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EVALUATION REPORT

MILLENNIUM WATER AND SANITATION PROGRAM (PEPAM/USAID) EX-POST EVALUATION

WASH Ex-Post Evaluation Series—Water Communications and Knowledge Management (CKM) Project

July 2019

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ACRONYMS

ACIEHA	Integrated Community-Based Approach for Water, Hygiene, and Sanitation
ASUFOR	Associations of Water Users, Association d'Usagers de Forage
CFA	West African Communauté Financière Africaine Franc
CKM	Communications and Knowledge Management
CG	Village Management Committee, *comité de gestion*
CLTS	Community-Led Total Sanitation
CLTS-WI	CLTS with a Water Incentive
DHS	Demographic and Health Surveys
DVL	Double Vault Latrine
E. coli	*Escherichia coli*
ET	Evaluation Team
GoS	Government of Senegal
HH	Household
IP	Implementing Partner
JMP	Joint Monitoring Programme
MPN	Most Probable Number
NGO	Non-Governmental Organizations
NL	Natural Leader
OD	Open Defecation
ODF	Open Defecation Free
OFOR	Office of Rural Borehole Management
O&M	Operations and Maintenance
PEPAM/ USAID	The Millennium Water and Sanitation Program/USAID
PHAST	Participatory Hygiene and Sanitation Transformation
PLHA	Local Water Supply and Sanitation Plan
RTI	Research Triangle Institute
RWSN	Rural Water Supply Network
SARAR	Self-Esteem, Associative Strengths, Resourcefulness, Action Planning and Responsibility
SI	Social Impact Inc.
SNAR	National Sanitation Strategy
USAID	United States Agency for International Development
USAID/E3	USAID Bureau for Economic Growth, Education and Environment
USD	United States Dollar
VIP	Ventilated Improved Pit
WADA	Water and Development Alliance
WASH	Water, Sanitation, and Hygiene
WP	Water Point
WatSan	Water and Sanitation
WUA	Water Users Association

EXECUTIVE SUMMARY

PURPOSE AND OVERVIEW

Rural water and sanitation service challenges in developing countries are well known. As of 2015, only 63 percent of rural populations in Senegal had access to basic drinking water, 13 percent had access to basic sanitation, and 24 percent had access to a handwashing facility.[1] Donors, implementers, and governments continue to debate the effectiveness of applying subsidies to expand rural water and sanitation infrastructure.[2, 3] In recent years, that debate has grown with the popularization of the community-led total sanitation (CLTS) approach, which in its "pure" form does not allow subsidies. With great interest over the last several years, stakeholders in the water, sanitation, and hygiene (WASH) sector have tried to combine or debated the value of combining the two approaches.

This report presents findings from the fifth in a series of six ex-post evaluations designed to provide evidence of the factors impacting sustainability of USAID–funded WASH activities. A consortium of partners with Research Triangle Institute (RTI) in the lead implemented the subject of this evaluation—the Millennium Water and Sanitation Program (*Programme d'Eau Potable et d'Assainissement du Millénaire au Sénégal*, PEPAM/USAID)—from 2009–2014 with a budget of $21 million, and aimed to improve sustainable access to WASH in four regions of Senegal. USAID and other stakeholders will use the evaluation to improve the design, effectiveness, and sustainability of future WASH activities.

PEPAM/USAID applied three different approaches to deliver water services, sanitation services, or both: CLTS with a water incentive (CLTS-WI), subsidy for water and sanitation services, and a hybrid of CLTS-subsidy. Within these approaches, the RTI consortium aimed to improve local water and sanitation services through several interventions. Specifically, PEPAM/USAID trained and supported local water entrepreneurs (drilling operations, metal artisans) to facilitate the construction, rehabilitation, and maintenance of water points (WPs), installed different pump types and set up supply chains for them, and established or strengthened water management committees. The activity also trained local sanitation masons to construct PEPAM/USAID–promoted designs, provided latrine construction and pit emptying manuals, and established or strengthened sanitation committees. In addition, the activity promoted handwashing at critical times and tippy tap construction. A wide array of behavior change interventions accompanied these activities using both the participatory, hygiene and sanitation transformation (PHAST) and self-esteem, associative strengths, resourcefulness, action planning and responsibility (SARAR) approaches.

SCOPE

The evaluation addressed seven key questions**:**

1 Joint Monitoring Program (JMP), WHO, and UNICEF. washdata.org/data/household#!/sen.
2 Evans, B., C. van der Voorden, & A. Peal, 2009. Public Funding for Sanitation: The Many Faces of Sanitation Subsidies. Water Supply & Sanitation Collaborative Council. Geneva: Switzerland
3 Le Blanc, D. 2007. Providing Water to the Urban Poor in Developing Countries: The Role of Tariffs and Subsidies. United Nations.

Table 1. Evaluation Questions

Water	1. What is the level of service of PEPAM/USAID WPs? 2. Which factors influenced sustainability of water services? 3. Are women actively engaged in management and governance structures?
Sanitation	4. Are households (HH) using and replacing their latrines? 5. What factors, including choice of approach, contributed to sustainability?
Handwashing	6. What is the status of handwashing stations and practices today? 7. Which factors influenced sustainability of handwashing behaviors?

DESIGN

The evaluation team (ET) conducted data collection in November and December of 2018 in Kolda, Sédhiou, Ziguinchor, and Tambacounda regions using a mixed-methods design:

Surveys

- **514** Water users
- **617** Sanitation HHs

Water Quality Tests

- **105** *Escherichia coli (e. coli)*
- **105** Iron
- **64** Fluoride

Structured Observations

- **169** Water points
- **551** Latrines
- **291** Handwashing stations

Key Informant Interviews

- **56** interviews with former implementers, local water entrepreneurs, government officials, water management committees, community leaders, and members.

For the quantitative component of the study, the ET randomly selected villages to provide a representative sample. The ET purposively selected the qualitative sample to provide a wide range of perspectives and opinions. The ET analyzed the quantitative data using Stata and the qualitative data using MAXQDA. The ET triangulated the quantitative and qualitative data to validate findings, conclusions, and recommendations.

KEY FINDINGS

WATER POINTS

CURRENT STATUS

- **While a majority (63 percent) of the water points remained functional,** the performance varied significantly based on technology used. Of the different technologies, the Erobon rope pumps performed poorly (27 percent functional), while the India Mark (74 percent functional) and mechanized pumps (70 percent functional) performed the

best. These findings are in line with the broader literature, which show similar functionality rates.[4]

- **A majority (84 percent) of water users reported being satisfied or very satisfied with the quantity of water** produced at their primary water source. The India Mark 2 pumps performed best in terms of flow rates as well as stroke rates. Across manual pump technologies, however, some users complained about the strenuous effort required to meet their water needs.
- **Respondents generally believed the activity WPs provided safe water**; water quality testing results largely supported this sentiment. **Only 7 percent of WPs tested positive for *E. coli,*** and fluoride and iron testing revealed similarly low levels.
- **Most users (83 percent) spent less than 30 minutes round trip to get water**. However, most users had to make multiple trips to meet their households' water needs, spending 53 minutes per day on average to collect water.
- **Most respondents (82 percent) reported their WP functioned year-round**, with the Vergnet pumps reported to have the most issues.

USE

Sixty-one percent of respondents reported using multiple WPs to meet their water needs, and most secondary water sources used were unprotected. In communities with functioning PEPAM/USAID WPs respondents reported these typically served as their primary source for water and most frequently used for drinking and cooking purposes. For animal and agriculture purposes, HHs relied more heavily upon secondary sources for water. Only 27 percent of respondents reported using an effective form of water treatment such as Aquatabs or chlorine.

FACTORS AFFECTING SUSTAINABILITY

Most WPs had an active water management committee, but few appeared to be following management best practices such as holding monthly meetings, writing and distributing meeting minutes, etc. Only 33 percent of respondents said they paid water fees, and these fees, more often than not, were insufficient to cover the necessary operation and maintenance costs. The ET found a statistically significant and positive correlation between fee collection and functionality. PEPAM/USAID–trained local entrepreneurs could still be found and hired if a person or water committee had the means to pay for their service. However, none of the local entrepreneurs sustained active contracts with water committees.

SANITATION

CURRENT STATUS

HH in PEPAM/USAID villages surveyed reported high rates of sanitation access (92 percent) across all approaches and sharing latrines as a common practice. While HHs in CLTS-WI villages reported the highest access to any latrines, subsidy and hybrid communities typically

[4] Banks, B. & S. Furey. 2016. What's Working, Where, and for How Long: A 2016 Water Point Update. Poster session presented at the 7th RWSN Forum, Abidjan, Cote d'Ivoire. https://www.rural-water-supply.net/_ressources/documents/default/1-787-2-1502962732.pdf

built latrines of higher quality. Among all approaches, only 47 percent of respondents qualified as having basic sanitation access, with those in hybrid villages performing best (56 percent).

USE

The ET found fairly high levels of latrine use—both self-reported (89 percent) and observed (86 percent). Ninety-four percent of latrines in CLTS-WI villages and 89 percent of subsidy village latrines appeared to be in use; the hybrid approach performed relatively poorly in comparison (with 77 percent in use). Reports of open defection varied by approach. Overall, 68 percent of respondents stated that no one in their community defecates in the open.

FACTORS AFFECTING SUSTAINABILITY

Overall, 49 percent of respondents indicated they had repaired their latrine when it had an issue, with those in hybrid villages reporting the highest rate of repair/replacement. Reported barriers to access and repair/replacement included insufficient access to financial and material resources. Some of the poorest households appeared to be in a cycle of building poor quality latrines that required frequent repairs or replacement, which had an impact on sustainability.

A trade off appeared to occur between latrine quality and use. While the CLTS-WI approach appeared most effective at encouraging use, the poor quality of the latrines in these communities did not meet the requirements for basic sanitation service. In subsidy and hybrid communities, more respondents qualified as having basic sanitation service and more frequently reported repairing or replacing their latrine, yet actual use appeared lower.

HANDWASHING

CURRENT STATUS

Very few HH had a fixed handwashing station (6 percent). The ET did not find any activity-supported tippy taps still in use. Only 31 percent of households had access to both soap and water for handwashing.

USE

Despite the low rates of observed handwashing stations, soap, and water, 85 percent of respondents said they regularly washed their hands with soap and water. Only 38 percent of handwashing stations across the intervention approaches showed signs of use, indicating that handwashing promotion did not become normative.

FACTORS AFFECTING SUSTAINABILITY

The PHAST/SARAR approaches used for behavior change messaging are now known to have several weaknesses.[5] People reported washing their hands most before eating (81 percent), after toileting (73 percent), and before cooking (53 percent). At other critical times, less than 50 percent of respondents reported washing their hands. Respondents pointed to the need for

5 IRC International Water and Sanitation Centre & NETWAS International. 2009. Report of the Evaluation of the PHAST Tool for the Promotion Hygiene & Sanitation in the GOK/UNICEF Programme of Cooperation. UNICEF. https://www.unicef.org/evaldatabase/files/Kenya_2009-008_-_PHAST_Evaluation_Report_final-.pdf

sustained behavioral interventions and promoter presence to enable HHs to change habits and shift norms.

The implementation of additional WASH programming in the community appeared to influence handwashing (but not sanitation or water outcomes). HHs in these communities appeared to be more likely to have both soap and water as well as observable signs of handwashing.

CONCLUSIONS

Overall 63 percent of PEPAM/USAID WPs still functioned and served as high-quality, reliable primary drinking water sources. The PEPAM/USAID WP failure rate, while on a par with other studies, indicated a lack of sustainability. Several factors appeared to influence the status and use of the PEPAM/USAID WPs. Despite training, many of the water management committees struggled to implement best practices, and most did not to collect water fees that would ensure sufficient funds to pay for WP operations and maintenance. Activity-trained local entrepreneurs continued to engage in construction and repair of WPs, but only for those with financial resources could afford to hire them. These findings are consistent with other studies in this series as well as studies of rural WP management more broadly.[6] As long as these issues remain, rural water service will struggle to consistently function and be maintained.

Achieving a balance between quality infrastructure and high rates of use can be difficult. Latrine use and norm creation are dependent on a host of factors, but chief among them is access. In PEPAM/USAID villages, the ET noted a trade-off between quality and use. CLTS-WI communities had the highest evidence of use, but the lowest quality latrines, while subsidy and hybrid communities had lower evidence of use, but better-quality latrines that more frequently met basic service standards. A hybrid approach also has the potential to address sanitation service for economically disadvantaged households that reported limited financial, material, and physical resources. The approach could affect outcomes in multiple ways. For example, the CLTS-WI approach used open defecation free certification as an incentive for a subsidized water point, whereas the hybrid approach did not. It is of critical importance for future WASH activities to further explore the impact of differences between the implementation approaches and how they motivated behavior change around latrine use and open defecation practices.

As far as the sanitation subsidy vs. CLTS debate goes, in this context the data indicate a trade-off between the approaches. However, in aggregate, the data suggest that the hybrid approach strikes a balance and may be able to deliver more basic sanitation service to HHs and better establish norms.[7] However, more research needs to be done to understand the factors that drove high latrine use in CLTS-WI villages and comparatively poor use in hybrid villages; this analysis is beyond the scope of this evaluation given available information on PEPAM/USAID implementation.

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6 Foster, T. 2013. "Predictors of Sustainability for Community-Managed Handpumps in Sub-Saharan Africa: Evidence from Liberia, Sierra Leone, and Uganda." *Environmental Science & Technology* 47.21: 12037-12046. And Foster, T. and R. Hope. 2017. "Evaluating Waterpoint Sustainability and Access Implications of Revenue Collection Approaches in Rural Kenya." *Water Resources Research* 53.2: 1473-1490.

7 USAID. 2018. An Examination of CLTS's Contributions Toward Universal Sanitation. Washington, DC.: USAID Water, Sanitation, and Hygiene Partnerships and Sustainability (WASHPaLS) Project.

Encouraging handwashing is also difficult, though repeated messaging over time may be helpful. Based on the interviews and direct observations, it became evident that the handwashing stations PEPAM/USAID promoted no longer exist and replacement has been limited. With less than half of all observed HHs possessing any materials or facilities to wash hands and in spite of self-assertions regarding handwashing practices, the behavior change strategy did not appear sufficient to change handwashing behavior long-term.

