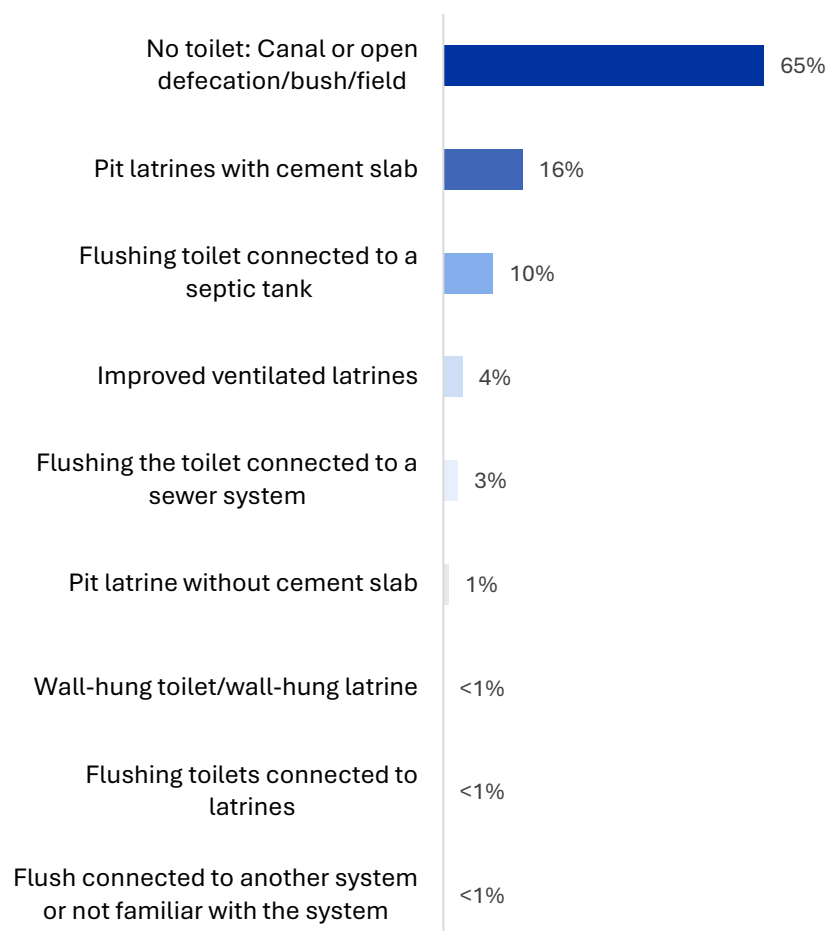


The assessment revealed that a significant 77 per cent of the 437 households surveyed did not have pit toilets or latrines, leaving only 23 per cent with access to such facilities. Kasseh (7%) and Foah Zongo (5%) recorded the highest proportion of households reporting having access to pit toilets or latrines in the households. On the other hand, Azizakpe, Azizanya, and Kewunor reported no households with latrines.

Pute recorded the highest proportion of households reporting not having access to toilets or pit latrines in the households (17%), followed by Azizanya (12%) and Otrokpe (11%).

These findings underscore a critical gap in access to sanitation facilities across the communities, emphasizing the urgent need for targeted interventions to improve hygiene and sanitation infrastructure.

Fig. 21 Type of toilets or latrines household use



N.B Multiple choices possible

The assessment of household toilet and latrine types revealed that 65 per cent of households had no toilet facilities, relying on canals, open defecation, or the use of bushes and fields. Among households with toilet or latrine facilities, 16 per cent used pit latrines with a concrete slab, while 10 per cent had flushing toilets connected to septic tanks. Improved ventilated latrines were reported by 4 per cent of households, and flushing toilets connected to sewer systems accounted for 3 per cent.

Less commonly used facilities included pit latrines without concrete slabs (1%), wall-hung toilets or latrines, and flushing toilets connected to latrines, and flushing toilets connected to other systems or were unfamiliar with the system all reported less than 1 per cent.

This information highlights the widespread reliance on unimproved sanitation facilities and the critical need for improved toilet infrastructure across the communities.