RECOMMENDATIONS

1. **Consider building on the hybrid (combined CLTS and subsidy) approach for future rural sanitation service programming.** Attention should be paid to improving promotion of quality latrine facilities and determining the appropriate subsidy.
2. **Consider alternative models for small-scale WP management and governance**. Ensure that these models include linkages and consistent interactions with larger WASH governance and support structures.
3. **Incorporate human-centered design of handwashing stations into future projects**. Consider improving access to fixed handwashing stations beyond the tippy tap as well as supply chains for quality materials. Also develop guidelines on handwashing station material quality.
4. **Continue to engage in private-sector partnerships that foster local capacity building and entrepreneurship training.** Ensure that specific plans are in place to transition financial systems (bank accounts/guarantee of payment) for WASH services when a project ends. Simultaneously, ensure that supply chain systems are sustainable after the project concludes.
5. **Support system strengthening for sustained championing of WASH behavioral norms.** Promote the journey to self-reliance through work with host governments to strengthen systems that support community health workers or community WASH champions to provide longstanding and consistent behavior change activities. Changing behavior and shifting norms around water, sanitation, and handwashing with soap and water will require sustained presence.
6. **Conduct a cost-benefit analysis of WP pumps, well borehole options, and the three sanitation implementation approaches.** Combine existing cost documents with benefit data as an aid in decision-making for future programming.
7. **Support adaptive management recommendations in midterm evaluation reports and follow up to ensure that implementers have the flexibility to make course corrections.** Based on the data, it appears that implementing partners did not modify all implementation approaches in accordance with independent midterm evaluation findings regarding threats to sustainability.

INTRODUCTION

Water and sanitation service challenges in developing countries are well known. The 2016 Water Point Update from the Rural Water Supply Network (RWSN) showed that an average of 22 percent of water points (WPs) were nonfunctional across 11 countries.[8] In a study of four sub-Saharan African countries, an average of 13 percent of villages previously declared to be open defecation free (ODF) slipped back into open defecation (OD) status.[9] Debates about the effectiveness and application of subsidies for rural water and sanitation infrastructure have taken place for many years.[10, 11] In recent years, the debate has only grown with the popularization of the community-led total sanitation (CLTS) approach that does not include subsidies. As an outcome of this debate, a number of stakeholders have tried or considered the value of combining CLTS with targeted subsidies, which is of great interest to the water, sanitation, and hygiene (WASH) sector.

This report presents findings from the fifth in a series of six ex-post evaluations designed to understand the factors impacting sustainability based on the evaluation of completed USAID–funded WASH activities three to ten years after their conclusion.[12] The subject of this evaluation—the Millennium Water and Sanitation Program (*Programme d'Eau Potable et d'Assainissement du Millénaire au Sénégal*, PEPAM/USAID)—provides an opportunity to learn about the long-term outcomes related to rural water point construction and rehabilitation, management of those water points, participatory sanitation and hygiene education activities, and the comparative long-term outcomes of three approaches to achieving sanitation adoption: CLTS with a water incentive (CLTS-WI), subsidy for water and sanitation services, and a hybrid subsidy-CLTS approach. As of 2015, Senegal had met the Millennium Development Goals (MDGs) in urban water and sanitation. However, more than 2 million rural Senegalese lagged behind. Only 63 percent of rural populations had access to basic drinking water, 13 percent had access to basic sanitation (use of improved facilities that are not shared with other households), and 24 percent had access to a handwashing facility.[13] The aim of this evaluation is to provide evidence for USAID and other stakeholders and inform the design of sustainable future rural WASH activities in Senegal.

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[8] Banks, B. & S. Furey. 2016. What's Working, Where, and for How Long: A 2016 Water Point Update. Poster session presented at the 7th RWSN Forum, Abidjan, Cote d'Ivoire. https://www.rural-water-supply.net/_ressources/documents/default/1-787-2-1502962732.pdf

[9] Tyndale-Biscoe, P. et al. 2013. ODF Sustainability Study. Plan International. http://www.communityledtotalsanitation.org/sites/communityledtotalsanitation.org/files/Plan_International_ODF_Sustainability_Study.pdf.

[10] Evans, B., C. van der Voorden, & A. Peal. 2009. Public Funding for Sanitation: The Many Faces of Sanitation Subsidies. Water Supply & Sanitation Collaborative Council. Geneva, Switzerland.

[11] Le Blanc, D. 2007. Providing Water to the Urban Poor in Developing Countries: The Role of Tariffs and Subsidies. United Nations.

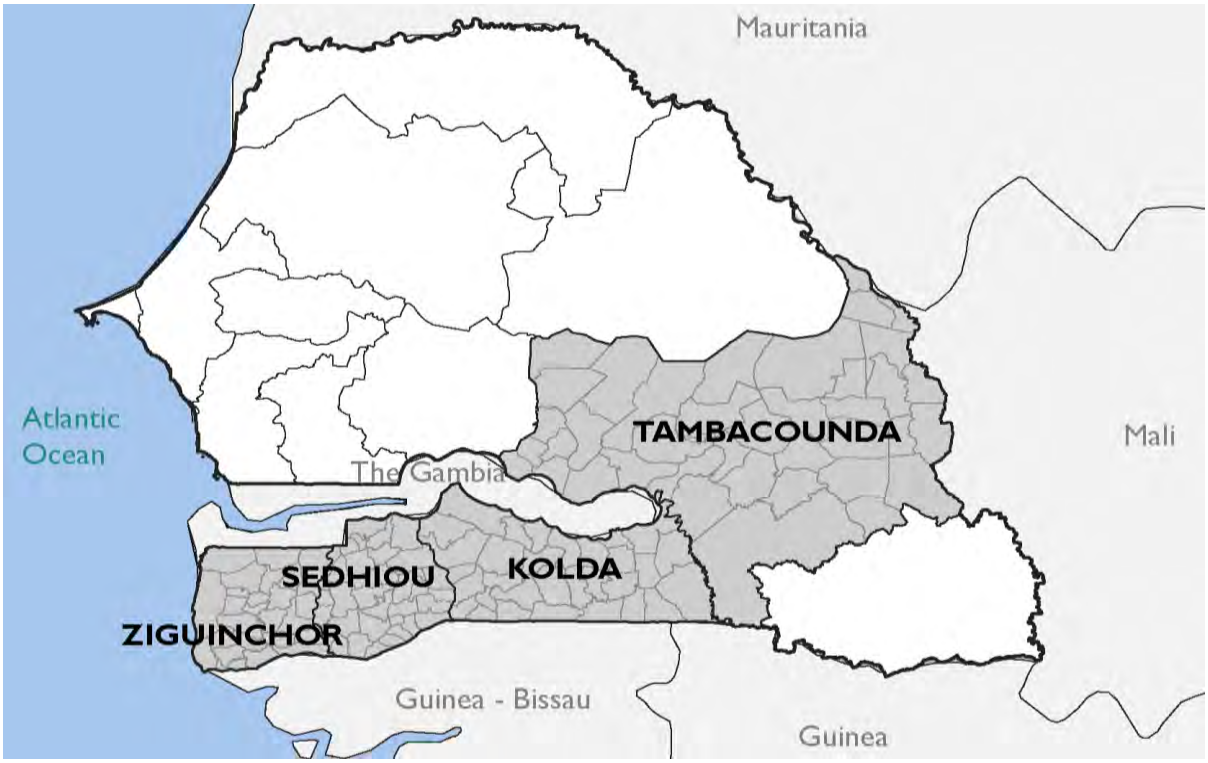
[12] The first four evaluations have been completed in Madagascar, Indonesia, Ethiopia, and India. The ex-post series is a task under the Water CKM activity, which is implementing knowledge management and communication services in support of the USAID Water and Development Plan. The project supports USAID's E3 Water Office and its partners in increasing water program knowledge and data capture; enhancing knowledge creation and knowledge sharing internally and among a wide range of external water sector stakeholders working in the water sector; and improving communication and outreach through diverse stakeholder engagement.

[13] Joint Monitoring Program (JMP), WHO, and UNICEF. washdata.org/data/household#!/sen.

OVERVIEW OF ACTIVITY AND BUDGET

In 2005, the Government of Senegal (GoS) launched PEPAM, a unified framework geared toward meeting Millennium Development Goal targets for water and sanitation, specifically to "provide drinking water to an additional 2.3 million people, increase rural households (HHs') access to drinking water from 64% in 2004 to 82% in 2015;[14] and expand sanitation provision to 355,000 rural HHs, increasing the rate of access to sanitation in rural areas from 17% in 2004 to 59% in 2015."[15] In addition to its own PEPAM interventions, the GoS also partnered with a number of international donors (e.g., PEPAM/European Union, PEPAM/African Development Bank, etc.[16]), including USAID. Even with progress from GoS inputs, by 2008, Senegal's rural areas, particularly in southern Casamance and Tambacounda (**Figure 1**), remained behind in terms of access to water and sanitation.[17] Poverty and ongoing low-level conflict in Casamance since the 1980s exacerbated the discrepancy in coverage.[18]

Figure 1. Map of Senegal Regions with PEPAM/USAID Activities Highlighted in Gray



[14] PEPAM's Final Report specifies that the indicator used to measure rural household access to drinking water follows the USAID definition for improved drinking water

[15] PEPAM. "Vue d'ensemble." http://www.pepam.gouv.sn/ensemble/index.php?rubr=vue.

[16] See Inception Report in Annex A for more details on PEPAM's partners.

[17] PEPAM documented these conditions in a 2010 Coordination Unit study, which found that "the Casamance region in Senegal ranks at the bottom of the list for access to potable water (i.e., Kolda's rate is 36.8%). Access to sanitation facilities is even lower, with the rate in Ziguinchor at 29%, and the rate in Sédhiou and Kolda both at a very low 8.1%." Swerdlin, D. & M. Seck. 2013. Final Report–Senegal WADA I & II Activities Community Led Total Sanitation Infrastructure Planning and Construction (Water Wells and Latrines) in the Regions of Ziguinchor, Sédhiou, and Kolda.

[18] CIA World Factbook. "Senegal Country Profile." https://www.cia.gov/library/publications/the-world-factbook/geos/sg.html.

To address these challenges USAID, in partnership with the GoS, selected Research Triangle Institute (RTI) to lead a consortium to manage and implement the $21-million PEPAM/USAID activity from September 2009 to December 2014. RTI worked with the GoS, other implementing partners (IPs), approximately 20 local NGOs, local entrepreneurs,[19] and other stakeholders to implement PEPAM/USAID in the Casamance region (Kolda, Sédhiou, and Ziguinchor) and Tambacounda. The primary objective was to: "Improve sustainable access to water supply and sanitation (WSS) and to promote better hygiene in targeted rural, small town, and peri-urban areas of Senegal" (**Annex F: USAID/PEPAM Results Framework**).[20]

CROSS-CUTTING IMPLEMENTATION

The RTI consortium aimed to achieve its objectives through a number of water and sanitation service-strengthening activities. This included training and supporting local water entrepreneurs to facilitate the construction, rehabilitation, and maintenance of WPs, including setting up drilling operations and supply chains. PEPAM/USAID also provided manuals on latrine construction, pit latrine emptying, and handwashing station construction and trained local entrepreneurs (sanitation masons) to construct and maintain sanitation infrastructure in their communities. The activity strengthened existing or established new Water Users' Associations (WUAs), *Association d'Usagers de Forage* (ASUFORs), and Village Management Committees (*comité de gestion*—CGs)[21], which oversaw the construction and maintenance of water and institutional sanitation infrastructure, as well as the promotion of good WASH practices.

Additionally, the activity provided Regional Hygiene Offices with water quality measuring equipment to facilitate local water quality testing[22] and promoted the development of local water and sanitation plans.[23,24] Program technicians and regional technical service units used these water and sanitation plans to support village selection.[25] Across all villages and approaches (described below) PEPAM/USAID used a wide array of behavior change interventions informed by the participatory, hygiene, and sanitation transformation (PHAST) and self-esteem, associative strengths, resourcefulness, action planning and responsibility (SARAR) approaches. In addition, PEPAM/USAID promoted community management practices and capacity building, and worked to empower local leaders to mobilize their communities around household water treatment with Aquatabs, handwashing practices at critical times, and tippy tap construction. Community members participated in all the interventions on a voluntary basis.

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[19] Private-sector local entrepreneurs were capacitated and provided inputs to provide a range of products and services along the WASH value chain e.g., WP drilling, pump installation, WP slab placement, and operations and maintenance contracts.
[20] RTI International. 2014. PEPAM/USAID Senegal Final Project Report.
[21] WUAs and ASUFORs typically served larger water systems with mechanized pumps while the CGs typically manage manual pumps.
[22] PEPAM/USAID documents do not specify the frequency at which water quality testing was supposed to occur.
[23] SEMIS. 2013. Mid-Term Evaluation of the PEPAM/USAID Water and Sanitation Project. USAID.
[24] RTI International. 2011. USAID/Millennium Water and Sanitation Program Annual Report No. 2. USAID.
[25] Site selection was ultimately approved by the national department. PEPAM Year 1 Assessment Report.

INTERVENTION APPROACH

Over the course of implementation, PEPAM/USAID used three different approaches to WASH programming: CLTS with a water incentive (CLTS-WI), subsidy, and hybrid. Each is discussed in turn below (see **Annex G: Summary of USAID/PEPAM Approaches**).[26]

The first approach, **CLTS with a water incentive,** focused primarily on sanitation (encouraging at least one latrine per HH) and handwashing promotion. PEPAM/USAID offered no subsidies or funding for household latrines, following the traditional CLTS approach (e.g., triggering.), however, the activity provided sanitation manuals to guide latrine construction and maintenance and referrals to trained masons.[27] In addition, PEPAM/USAID incentivized villages with a subsidized water point upon achieving ODF certification (the village paid a 10 percent cost-share for new WP and 50 percent to 100 percent for any major rehabilitations).[28] Only a subset of the total ODF certified villages opted for a subsidized WP. In addition to sharing the cost of building/rehabilitating WPs and setting up a maintenance fund with a minimum 50,000 West African Communauté Financière Africaine Franc (CFA) contribution, communities provided sand, gravel, and other construction materials.[29] The activity also encouraged community members to treat their water with Aquatabs,[30] build handwashing stations, and wash their hands at critical times. PEPAM/USAID implemented this approach Kolda, Sédhiou, and Ziguinchor.

Table 2. CLTS Villages

APPROACH	#
Sanitation & Hygiene Only (ODF Verified)	36
Water, Sanitation, & Hygiene (ODF Verified)	72

[26] The approaches were rolled out in a phased process and learning incorporated for each phase into the next. Starting with the subsidy approach in 2009, in 2010 CLTS pilots began, and after 2.5 years the hybrid (CLTS+subsidy) approach was introduced in Tambacounda according to: USAID. 2013. Diversification of Strategies to Improve Access to Sanitation in Rural Areas In Senegal Technical Note on USAID/PEPAM's Integrated Approach.
[27] RTI International Implementation Plan, WADA Project Development Process.
[28] Note, using a water point as an incentive alone diverges from traditional CLTS, which focuses on disgust and shame as the primary motivators to change behavior and reach open defecation free status.
[29] The Water and Development Alliance (WADA) subcomponent principally focused on this approach and drove efforts toward Development Result 5.
[30] The implementation documents do not provide specific details on how and where community members were encouraged to use Aquatabs.