IOM enumerators conducting household survey in Azizakpe in Ada East District © IOM Ghana 2024

IMPACT OF MOBILITY DYNAMICS ON CHOLERA SPREAD IN ADA EAST

Mobility dynamics played a critical role in the spread of the cholera outbreak in Ada East. Communities located along major trade routes, fishing hubs, and areas with high population movement—such as Totopey, Pute, and Azizanya—experienced higher exposure levels. These areas serve as transit points for traders, fishermen, and seasonal workers, increasing the risk of disease transmission across different locations. Additionally, the presence of large gatherings, including markets and festivals, has facilitated the spread of cholera through contaminated water and food sources. Limited access to proper sanitation in these high-mobility areas further exacerbates the challenge, as open defecation and poor waste management contribute to environmental contamination.

To mitigate the impact of mobility on cholera transmission, IOM and partners can implement targeted interventions aimed at high-risk mobile populations. First, strengthening disease surveillance and early warning systems in transit areas can help detect outbreaks quickly and enable rapid response. Second, establishing mobile health teams to provide cholera prevention education, vaccination, and hygiene kits to mobile communities can reduce infection risks. Additionally, promoting safe WASH practices in marketplaces, transport hubs, and fishing communities through infrastructure improvements—such as handwashing stations and improved latrines—can minimize contamination risks.

RECOMMENDATIONS FOR FURTHER INTERVENTIONS

Based on the findings of the location and quantitative assessment exercise, targeted recommendations have been identified to address the cholera risks and vulnerabilities in the 10 communities assessed in the Ada East District. These recommendations are focused on improving water, sanitation, and hygiene (WASH) infrastructure, strengthening healthcare systems, enhancing community capacity, and addressing behavioral barriers to cholera prevention. In addition, further assessments are proposed to ensure tailored and sustainable interventions.

• Improving Access to Safe Water, Sanitation and Hygiene Facilities

To address the critical gaps in WASH infrastructure, it is recommended that efforts be made to rehabilitate or establish safe water supply systems in high-risk communities such as Azizanya, Pute and Totopey. Household-level water treatment practices, including the distribution of water purification tablets (aqua tabs), should also be prioritized. Furthermore, public and private toilet facilities should be constructed and maintained to eliminate open defecation, particularly in communities like Pute, which exhibit significant sanitation challenges. Frequent hand washing should also be encouraged in these communities.

• Strengthening Health Service Delivery

To improve access to healthcare and mitigate cholera risks, additional healthcare facilities should be established in underserved and hard-to-reach communities. Health workers should be trained on cholera case management, community surveillance, and early response mechanisms. Community awareness campaigns should be launched to educate residents on cholera prevention practices, such as handwashing, food safety, and early reporting and treatment of symptoms.

• Enhancing Community Capacity and Resilience

Building local capacity is essential for sustainable cholera control. Community leaders should be actively involved in the planning and implementation of interventions to foster ownership and accountability. For communities with high population mobility, such as Kasseh, Azizanya and Pute, resources such as sanitation facilities at transit hubs should be provided. Emergency preparedness measures, including the establishment of rapid response teams and stockpiling of cholera treatment supplies, should also be strengthened.

• Promoting Behavioral Change through Education

Behavioral barriers to cholera prevention should be addressed through regular hygiene promotion campaigns targeting schools, marketplaces, and households. This could be done through radio broadcasts and house-to-house visits. Behavior change programs should also be implemented to encourage the consistent use of sanitation facilities and proper handwashing practices, particularly in high-risk communities.

By implementing these recommendations and conducting further assessments, a comprehensive approach can be developed to reduce cholera risks and enhance resilience across the Ada East District. These interventions will prioritize the most vulnerable communities, ensuring that resources are effectively utilized to achieve long-term impact.

The opinions expressed in this publication are those of the authors and do not necessarily reflect the views of the International Organization for Migration (IOM). The designations employed and the presentation of material throughout the publication do not imply expression of any opinion whatsoever on the part of IOM concerning the legal status of any country, territory, city or area, or of its authorities, or concerning its frontiers or boundaries.

IOM is committed to the principle that humane and orderly migration benefits migrants and society. As an intergovernmental organization, IOM acts with its partners in the international community to assist in meeting the operational challenges of migration; advance understanding of migration issues; encourage social and economic development through migration; and uphold the human dignity and well-being of migrants.

Publisher: International Organization for Migration (IOM)

Ghana Country Office

9 Volta Road, Airport Residential Accra

Accra, Ghana

Tel: +233 302 742 930

Website: www.ghana.iom.int



© 2025 International Organization for Migration (IOM)