The second approach**—subsidy—**combined demand creation through community meetings and promoters with a subsidy to finance water and/or sanitation infrastructure. This approach did not include traditional CLTS activities. Presidents of ASUFORs and CGs, heads of villages, or mayors could request financing support for desired water and/or sanitation infrastructure in their communities, and PEPAM/USAID financed the difference between what the community could contribute and the total cost of the water point, or in some rare cases, institutional latrines.[31,32] PEPAM/USAID made the subsidy available to any household in the community. Households that opted to participate in the sanitation subsidy component cost-shared a prespecified amount based on the latrine type selected (see **Table 6**). The community fundraised and cost-shared 10 percent of the project's capital expenses for WPs, and user fees were meant to cover ongoing operation expenses. In addition, the activity encouraged community members to treat their water with Aquatabs and to construct fixed handwashing stations to wash their hands at critical times. PEPAM/USAID implemented this approach in Kolda, Sédhiou, Tambacounda, and Ziguichor.

Table 3. Subsidy Villages

APPROACH	#
Water only	64
Sanitation & Hygiene only	57
Water, Sanitation, & Hygiene	112

The final approach—**hybrid**[33]—a combination of CLTS and subsidy implemented in parts of Tambacounda, promoted both water supply and /or sanitation infrastructure. IPs triggered communities with CLTS methods and approximately three months later revisited the communities to introduce the subsidy structure. PEPAM/USAID made the sanitation subsidy available to all households in the community, and those that chose to participate had to pay their portion of the cost-share. In villages that only participated in the water subsidy, IPs held demand-creation meetings, and the community fundraised their portion to obtain a subsidized WP. In addition, PEPAM/USAID encouraged community members to treat their water with Aquatabs, build handwashing stations, and wash their hands at critical times.

Table 4. Hybrid Villages

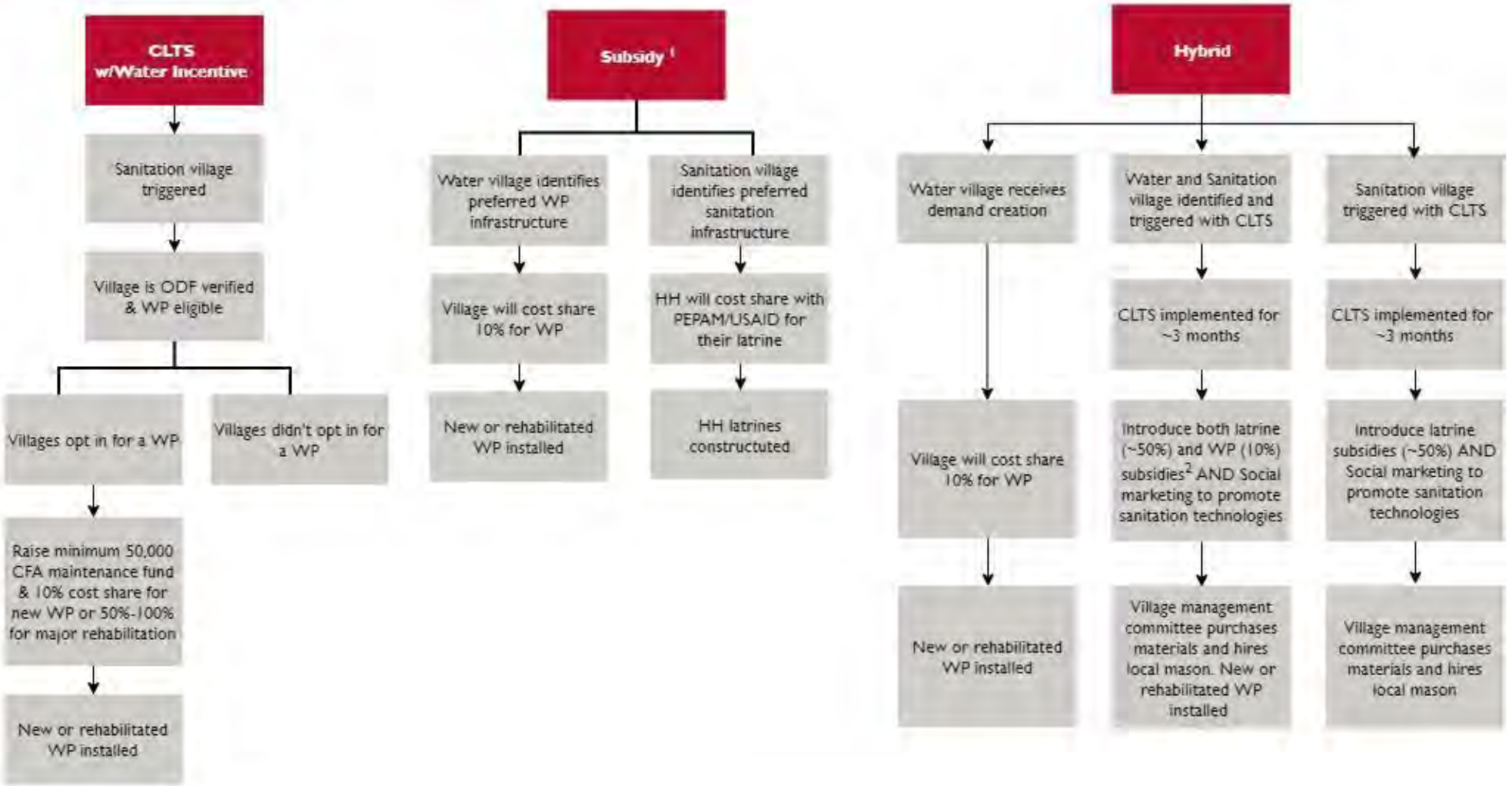
APPROACH	#
Water only	31
Sanitation & Hygiene only	9
Water, Sanitation, & Hygiene	34

[31] Public sanitation also referred to as institutional sanitation was only a part of the subsidy approach and included latrines at 10 schools and 39 clinics. PEPAM/USAID constructed sanitary blocks and boreholes to promote WASH in Schools in the Casamance and built institutional sanitary blocks at health centers and health posts in Tambacounda. This evaluation did not evaluate 147 improved toilets provided as part of the WASH in Schools or institutional sanitation activities.

[32] RTI International. 2011. USAID/Millennium Water and Sanitation Program Annual Report No. 3. USAID.

[33] The hybrid approach was termed the Integrated Community-Based Approach for Water, Hygiene, and Sanitation in PEPAM documents.

Figure 2. PEPAM/USAID Approaches



Notes
1. When both water and sanitation activities were implemented in the same village, the activities happened simultaneously.
2. In water and sanitation villages, the water and sanitation subsidies were introduced simultaneously.

WATER INTERVENTION

PEPAM/USAID developed the capacity of local entrepreneurs to install or rehabilitate several different water point types. The activity selected technologies based on a variety of factors, including: geology, site access for drilling rigs, population density, desired level of service, cost, familiarity of the communities with different pumps, and operations and maintenance (O&M) requirements. PEPAM/USAID installed mostly small, single-point water pumps. However, the activity also installed a limited number of water system extensions and larger, solar- or diesel-powered, multi-point submersible pumps. The smaller systems could serve up to 1,200 people in a community, whereas the latter could serve up to 15,000 people. In addition, the activity rehabilitated existing manual pumps in some villages. The specific pump classification and models of the rehabilitated pumps are not identified in project documents, however, all were manual pumps. **Table 5** summarizes the types of WPs that PEPAM/USAID installed.

Table 5. Water Pumps Installed by PEPAM/USAID

PUMP CLASSIFICATION	SPECIFIC PUMP NAMES	NOTES
Rope Pump 	Erobon	Problems noted in the midterm evaluation; no more constructed after 2013.
Deep-Well Diaphragm Pumps 	Vergnet 60	
	Vergnet	
	Vergnet 100	
Deep-Well Piston Pumps 	India Mark II Galvanized	Problems with corrosion. The project stopped using the galvanized version in favor of the stainless-steel version.
	India Mark II Stainless Steel	

Submersible Pumps 	Submersible Pumps[34]	Some installed with water towers.

SANITATION INTERVENTION

PEPAM/USAID promoted three improved household latrine designs that ranged in cost from $100 to $323 USD. PEPAM/USAID worked to create demand for any type of latrine, and to train local entrepreneurs (masons) to build activity-specific latrine types. Where applicable, the amount subsidized varied for each of the latrines by approach. Note that in the subsidy approach, the HH's cost-share was less than for HHs participating in the hybrid approach (**Table 6**).

Table 6. PEPAM/USAID Latrine Design and Cost

LATRINE DESIGN OPTION	FEATURES	APPROACH	SUBSIDY AMOUNT FROM PEPAM/ USAID	COST FOR HH	
SanPlat[35] 	A ventilated, round, brick-lined pit latrine; covered with a concrete, circular slab with drop hole cover (required). Total built: **2,707**[36]	**Subsidy**	42,943 CFA $75	20,527 CFA $35	63,470 CFA $110
		CLTS	0	28,707 CFA $50	28,707 CFA $50
		Hybrid	29,880 CFA $51	27,590 CFA $49	57,470 CFA $100
Double Vault Latrine (DVL) 	2 separate ventilated, (about 2 meters apart), round brick-lined latrines; covered with concrete circular slabs with drop hole covers (required). Removable superstructure made of	**Subsidy**	70,285 CFA $70	40,805 CFA $122	111,090 CFA $192
		CLTS	0	0	0
		Hybrid	29,880 CFA $51	81,210 CFA $140	111,090 CFA $192

[34] Specific brands of submersible pumps were not identified in PEPAM/USAID's documentation.
[35] The total costs are different for a SanPlat latrine in subsidy, CLTS, and Hybrid categories. This table is a modified version from the final report annexes. The ET was unable to understand why this difference existed. but were not able to.
[36] SanPlats built by region—Kolda 704, Sédhiou 312, Tambacounda 240, Ziguinchor 1,452.

	local materials (optional). Total built: **941**[37]				
Ventilated Improved Pit (VIP)[38] 	2 rectangular, ventilated pits separated by a partition wall but in the same superstructure; 2 concrete defecation slabs and 2 concrete drain tiles; footrests installed; brick superstructure with metal sheet roof and door (required). Total built: **323**[39]	**Subsidy**	76,977 CFA $133	119,565 CFA $207	196,542 CFA $323
		CLTS	0	0	0
		Hybrid	29,880 CFA $50	166,662 CFA $290	196,542 CFA $323

HANDWASHING

As noted above, PEPAM/USAID implemented handwashing interventions across all approaches using PHAST/SARAR methods. The activity focused on promoting handwashing at critical times (before preparing food, before eating, and after a defecation event). The activity promoted tippy taps and provided guidance on how to construct them.

PEPAM/USAID KEY RESULTS

According to the PEPAM/USAID final closeout report, the activity surpassed targeted levels of performance across indicators. Key achievements are shown in **Figure 3**.

Figure 3. PEPAM/USAID Select Key Achievements

Overall

- ✔ 742 organizations (WUAs, trade and business associations, etc.) received USAID assistance[40]
- ✔ 18,349 rural HHs directly benefitted from the program
- ✔ 10,245 home visits conducted on WASH across all of the approaches

[37] DVL built by region—Kolda 137, Sédhiou 247, Tambacounda 24, Ziguinchor 533.
[38] VIP latrines are typically built with one pit, however, the PEPAM/USAID manuals specified that promoted VIP latrines would have two pits.
[39] VIP built by region—Kolda 1, Sédhiou 29, Tambacounda 16, Ziguinchor 277.
[40] On the private-sector side specifically, 33 enterprises and 236 individuals were trained and/or equipped to provide private-sector construction and operations and maintenance to water and sanitation infrastructure in PEPAM/USAID activity villages.

Water

- ✔ 11,076 beneficiaries gained access to an improved drinking water source[41]
- ✔ 14 local drilling enterprises, 5 metal working shops, 60 local water infrastructure repairmen trained/strengthened

Sanitation

- ✔ 74,170 beneficiaries gained access to improved sanitation through the installation of 6,709 latrines. For CLTS-WI only: 28,300 beneficiaries in 108 CLTS-WI villages gained access through 2,405 new or rehabilitated latrines
- ✔ 176 masons trained to construct household latrines

Handwashing

- ✔ 4,925 handwashing units installed

GOVERNMENT OF SENEGAL POLICY CONTEXT

The GoS continues to take steps to enhance WASH access in rural Senegal. In 2014, the government passed a law to establish a new public corporation, the Office of Rural Borehole Management (OFOR), to own, manage, rehabilitate, and delegate rural water supply assets across Senegal. OFOR is responsible for asset management, infrastructure renewal and extension, and the control and monitoring of operations. Through delegated public service contracts (leases) from OFOR, private operators directly manage service delivery, oversee O&M, and collect tariffs. This legislation shifted the ASUFORs' role from overseeing operations to governing water services in the locality, representing consumers in policy and operational decisions, and advising the operator on issues relating to the community.[42] Of note, this policy only applies to ASUFORs (which typically manage larger multi-village systems) and does not apply to smaller community water points. In 2016, Senegal adopted its national sanitation strategy (SNAR), which aims to replace the subsidy approach with a market-based approach that will gradually shift responsibility for building sanitation facilities to households. The SNAR uses sanitation marketing techniques to reach the estimated 7.5 million unserved or underserved people who are capable and willing to pay for water services.

[41] 135,311 beneficiaries gained access to a drinking water source
[42] Diallo, O. 2015. Levers of Change in Senegal's Rural Water Sector. Word Bank Group.

EVALUATION QUESTIONS

This evaluation addressed seven questions as shown below:

WATER

1. What is the present level of service at WPs installed or rehabilitated by PEPAM/USAID four years after activity close in terms of functionality, water quantity, quality, accessibility, and reliability?
    a. To what degree are community members using activity-sponsored WPs relative to other water sources, for which purposes and why?
2. Which factors influenced sustainability of water services?
    a. How effective have governance and management activities been?
    b. To what extent have PEPAM's efforts to build private-sector (local entrepreneur) capacity for WP construction and maintenance influenced WP sustainability?
3. To what extent are women continuing to participate in management and governance structures put in place under PEPAM/USAID?

SANITATION

4. To what extent have HHs been using and replacing (as needed) their latrines in PEPAM/USAID communities?
5. What factors have contributed to use and maintenance of HH latrines?
    a. Which of the three implementation models (CLTS, subsidy, and hybrid) was the most sustainable?

HANDWASHING

6. In sanitation communities, to what extent are PEPAM/USAID–promoted handwashing stations, or other models, used today?
7. Which factors influenced sustainability of handwashing behaviors?

METHODOLOGY

OVERVIEW

This ex-post evaluation used a mixed-methods design to conduct data collection in November and December of 2018 in Kolda, Sédhiou, Ziguinchor, and Tambacounda regions (see **Figure 4** below). Prior to fieldwork, the evaluation team (ET) conducted a desk review of PEPAM/USAID activity documentation and researched other WASH activity in the regions, as well as other WASH literature. The ET developed all data collection instruments and updated them with input from data collection partner Atraxis Group. See **Annex A** for detailed methodological and data collection details, **Annex B** to review the data collection instruments (both in English and in French), **Annex C** to see the list of respondents, and **Annex D** for a list of documents reviewed.

Figure 4. Evaluation Data Collection Methods

Document Review

- +100 Project and background documents

Surveys

- 514 Water users
- 617 Sanitation households

Structured Observations

- 169 Water points
- 551 Latrines
- 291 Handwashing stations

Water Quality Tests

- 105 *E. coli*
- 105 Iron
- 64 Fluoride

Key Informant Interviews

- 56 interviews with former implementers (5), local water entrepreneurs (4), regional government officials (12), water management committees (11), community leaders (12), and members (12)

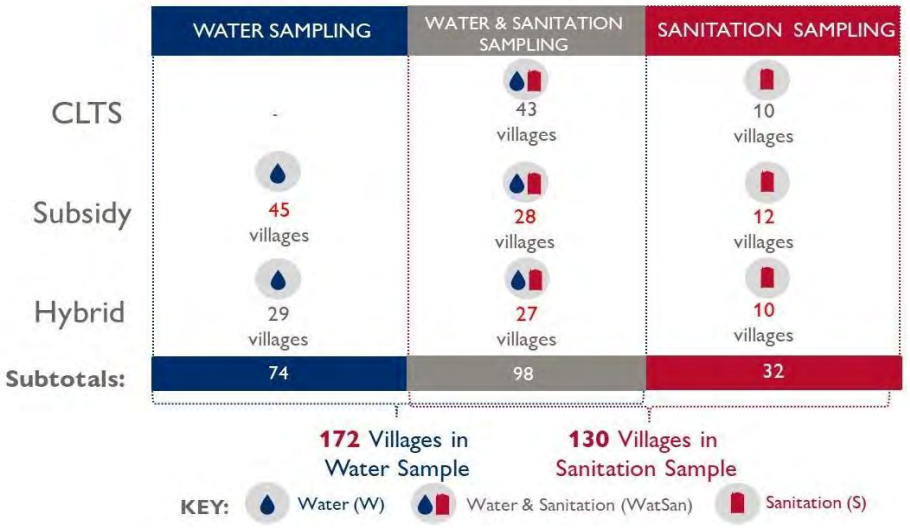
EVALUATION TEAM

Five people comprised the evaluation team: Team Leader Holly Dentz; Senior Technical Advisor Kari Nelson, Ph.D.; Senior WASH Consultant Alioune Watt; and Logistician Lyne Mendy. Project Director Leslie Hodel provided additional technical support and oversight. The Atraxis Group conducted data collection. The evaluation team and data collection firm brought significant expertise in WASH and evaluation methods, water point engineering, and knowledge of local languages and context.

SAMPLING

The ET derived the sampling frame of eligible villages from the approximately 500 villages mentioned in PEPAM/USAID documentation, which indicated key activity details such as intervention approach (CLTS-WI, subsidy, hybrid) and intervention village type (water, sanitation, or water and sanitation combined).[43] Once the team applied exclusion criteria, it drew a random sample of villages that received a water intervention, stratified by the type of approach in which it was embedded (CLTS-WI, subsidy, or hybrid) (see **Annex A: Inception Report, Table 5**). The final sample across type of intervention villages and approaches is summarized in **Figure 5.**

Figure 5. Final Quantitative Sample by Approach



The qualitative sample was purposively selected from the already sampled villages in the quantitative sampling frames. The ET selected from a combination of village types (water, sanitation, and water and sanitation combined) and implementation approaches (CLTS-WI, subsidy, and hybrid) to enable the representation of a variety of perspectives, approaches, and conditions.

Traditionally ex-post evaluations avoid data collection in locations that had subsequent activities similar to the intervention activities, known as sample contamination. The ET investigated the locations and content of WASH activities conducted by USAID, GoS, or other donors since PEPAM/USAID ended to the extent possible (see **Annex A: Inception Report Annex A, Assessment of Site Contamination**). In agreement with USAID, the ET attempted to select villages with limited or no additional WASH activities. In every data collection location, the ET also captured details of which activities, if any, took place and what those activities entailed. This allowed the ET to account for any impacts related to contamination during analysis.

[43] The USAID Mission provided the ET with a PEPAM/USAID activity WatSan by Activity implementation document that had details such as: village type, approach type, number an infrastructure installed, implementers, etc.

DATA COLLECTION METHODS

The ET conducted surveys with water users as they visited water points.[44] HH sanitation surveys focused primarily on sanitation and handwashing practices. The ET relied on structured observations of WPs, water quality testing, and key informant and group interviews with a variety of stakeholders to understand the current status, use, and factors that impacted the sustainability of PEPAM/USAID WASH activities.

QUALITATIVE INTERVIEWS

Key Informant or Group Interviews with IPs and Government Officials. The ET conducted key informant interviews or group interviews with IPs and regional government officials across regions to provide context for the overall evaluation (policy frameworks, monitoring, etc.) and gain a deeper understanding of the PEPAM/USAID activities' implementation challenges and successes, factors that may have impacted sustainability, lessons learned, and interactions with their offices. The ET also sought additional data and documentation but found it was rarely available.

Key Informant or Group Interviews with Community Members and Natural Leaders (NLs). The ET sought the perspectives of community members and NLs (e.g., village chief, health workers) on a wide range of topics: PEPAM/USAID activity implementation, the community's retention of WASH behaviors, WASH norms, and sustainability of water supply infrastructure and sanitation activities. In addition, the ET asked this group about the activity's village-level governance; local entrepreneur engagement; and other topics that emerged from interviews with USAID, implementers, and regional officials.

Table 7. Qualitative Interviews Completed

STAKEHOLDER	INTERVIEWS CONDUCTED
Former Implementers	6
National Government	1
Regional Government	11
Private Sector Water Entrepreneurs	4
Water Management Committees	11
Community Leaders	12
Community Members	12
Total	**56**

Group Interviews with Local Entrepreneurs. In each of the regions, the ET aimed to capture the perspectives of private-sector local water entrepreneurs (e.g., drillers, manufacturers, repair artisans) and sought their perspective on the impact of PEPAM/USAID training, program implementation, and sustainability of systems. During data collection, the ET identified some local water entrepreneurs who also had worked on the sanitation component of the activity. These local entrepreneurs shared their thoughts on both water and sanitation aspects.

[44] In some instances when no water point users were found collecting water after the observation period, the enumerators would seek out community members who reported collecting water to participate in the survey.

QUANTITATIVE DATA

Mixed-Methods Group Interviews with Water Committees. The ET conducted group interviews with two to four water committee (WUA and select ASUFOR) members and included female committee members, if available. The interview guides contained a mix of semi-structured and structured questions to elicit thoughts and perceptions related to who used the WPs, water quality, governance, operations, maintenance, financial stability, and engagement with local entrepreneurs.

Household Sanitation Survey. The ET completed 617 short sanitation and handwashing–focused household surveys with a female head of HH (where possible) to assess history of latrine installation, maintenance, replacement, user perception related to replacement/maintenance, local entrepreneurs' capacity to support replacement/maintenance, community open defecation, knowledge of critical times for handwashing, and use and maintenance of handwashing stations. Within sampled villages, the ET selected a nonprobability sample of HHs with respondents available.

Group Survey with Water Point Users. The ET identified 514 WP users (approximately three per WP) to participate in a brief survey to understand respondents' experiences and thoughts on service-level indicators such as functionality, quality, quantity, accessibility, reliability, source switching/mixing, challenges, and other related questions. When participants were available, the ET conducted one or more interviews at each WP. If the WP was not functioning at the time of its visit, the ET identified community members who collect water from other sources to participate.

Structured Observations. The ET conducted 169 one-hour structured observations at WPs. The observation tool captured function (e.g., if WPs dispense any water), flow rate, stroke rate, leakage tests, fill time, and observed risk of contamination. The ET also assessed WP infrastructure for factors that might affect sustained functionality, such as engineering aspects.

During the HH sanitation survey, the ET observed 551 latrines and 291 handwashing stations. The ET observed latrines to assess the facility's cleanliness, signs of usage, and its structure for safety, privacy, ventilation, and presence of a slab. Handwashing station observations took note of handwashing station type and assessed the presence of soap and water.

Water Quality Testing. The ET conducted water quality testing at functional water points. In line with USAID WASH indicator HL.8.1-2, the ET tested 105 WPs for *E. coli.* HL.8.1-2 specifies fecal coliforms as the indicator, however, the ET opted to test for *E. coli* as a more specific measure of contamination. The ET used the most probable number (MPN) method with the Aquagenx compartment bag test (Chapel Hill, North Carolina). The ET also tested 105 samples for iron and 64 samples for fluoride. Based on extensive research prior to the evaluation, the ET and USAID determined that no arsenic testing needed to take place in the regions and fluoride only needed to be tested in Kolda, Sédhiou, and Tambacounda.

QUALITY CHECKS

The ET employed a number of data quality checks throughout the data collection and cleaning process. During data collection, a supervisor conducted back check surveys and observations in 20 randomly selected villages in the overall sample. In addition, the ET made back check phone

calls to confirm enumerator visits. In cases where these measures raised quality concerns, the ET recollected the data. In addition, ET conducted frequent quality checks on the final dataset and resolved all noted issues prior to finalization.

Senior ET members reviewed all initial qualitative notes to ensure sufficiency of detail and clarity. They worked with data collectors to improve the quality where necessary, working with translators until notes attained quality standards.

ANALYSIS

The ET analyzed all quantitative data using Stata 15 software and calculated means and pairwise comparisons with 95 percent confidence intervals for WASH indicators. The team cleaned all data for errors (e.g., duplicates, missing values, etc.), and, where appropriate, disaggregated the data by region, approach, and/or pump type. For qualitative data, the ET developed a codebook based on the evaluation questions and refined it through practice coding and iterative discussions with coders before formal codebook application. Coders applied analytic codes using MAXQDA 12 software and tested for intercoder agreement. The team leader reviewed the results for consistency and addressed discrepancies. The team leader also recoded data as needed for consistent coding application. Two ET members used applied thematic analysis to deductively examine themes across the 56 qualitative interviews using complex coding queries and lexical searches. The ET triangulated the quantitative and qualitative data to ensure that the conclusions reflected the diversity of stakeholder perspectives from all groups, village types, and implementation approaches. The data analysis methods and triangulation process allowed the ET to validate findings, conclusions, and recommendations.

LIMITATIONS

As with any evaluation design, limitations and risks need to be considered. The ET identified the following challenges and devised mitigation strategies during the evaluation:

Contamination. Despite the ET's best efforts to avoid sites where another donor or group had completed a similar intervention since the end of PEPAM (i.e., sample contamination), the ET encountered contamination not detected during the desk review in 29 percent of villages. The level of contamination varied substantially region to region—Kolda had the lowest level (12 percent) and Ziguinchor the highest (61 percent). Sédhiou (25 percent) and Tambacounda (19 percent) had relatively low contamination. The ET analyzed the data to determine if the contamination affected key outcomes (e.g., WP functionality, WP payment indicators, basic sanitation access, observed soap and water, etc.). The team found no significant correlations between contamination and water and sanitation indicators. However, the ET identified a significant and positive correlation between contamination and two handwashing indicators (having soap and water available ($r=.18; P<.001$) and signs of handwashing ($r=.13; P=.03$). Thus, the presence (or not) of contamination appeared to relate only to handwashing, but not to water or sanitation outcomes. Due to fieldwork timing and interview schedules, it was difficult to gather information on contamination from government officials prior to village-level data collection. In most cases, when asked, government officials did not have village-level data readily available.

Lack of Comparison to an Endline Survey. This evaluation cannot directly measure the sustainability of sanitation and handwashing infrastructure and behavior because PEPAM/USAID did not conduct an endline survey at the activity's conclusion to which ex-post evaluation findings can be compared. While the ET cannot estimate precise slippage, it is possible to discuss implicit trends.

Use of PEPAM/USAID Water Points. Both the water user survey and the HH sanitation survey asked respondents how they used the water gathered from their primary and secondary WPs. Not all enumerators followed the survey protocols, however, and in some cases, the primary WP was not always the PEPAM/USAID WP. Without a verification question asking which (or if either) WP was the PEPAM/USAID WP, this identification had to be estimated using other variables collected in the HH sanitation survey.

Selection Bias and Sample Size. Random selection of villages for WP observations should limit bias for WP functionality observations. While the ET selected sanitation villages at random, due to the purposive nature of respondent recruitment for some aspects of the evaluation (water user survey, HH sanitation survey, qualitative data collection), the ET did not have a fully random and representative sample for measuring WASH behaviors. The ET also restricted WP or latrine observation to one day at each site with no revisits in light of resource and time constraints, which may have also affected generalizability of results.

Due to resource constraints, the sample size did not provide sufficient statistical power to measure precise and generalizable results. This could reduce the likelihood that the statistically significant results reflect a true effect.[45] The ET presents the results with this caveat and shares inferences based on results.

Other Biases. Biases such as self-selection, recall, and positive response may have occurred. Participants may have chosen to participate or not based on their interest in the topic and feelings about it. This has the potential to provide a skewed picture of WASH in their community. Because PEPAM/USAID spanned from 2009 to 2014, some villages may not have engaged with the activity in more than nine years, and respondents may not have been familiar with or able to recall details to adequately answer the ET's questions. Respondents may have also wanted to provide a "correct or expected" answer because of social norms in their community, which would lead to positive response bias. To guard against the biases listed above, the ET triangulated findings among several sources and data types and included observations, where feasible, to complement self-reported behaviors.

Implementation Complexities. PEPAM/USAID had several objectives, more than 18 IPs, and a complicated implementation that spanned different interventions, village types, and approaches. Exactly how each implementing partner carried out its activities is unknown, as are the details on which specific HHs took up interventions. This limits what can be said about how the implementation affected sustainability. However, the ET still made inferences based on triangulation of data sources.

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[45] Button, K. et. al. 2013. Power Failure: Why Small Sample Size Undermines the Reliability of Neuroscience. Nature Reviews. https://brain.mpg.de/fileadmin/user_upload/images/IMPRS/Master_Reading_List/small_samples_Nature_Reviews.pdf

FINDINGS AND CONCLUSIONS

WATER POINTS

FINDINGS

CURRENT STATUS

This section discusses the current status of PEPAM/USAID–supported water infrastructure in villages that experienced water and combined water and sanitation interventions. In most cases, outcomes of interest are disaggregated by the type of water pump installed, as technology may influence key outcomes such as functionality, quantity of water produced, life cycle costs, etc. Where relevant, the ET also disaggregated data by region. However, the types of pumps installed varied somewhat across regions, which could conflate any potential regional/geographic differences.

In addition to discussing observed values, the report also makes comparisons to Joint Monitoring Programme (JMP) and Demographic and Health Surveys (DHS) water access standards. This includes comparisons to the JMP ladder for water service, which classifies "basic" water service as being provided from an improved source and taking less than 30 minutes round trip to collect.

Water Point Functionality. The PEPAM/USAID activity supported installation of several different types of WPs based on a variety of factors: well depth to groundwater, population served, and other technical factors. Overall, functioning WPs accounted for 63 percent of the 169 visited, but the functionality rate varied by technology (**Error! Reference source not found.**). The type of well or borehole used (hand drilled, small rig, or large rig) showed no significant differences in functionality.

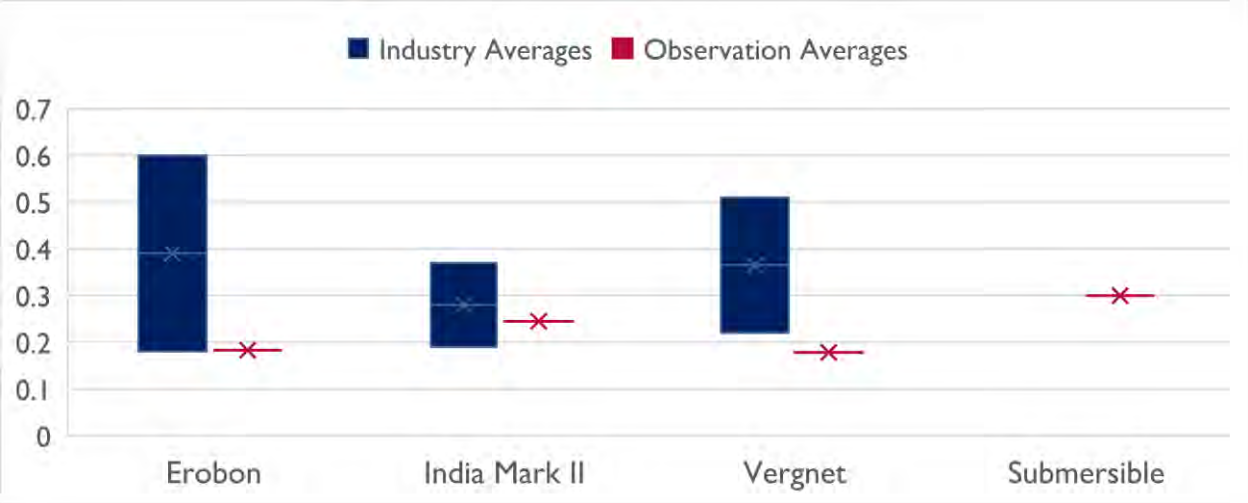
The activity's midterm evaluation highlighted problems with Erobon rope pumps,[46] which had the lowest functionality rate during the evaluation's observations (27 percent). This performance differed significantly from all other groups except the rehabilitated WPs (33 percent). PEPAM stopped installing the Erobon rope pumps in 2013, though documentation doesn't specify why this change happened.[47]

[46] SEMIS. 2013.

[47] The team heard anecdotally that the change was in response to feedback from the GoS rather than because of the midterm report, however, no documentation is available to confirm the full circumstances.

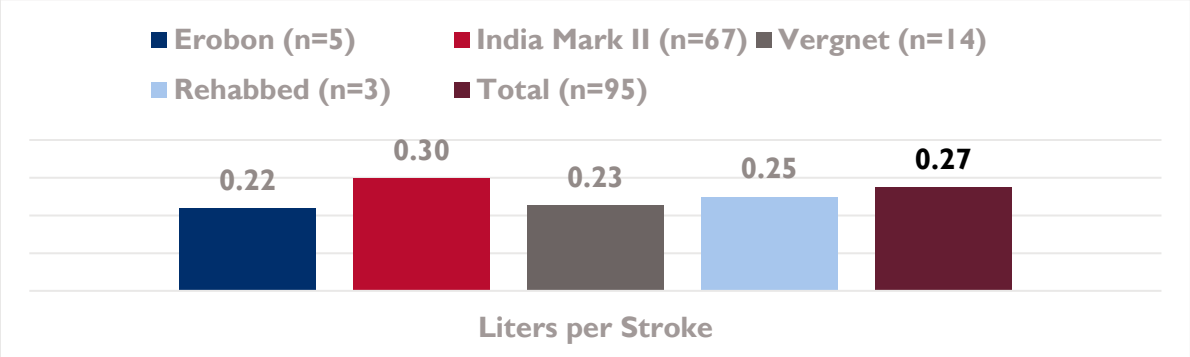
Water Quantity. The majority (84 percent) of water users reported being satisfied or very satisfied with the quantity of water produced at their primary water source. However, at observation, pumps appeared to be performing at the lower end of (if not below) the expected range for the type of pump **(Figure 6)**. Expected flow rates can vary significantly depending on borehole depth and, for manual pumps, can also vary depending on the user and the physical exertion applied. For submersible pumps, flow rates can also vary depending on the specific model and horsepower of the pump, as well as by the amount of energy put into the system. Project documents did not make these details available and thus a likely flow range cannot be estimated.

Figure 6. Expected vs. Observed Flow Rates by Type of Pump, in Liters per Second (Water Point Observations)[48]



Stroke rate is another important measure of flow specific to manual pumps **(Figure 7)**. The less water produced per stroke, the more strokes required to fill a bucket, and the more time and physical exertion it takes a person to collect water.

Figure 7. Manual Pump Stroke Rates by Type of Pump (Water Point Observations)



[48] Brikké, F. & M. Bredero. 2003. Linking Technology Choice with Operation and Maintenance in the Context of Community Water Supply and Sanitation. A Reference Document for Planners and Project Staff. WHO and IRC Water and Sanitation Centre. https://www.who.int/water_sanitation_health/hygiene/om/wsh9241562153.pdf.

Each type of pump had a similar mean stroke rate, with the exception of the India Mark II, which had a significantly better stroke rate when compared to either the Erobon pumps *(P=.01)* or the Vergnet pumps *(P<.001)*. In the qualitative interviews, water users occasionally complained about the high amount of effort needed to operate the pumps. As one water user said, "We all use the water from the pump, but it is difficult to get water because to pump the water we put a lot of effort into it, and we often have chest pains. This can discourage people and push them to look for water in the well."

Water Quality. Overall, water users described themselves as satisfied with the water quality from their primary WPs, with 87 percent of respondents giving either a satisfied or very satisfied rating for water quality. The water quality tests supported this broadly positive view, finding that very few WPs had significant water quality concerns.

When tested for iron, only 21 out of 105 WPs tested above 0 mg/l, and only one tested above the Senegal national standard of .5 mg/l.[49] Fluoride tests indicated that only five of 64 WPs tested over the national standard of .8 ppm, and only three tested above the World Health Organization standard of 1.5 ppm. *E. coli* testing revealed contamination of seven of 105 WPs. These findings only occurred in the Ziguinchor and Tambacounda regions. Though a precise diarrhea risk level is not known to correspond to a measured level of *E. coli* contamination, a general risk assessment indicates that three of the seven contaminated WPs would be considered unsafe (MPN of 100), while another three would be considered an intermediate risk (MPNs between 1.5 and 5.8), and the last would be considered high risk and probably unsafe (MPN of 48.5).

Qualitative interviews also reflected this positive view of water quality, where interviewees often commented on the purity of the water from the PEPAM/USAID WPs and how they have contributed to positive health outcomes in the communities.

> "In this village, no one doubts the good quality of the water. It is the people themselves who come to tell us that water is safe to drink because, since they have had access to water from the borehole, many of the diseases found in children and in the population in general have disappeared."
>
> *– Water Committee Member Marassoum*

Water Accessibility. USAID indicator HL.8.1-1 and JMP access indicators require that water collection must take 30 minutes or less round trip. Though direct observations of the WPs revealed only a small number of WPs where people had to wait 30 minutes or more (15 percent), these observations did not include travel time. The time of day at which enumerators conducted their observations could make a difference in total collection time, as lines are longest during peak times (typically early morning or late afternoon). Though the data collection attempted to conduct observations at peak times, this was not always feasible.

[49] Though 169 WPs were observed, only 105 were sampled for iron and *E. Coli* because some WPs were not functioning and, therefore, could not be tested. Fluoride testing was not conducted in Ziguinchor based on feedback from local stakeholders.

When asked in the survey, only 17 percent of users reported needing 30 minutes or more for a single trip to collect water. However, most users reported needing multiple trips per day, and thus respondents reported an overall average of 53 minutes per day required to meet their water needs. The qualitative interviews echoed these findings. While largely happy with the PEPAM/USAID WPs, interviewees commented that they still had trouble meeting all of their water needs in a timely fashion, either because they had to travel long distances or because they had to wait in line.

> "The population has access to drinking water, but this water is not sufficient because there are sometimes traffic jams, and the other water point of PEPAM is far from us, because it is in the other district 2 km from us.… So we can't do these trips to get water. The water from this one pump in our neighborhood is not enough for us. That is why we are sometimes forced to fetch water from the well."
>
> *– Community Member*

The ET recorded regional variations in time spent collecting water (**Figure 8)**. Tambacounda had the highest number of respondents (26 percent) reporting they spent more than 30 minutes per trip (a statistically significant difference compared to other regions at $P<.01$ in each comparison). However, the total time spent collecting water in Tambacounda is on par with the overall average, suggesting that each trip is taking longer, but they are taking fewer trips. For total time spent collecting water, Kolda recorded the lowest average, with only 36 percent of respondents reporting they needed more than 30 minutes per day to collect water (a statistically significant average compared to each of the other three regions at $P<.02$ in all comparisons).

Figure 8. Percent of Respondents Requiring >30 Minutes Per Trip and Per Day to Collect Water (Water User Survey)

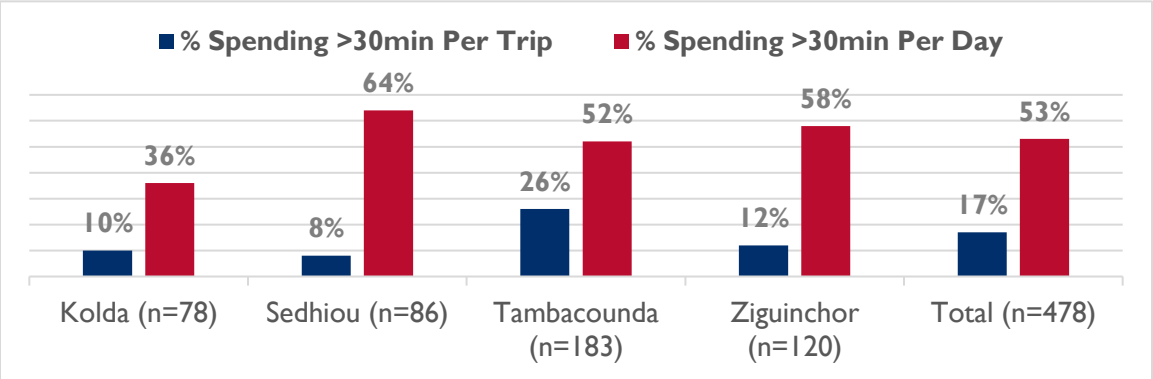
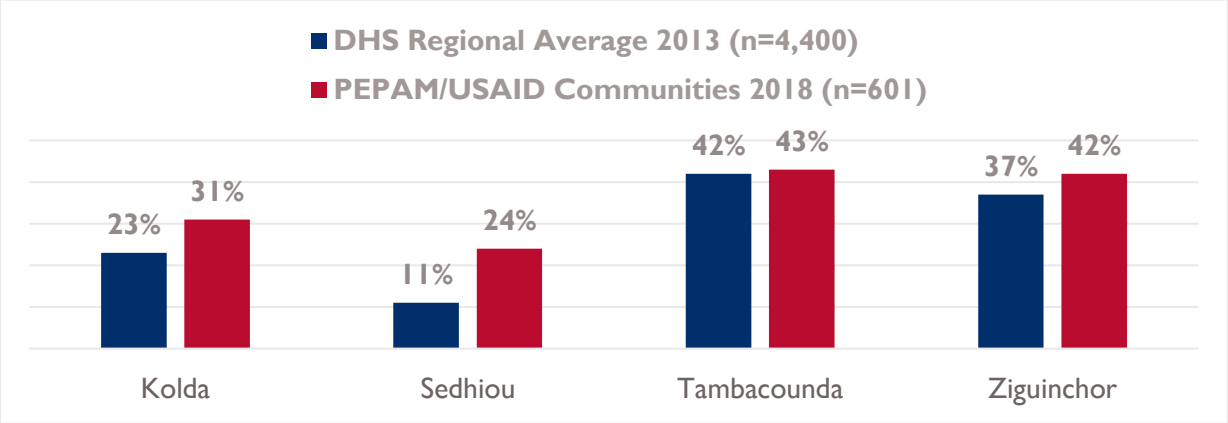


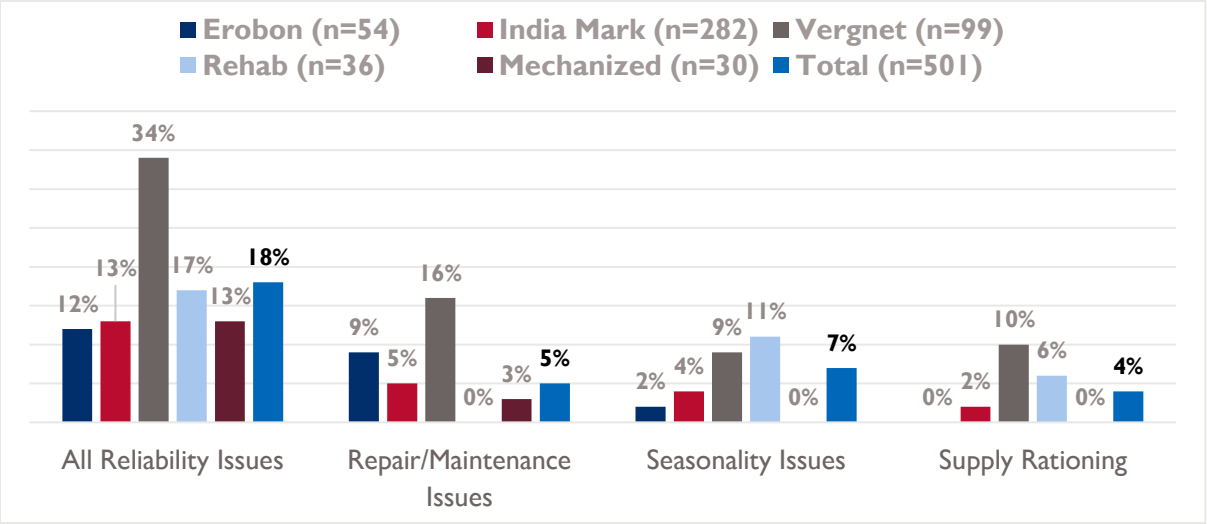
Figure 9 summarizes access to basic water service in PEPAM/USAID communities in 2018 compared to the 2013 DHS average in each region. PEPAM/USAID communities appeared to be close to or above the historic regional averages.

Figure 9. DHS Average of Basic Water Service by Region Compared with PEPAM/USAID Communities (Household Sanitation Survey)



Reliability. The ET found that respondents considered their WPs to be largely reliable throughout the year, with only 18 percent reporting concerns. Among the 92 respondents who reported reliability concerns, 40 percent reported repair and maintenance issues, 34 percent reported seasonality issues, and 21 percent reported issues regarding supply rationing. Though low overall, the specific reliability concerns varied notably by pump type and region, as seen below in **Figure 10** and **Figure 11**.

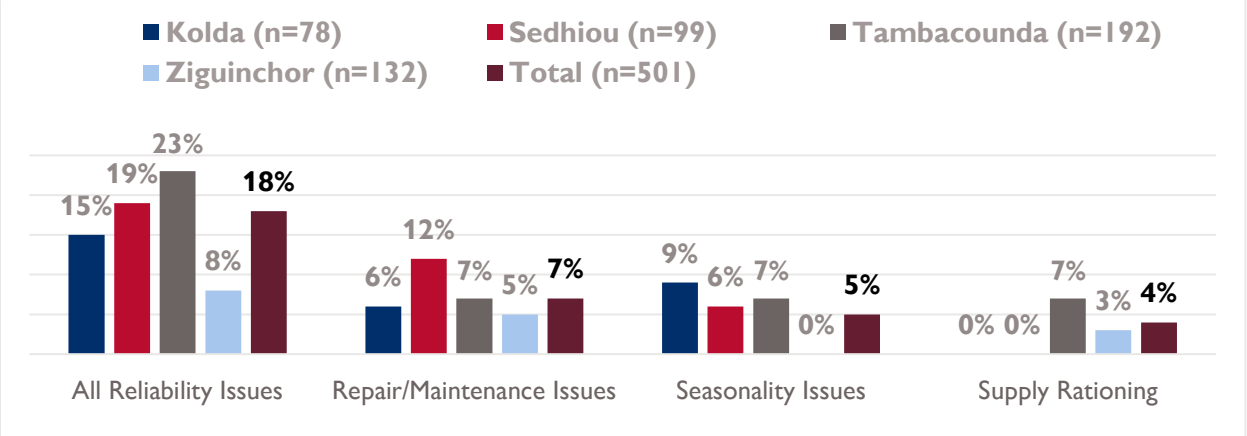
Figure 10. Reliability Issues by Pump Type (Water User Survey)



Vergnet pump users reported the most reliability issues. This higher rate of reported issues was statistically significant compared to all other groups *(P<.02* in all cases) except with regard to repair and maintenance issues, where Vergnet performance was not measurably different than the Erobon rope pump. The differences between pump types related to seasonality issues were shown to be statistically insignificant, suggesting that seasonality issues were not highly linked to the type of pump.

Examining the frequency of reliability issues by region is also informative (**Figure 11**).

Figure 11. Reliability Issues by Region (Water User Survey)



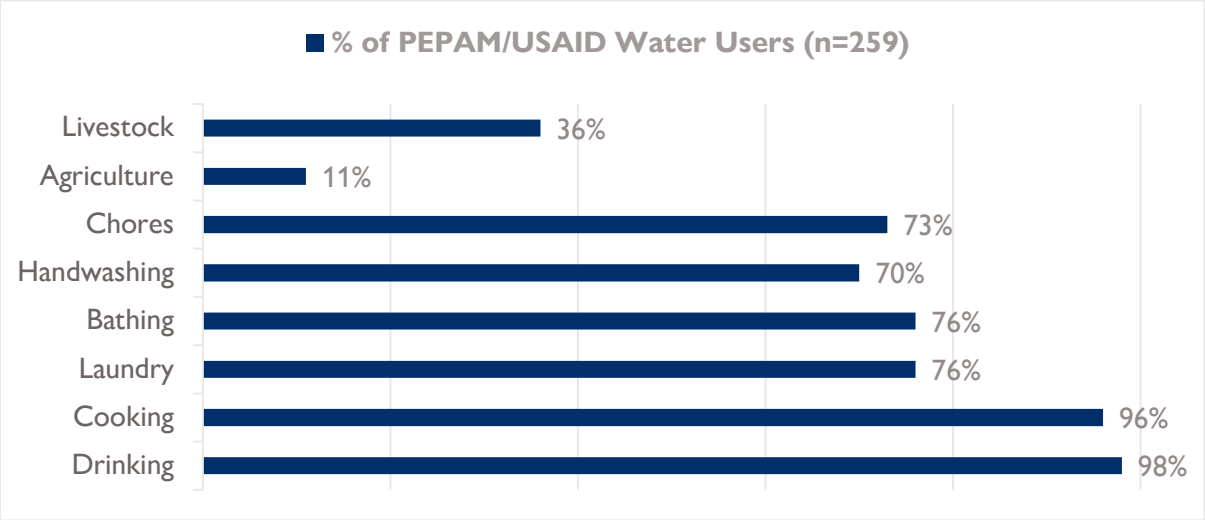
The ET reported no statistically significant regional differences in the occurrence of repair and maintenance issues. Ziguinchor experienced the fewest seasonality issues (no responses recorded)—a statistically significant difference compared to all other regions. Differences in seasonality issues between other regions were statistically insignificant. The low incidence of seasonality issues in Ziguinchor is likely related to its location near the ocean and delta regions of the Casamance River where the water table is likely higher.

Supply rationing occurred most often in Tambacounda, a statistically significant difference compared to each of the other regions *(P<.05* for each comparison). It is not clear from the data why supply rationing would be higher in Tambacounda. A possibility is that the water table depth and geology prevents quick recharging, which could affect the use of the pump.

USE

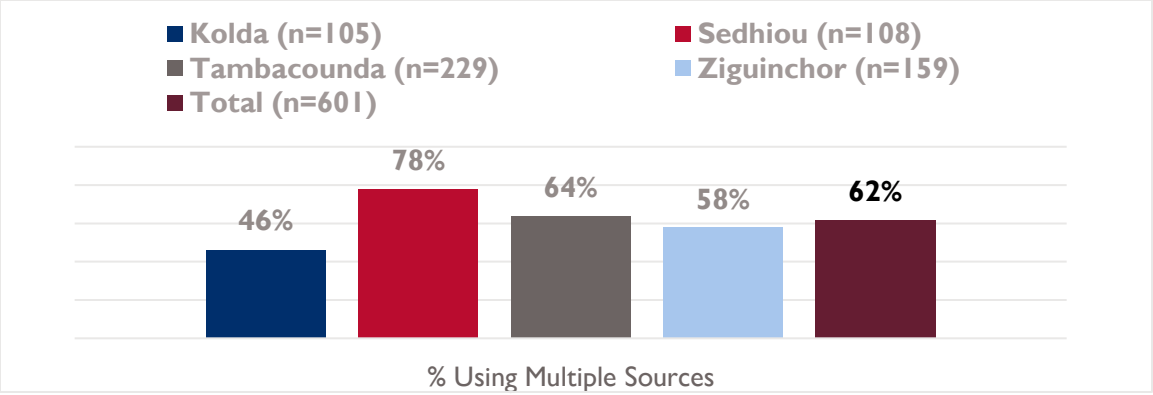
Water Use Patterns. Respondents used PEPAM/USAID WPs for a variety of purposes **(Figure 12)**. They reported drinking and cooking water as the dominant uses, however, a small number of respondents use these WPs for their livestock or for agriculture/gardening purposes.

Figure 12. Uses of PEPAM/USAID Water Points (n=259)



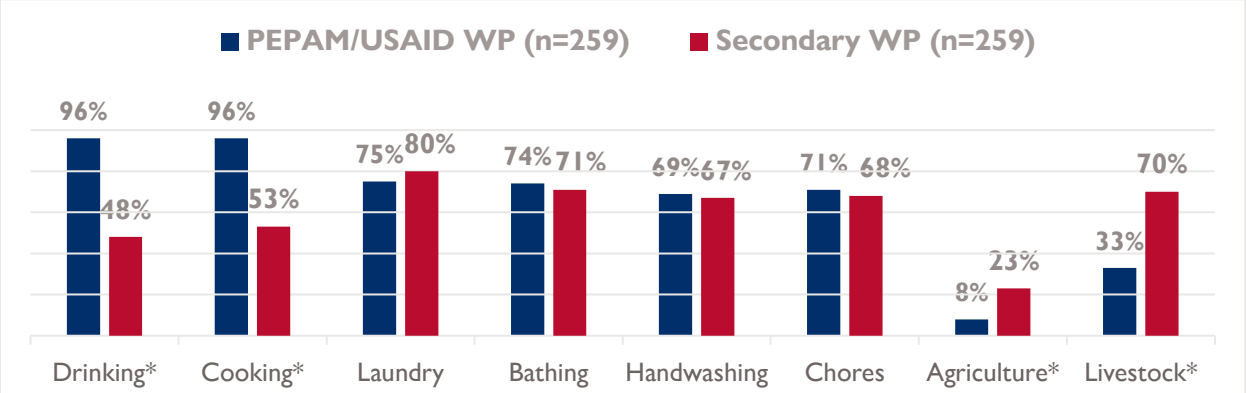
Sixty-two percent of respondents reported using multiple WPs to meet their water needs, though this number varies by region (**Figure 13**). In communities with functioning PEPAM/USAID WPs, interviewees reported that people typically use those WPs as their primary source of water. Many HHs in the activity regions also had their own (typically unprotected) wells, which interviewees indicated they used as backups to their primary sources and/or for water needs where water quality is of lesser concern (for example, doing laundry).

Figure 13. Percentage of Respondents Using Multiple Sources by Region (Household Sanitation Survey)



Of those reporting that they relied upon multiple water sources, 54 percent used unprotected wells, which mirrors interviewee comments in the qualitative interviews. **Figure 14** summarizes how multiple WP users utilize the PEPAM/USAID WPs compared to other WPs.

Figure 14. Uses of Primary and Secondary Water Sources (Household Sanitation Survey)



*Difference is statistically significant

Thus, while users appeared fairly ambivalent regarding whether they use the PEPAM/USAID WP or another WP for laundry, bathing, handwashing, and chores, responses differed significantly about what WP they preferred for domestic versus productive uses. Based on qualitative interviews, users appreciated the PEPAM/USAID WPs for providing clean,[50] safe water—something they may feel is more important for drinking and cooking, but less important for agriculture, gardening, and livestock-focused uses.

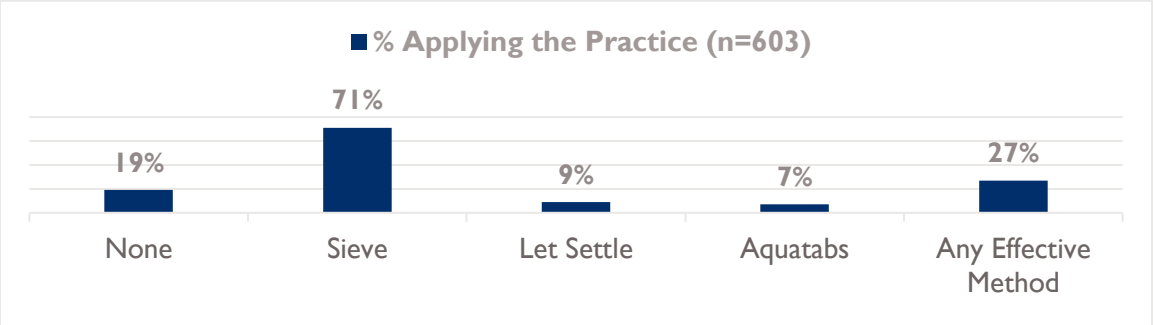
> "Community members use the water from this water point for drinking and cooking because they are convinced of the drinkability of the water and this is not the case with the other water points used for chores."
>
> *– Water Management Committee Member*

The sanitation survey also asked HHs about whether (and how) they treated their drinking water. PEPAM/USAID promoted the use of Aquatabs for water purification, but other effective means such as treatment with chlorine, Pur, and other methods are also options.

Figure 15 summarizes household water treatment practices, which found that only 7 percent used Aquatabs, and less than one-third of HHs used a potentially effective form of water treatment.[51] Some interviewees noted that they had difficulty obtaining products like Aquatabs at the local level.

[50] Interviewees reported believing that the water from activity WPs was "clean" and thus, the term is used here. However, this is only a reflection of their perceptions, not of the findings of water quality tests.
[51] Potentially effective water treatment methods include chlorination, boiling, water filters (ceramic, sand, or composite), Aquatabs, Pur, solar disinfection, Biosand filters, or coagulant.

Figure 15. Self-Reported Water Treatment Practices (Household Sanitation Survey)



As is true in many countries, women did the majority of the water collection at observed locations in Senegal. During the structured observations of WPs, enumerators counted the number of adult females/males and girls/boys under 15 who waited in line for water during the observation. Adult females made up the majority of the water users (58 percent). Girls under 15 made up an additional 24 percent of observed users. Males, both young and old, made up the remaining 19 percent of users observed (nearly evenly split between children and adults). The enumerators noted no regional differences in collection practices.

SUMMARY OF CURRENT STATUS AND USE

The ET found WP functionality to be mediocre, but on par with what has been found on other, similar studies of small, community-managed water infrastructure. Water users did not report water quantity and quality as major issues. Though most respondents spent less than 30 minutes round trip, most required multiple trips to meet their HHs' needs and spent nearly an hour of their day collecting water. Only a small proportion of respondents noted significant reliability issues.

Where functioning, the well-used PEPAM/USAID WPs provided water most frequently for drinking and cooking uses. Most respondents used multiple sources to meet their needs, however, revealing that drinking and cooking water more frequently came from the activity WPs, while respondents relied upon secondary (often unprotected) sources for agriculture and watering animals.

FACTORS AFFECTING SUSTAINABILITY

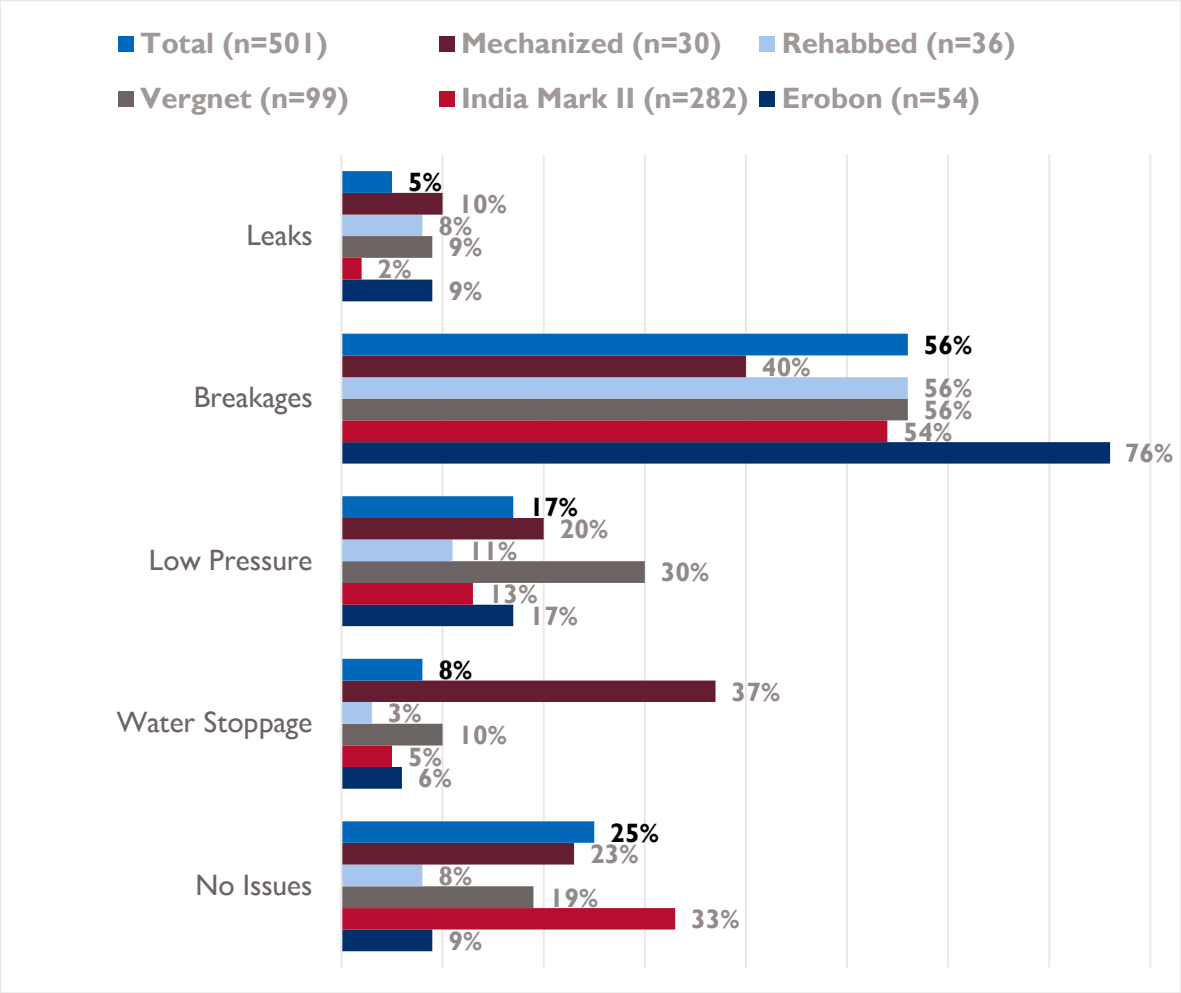
Management Factors. Water users reported in 87 percent of cases that an active water management committee oversaw their WP. Additionally, 76 percent of respondents with committees in place felt that the committee managed the WP well or very well. The ET detected no notable differences across regions or other subgroups.

Despite positive reviews from community members, an examination of key management practices revealed less than ideal adherence to the best practices PEPAM/USAID promoted. Eighty-nine percent of community members surveyed reported that their committee held regular meetings (though they did not specify the frequency of those meetings). However, only

63 percent reported ever having attended a meeting. In qualitative interviews with management committees, only four out of 11 committees reported holding meetings monthly.[52] And only four of 11 (though not all the same four as noted above) reported taking minutes for their meetings,[53] only two of which reported making the minutes public.[54] One government official summed up the challenges the water committees faced:

"At the beginning of the program everything worked well, with the establishment of structures for the management of WPs. The committees were formed and members' capabilities [built]. Since there has been no follow-up, the Management Committees do not work anymore. The lack of monitoring and mentoring has been a reason, and this is attributable just to the lack of means… Some of the equipment is in failure, and craftsmen repairers lack … spare parts…. Even if they *[the craftsmen]* are present in the village they can do nothing."

Figure 16. Reported WP Problems by Pump Type (Water User Survey)[55]



[52] PEPAM/USAID indicator
[53] ibid.
[54] ibid.
[55] Respondents could note multiple problems for the same WP. Thus, total percentages may equal more than 100 percent.

In many cases, the government did not continue supporting the small, volunteer, community management committees due to a lack of resources vis-à-vis the large number of WPs. Water users generally reported no major issues over the last four years with their WP (75 percent of respondents). **Figure 16** outlines the issues discussed, by the type of pump.

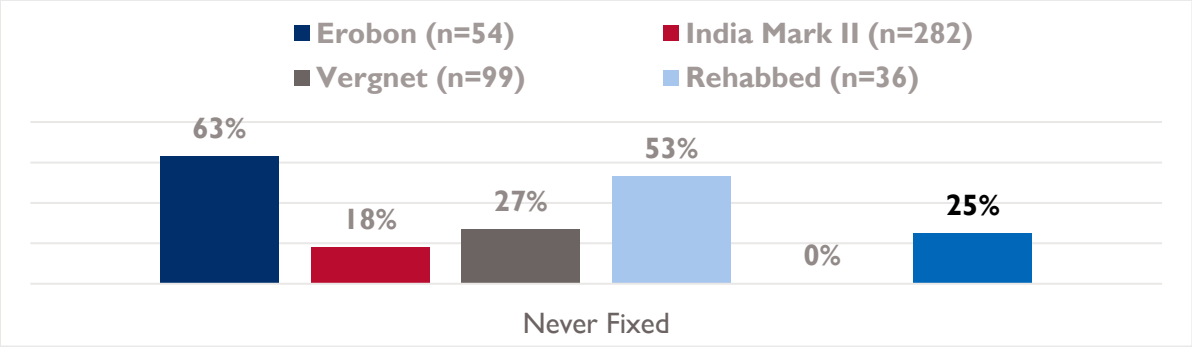
Some of these issues showed statistically significant differences depending on pump type. Though the India Mark II and mechanized pumps had similar percentages of respondents reporting no issues, the India Mark II pumps had a higher and statistically significant share of respondents reporting no issues compared to the Vergnet, Erobon, and rehabilitated WPs. The India Mark II pumps also appeared to be the least likely to show leakage issues, with statistically significant differences compared to other types with the exception of rehabilitated WPs.[56]

Mechanized WPs had the highest rate of stoppage issues, a statistically significant difference in all comparisons. The ET found the Vergnet pumps the most likely manual pumps to have water pressure issues, a statistically significant difference compared with each other type of manual pump. The Erobon pumps broke more frequently than all other pump types, with statistically significant differences compared to all other pump types except rehabilitated points.[57]

Forty-five percent of water users reported that WP repairs occurred quickly (within one to three days). And 25 percent of water users reported that repairs on their problematic WPs never took place. Comparing the survey data with the structured observation data enabled the ET to confirm that in 92 percent of the cases where enumerators observed nonfunctioning PEPAM/USAID WPs, respondents reported these WPs had never been repaired. Though the survey didn't directly ask about the time required to repair WPs for each type of issue noted, respondents who reported issues with breakages (41 percent) or with leakage (28 percent) most commonly reported that the WP had never been repaired.

Overall, respondents reported the Erobon and rehabilitated pumps as the least likely to be fixed or repaired (63 percent and 53 percent, respectively), while no one reported unresolved repairs related to mechanized pumps (**Figure 17).** The ET found comparisons among all pump types to be statistically significant except for the difference between Erobon rope pumps and the rehabilitated pumps.

Figure 17. Reports of Repairs that Were Never Fixed, by Pump Type (Water User Survey)



[56] Compared to rehabilitated WPs, the P-value was .08 and thus not statistically significant. But this may be due to the small sample size of rehabilitated WPs.
[57] When compared to rehabilitated WPs, the P-value was .06 and thus not quite statistically significant. However, given the low number of rehabilitated WPs, the lack of significance may be related to the low sample size.

In interviews, both water management committees and local entrepreneurs noted that the supply chains for water pump parts had broken down since the end of the PEPAM/USAID activity. The activity had helped entrepreneurs access the necessary parts, but after the activity ended, it appears that sources for many of the replacement parts have become harder to find. As one local entrepreneur stated,

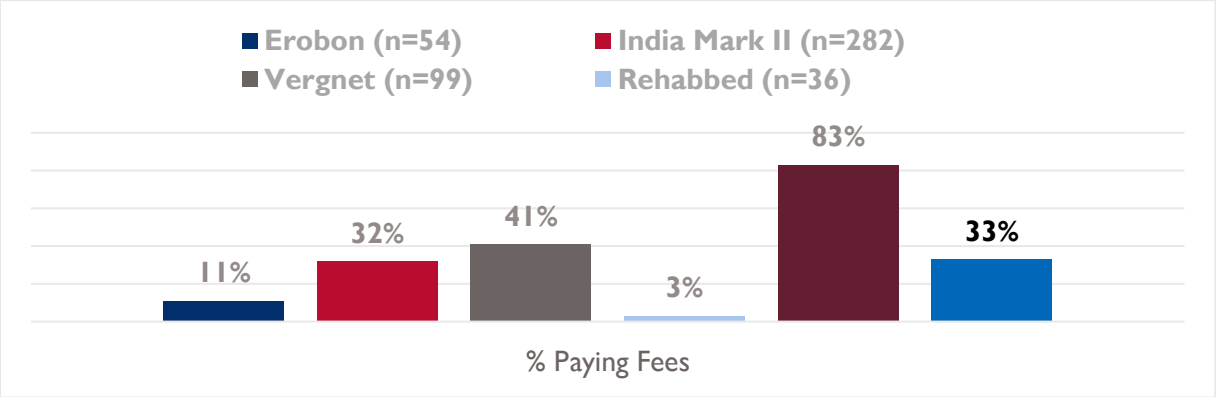
"…when USAID came, they brought us products like the Polymer and "bentome" that we drillers used. But after USAID left, there was some lobbying going on in getting access to these products, so right now we don't even know how to get them."

Difficulties obtaining parts can inhibit long-term sustainability of the WPs.

Financial Factors. During implementation, PEPAM/USAID trained water management committees not only in good management practices, but also in financial best practices such as keeping transparent records and opening a bank account. However, in the qualitative interviews, committee members noted difficulties following through with these best practices. The ET discussed record keeping with eight water committees and not one said they actively kept transparent records of expenses and revenues.

In the surveys, very few water users (33 percent) reported paying for water at their WPs, though this figure varied by pump type (**Figure 18**).

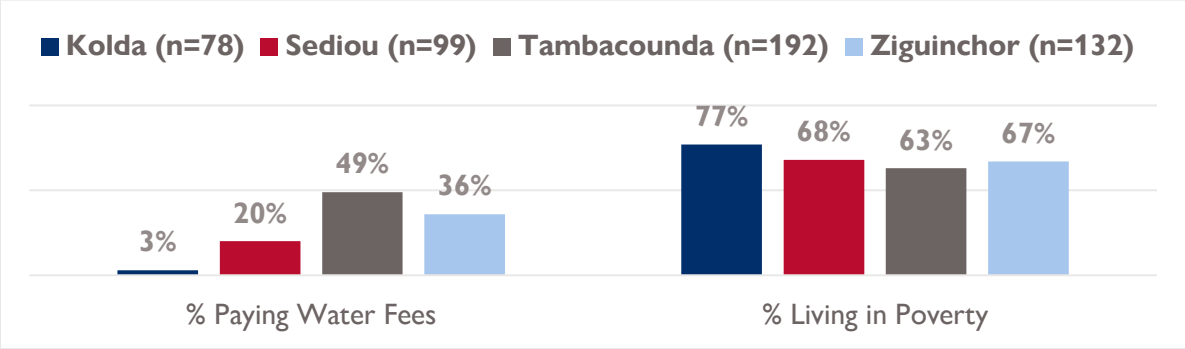
Figure 18. Water Fee Collection by Pump Type (Water User Survey)



Respondents in villages with a mechanized WP most commonly paid water fees, a statistically significant difference in all comparisons (**Figure 18**). One of the potential reasons committees with mechanized WPs are able to collect fees is that operation of the pumps generally requires the purchase of fuel (i.e., if people do not pay, the pump will not operate). The evaluation also found the mechanized pumps to be the most reliable, and people may be willing to pay more for reliable water access. (However, it is unclear from the data whether people paid more because the WP was more reliable, or whether the fact that they've paid more has enabled the WP to be more reliable). Those in villages with rehabilitated WPs paid fees less often, a statistically significant difference except in comparison with Erobon rope pumps, which also reported low fee collection. In cases where water committees did not systematically collect fees, interviewees noted that the committees might try to collect money when/if the WP broke down.

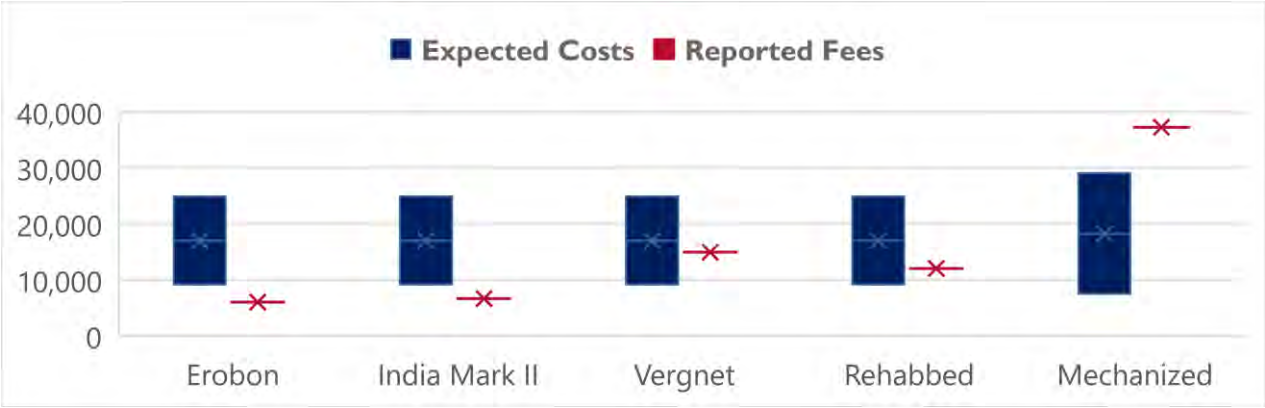
Water fee payment also appears to vary substantially by region. Socio-economic factors, such as the local poverty rate, may partially explain the regional variation in water fee payment (**Figure 19).** The ET noted statistically significant differences in all region to region comparisons *(P<.02* in all cases) and nearly statistically significant differences *(P=.05)* when it compared the regional percentage of people paying for water to the region's poverty rate.[58]

Figure 19. Water Fee Payment by Region (Water User Survey)



The ET also noted pump type and regional variations in how much people paid for water (if they paid at all). **Figure 20** illustrates these differences and provides a comparison to PEPAM/USAID's predicted O&M costs. PEPAM/USAID established extensive estimates of the expected O&M costs, which vary by well depth, population served, and type of pump (manual or mechanized).[59] The activity then provided (nonbinding) guidance based on this information to the committees to help them set tariffs. What this guidance process looked like in practice is not clear from the documents. However, the midterm evaluation found that the majority of WPs (65 percent) experienced severe threats to their financial viability.[60]

Figure 20. Amount of Water Fees Paid by Pump Type Compared with Expected O&M Cost Range, in CFA (Water User Survey & PEPAM/USAID Costing Study)[61])



[58] Agence National de la Statistique et de la Démogarphie (ANSD). 2011. Second Poverty Survey in Senegal/Deuxième Enquête de Suivi de la Pauvreté au Sénégal.
[59] PEPAM/USAID's documents did not include pump by pump estimates, but the documents noted that the variation by manual pump type was small. Thus, the figures illustrate all pumps using an overall average for the type of pump (manual vs mechanized). The averages ranged from 9,130–24,900 CFA per HH per year (about $15.50–$42.50/HH/year) for manual pumps and 7,470–29,050 CFA per HH per year (about $12.75–$49.50/HH/year) for mechanized pumps.
[60] SEMIS. 2013.
[61] RTI. 2014. Water Supply Technology Selection in Senegal: Experiences and Analysis from the USAID/PEPAM Project.

In many cases, water users reported paying water fees within or at least close to the expected range of O&M costs (**Figure 20**). Despite this finding, management committees often noted in the interviews that funds collected did not cover costs. It is not clear from the documents how PEPAM/USAID derived the expected O&M estimates, whether from empirical data with the specific pumps in other contexts, or if they made hypothetical estimates. It is also not clear whether inaccurate estimates or fees being set too low for the given wells have led to the shortfall.

Whether users paid for water and how much they paid significantly related to WP functionality at the time of visit *(P<.001* in both cases). While this in part could be attributed to the fact that water users stopped paying fees after a WP stops functioning, the finding is in line with other studies that highlight the importance of collecting sufficient water fees to ensure life cycle O&M costs are covered and WP functionality is maintained.[62]

During implementation, the activity attempted to help water committees set up fee structures to recoup full O&M costs. However, only four of 11 water committees reported having sufficient funds. Notably, larger ASUFOR committees accounted for three of those four committees; only one smaller community-level committee reported adequate funds. As already noted, water fee collection and fee amounts have been higher for the larger, mechanized water systems.

Many committees highlighted the difficulty of collecting fees and reported that water users regularly complained about the fees being too high. To increase fee collection, some committees reported barring access to those who have not paid their fees. In other cases, the committees lowered the fees in response to these complaints, but in so doing, started to jeopardize their ability to cover the necessary costs.

Pump Technology. As seen in the preceding sections, WP technology is related to several key outcomes and contributing factors. Users of submersible pumps more frequently paid for their water and also paid higher fees. These pumps proved to be the most reliable over time. The Erobon pumps and rehabilitated pumps performed poorly and proved to be the least reliable. And between the Vergnet and India Mark II pumps, the latter performed better and with fewer issues than the Vergnet pumps. While it is likely that the technology itself is a factor in these differing outcomes (which is why the activity stopped using the Erobon pumps), it is also possible that underlying factors play a role as well. PEPAM/USAID selected technologies for specific reasons—namely well depth, population to be served, logistical digging/construction considerations, anticipated costs (both for construction and for O&M), community preference, etc. Thus, it's possible that these underlying determinants of the chosen technology also played a role in the outcomes observed.

Local Entrepreneur Engagement. The PEPAM/USAID activity identified, trained, and provided drilling equipment to 14 local drilling enterprises to install boreholes and 60 local repairmen to operate and maintain water supply infrastructure. The activity also conducted three hydrogeology trainings for well drillers, private enterprises, and government technical

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[62] Fonseca, C., R. Franceys, C. Batchelor, P. McIntyre, A. Klutse, K. Komives, P. Moriarty, A. Naafs, K. Nyarko, C. Pezon, A. Potter, R. Reddy, and M. Snehalatha. 2010. Life-Cycle Costs Approach. IRC International Water and Sanitation Centre. https://www.ircwash.org/sites/default/files/Fonseca-2010-Life.pdf.

service units. The activity helped establish local enterprises in Tambacounda and Ziguinchor, provided equipment to entrepreneurs (drilling and other equipment), and assisted with the import of new and replacement borehole parts.

Eight out of the 11 water committees interviewed continued to engage the local entrepreneurs. However, none of the management committees currently have formal contracts with these enterprises in place. Some had contracts in place during the project period, as the activity's implementation plans called for formal contracts. However, all of those contracts have since lapsed. Despite the lack of contracts, engagement appears to continue, just not in the manner anticipated.

Interviewees noted several reasons why formal contracts between local entrepreneurs and their clients have dwindled. First, community water committees have not always paid the amounts required under the contracts. Second, competition exists between entrepreneurs, and the PEPAM/USAID–supported entrepreneurs sometimes lose out to lower cost competitors. Third, the entrepreneurs have had difficulty sourcing spare parts. And finally, since the activity's closure, local entrepreneurs indicated that a lack of oversight has led to a lapse in contracts. Despite the challenges, local entrepreneurs indicated a strong demand existed and continues to exist for repairs/maintenance and for well drilling and also noted an increased efficiency in drilling due to PEPAM/USAID training. Thus, the lack of contracts appears to reflect difficulties with the use of contracts, as well as a lack of incentives for using them, and not a problem related to the services being provided. In fact, the ET found no government officials familiar with the contracts the activity originally put in place and, therefore, they could not play an enforcement or follow-up role to make sure that both sides upheld the agreed-upon terms.

Women's Engagement. PEPAM/USAID encouraged active engagement of women in WP management as a key priority. The activity required that all committees include women and aimed for women to hold 50 percent of committee positions. In interviews, regional government officials echoed this perspective, noting this remains a priority. In fact, the government encourages 50/50 male-to-female participation on the committees, though they noted that not all communities follow this guidance.

Ten out of 11 water committees interviewed still have at least one female member. As one male committee member said, "The opinion of women is taken into account in this village because men are aware that they [women] are the ones who systematically use water in households. From this point of view, women's participation becomes essential." Interviewers found that women held 17 out of 40 possible water user committee positions (i.e., president, treasurer, etc.), which is close to the 50 percent target. Interviewees said that, in some communities, women played a key role in encouraging community members to pay for water and collecting fees. Interviewees also indicated that women had a strong role in ensuring WP cleanliness and served as important water stakeholders since they are the primary ones responsible for water collection and for ensuring hygiene and sanitation in their homes.

Interviewees said that illiteracy among female community members and a lack of awareness around key water issues can make it more difficult for women to effectively engage in community water management. However, this information is based solely on the interviews and

may be biased by the respondents' preconceived notions. For context, in Senegal, only 32 percent of rural women over age 15 are literate.[63]

CONCLUSIONS

The share of WPs still functioning four years after the end of the activity (63 percent) is on par with findings from other studies of small, community managed water infrastructure. The quantity and quality of water that functioning WPs provide is generally good. Accessibility, as defined by USAID and JMP, has improved, with only 17 percent of respondents reporting they spend more than 30 minutes per trip to collect water. However, most respondents are still spending nearly an hour of their day collecting water. Reliability of the water points is generally good, though variations exist among different pump types and regions.

Typically, where PEPAM/USAID WPs are still functioning, users rely on that WP as their primary water source. Among those who rely on multiple sources, people typically use the PEPAM/USAID WPs for drinking water and cooking. They rely more heavily on alternate (often unimproved) sources for agriculture and livestock uses.

Several factors appear to influence the status and use of the PEPAM/USAID WPs. Despite training during the activity, many of the water management committees struggle to implement best practices such as holding regular meetings or maintaining transparent financial records. Collecting water fees and the amount of fee collected strongly correlate with WP functionality.[64] Though the fees were at or near the ranges estimated by PEPAM/USAID, many of the management committees report having insufficient funds to cover O&M costs. It is unclear if this is because PEPAM/USAID made inaccurate estimates at the time or if another reason is at play.

Local entrepreneurs continue to be engaged in WP construction and repair. None report using formal contracts with community water committees, however, which is something that the activity emphasized. Some challenges remain for the local entrepreneurs, including issues with nonpayment for services and access to parts.

Women also continue to be actively engaged in WP management, with the support of local and regional government entities. They play particular roles in water point fee collection and in maintaining WP cleanliness, but challenges to their full participation remain.

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[63] DHS. 2017. https://statcompiler.com/en/

[64] Foster, T. "Predictors of Sustainability for Community-Managed Handpumps in Sub-Saharan Africa: Evidence from Liberia, Sierra Leone, and Uganda." *Environmental Science & Technology* 47.21 (2013): 12037-12046. And Foster, T. and R. Hope. "Evaluating Waterpoint Sustainability and Access Implications of Revenue Collection Approaches in Rural Kenya." *Water Resources Research* 53.2 (2017): 1473-1490.

HOUSEHOLD LATRINES

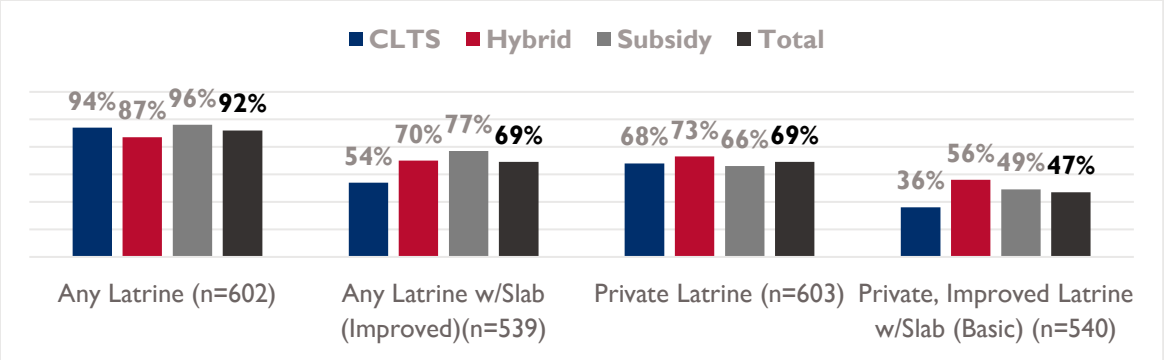
FINDINGS

These findings address the current status of sanitation in PEPAM/USAID sanitation intervention communities. To aid in understanding which of the three approaches (CLTS-WI, subsidy, or hybrid) might be to be the most sustainable, results from the HH sanitation survey (n=617) and latrine observations (n=551) are presented based on the sanitation approach used rather than the region where the intervention occurred. As mentioned above, comparing the three approaches and understanding any differences may provide further insight into the debate over subsidies.

CURRENT STATUS

Access to Sanitation. To end OD, people must have access to and use some type of latrine. According to HH sanitation survey respondents, 92 percent had access to a latrine. As seen in **Figure 21**, CLTS-WI approach village HHs reported a high level of latrine access, almost on par with subsidy village HHs (the highest), while hybrid village HHs reported an access level nine percentage points lower than subsidy village HHs (a statistically significant difference in both cases at P<.02). In the qualitative interviews, community members often mentioned that neighbors shared latrines if they did not have their own or if theirs did not function, which may explain why reported access to any latrine is so high. JMP and USAID (HL.8.2-2) define basic sanitation services as a household having a facility designed to hygienically separate excreta from human contact (e.g., flush/pour flush to piped sewer system, septic tank, or pit latrines; ventilated improved pit latrines, composting toilets, or pit latrines with slabs) and specifies that the latrine should not be shared with other households.[65,66]

Figure 21. Latrine Access in PEPAM/USAID Sanitation Communities (Household Sanitation Survey)

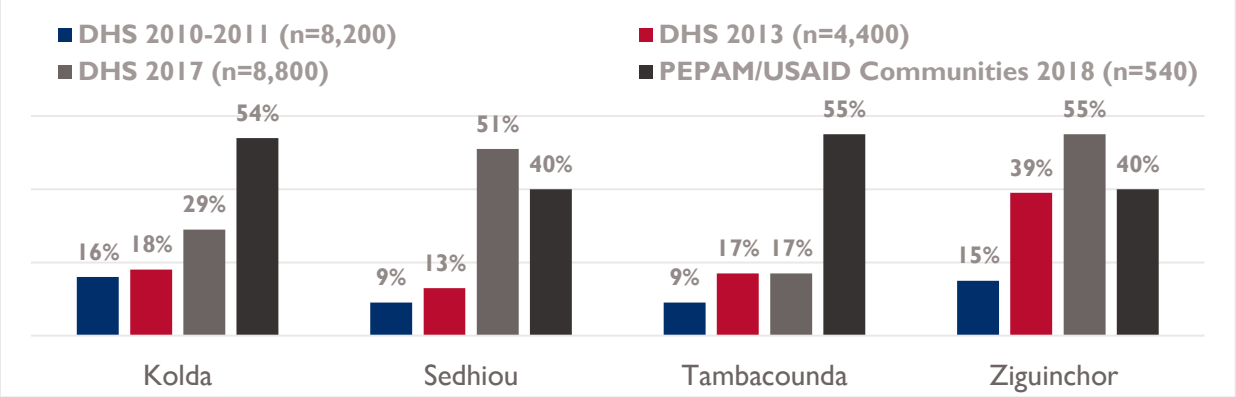


Hybrid villages reported the highest proportion of latrines that met basic sanitation service access (HL.8.2-2), followed by subsidy villages. Notably, CLTS-WI villages performed markedly

[65] JMP. 2018. https://washdata.org/monitoring/sanitation. Note the JMP and USAID definitions for sanitation service have changed since the activity closed.
[66] Since the PEPAM/USAID activity ended, JMP modified international WASH indicators to align with the Sustainable Development Goals, and USAID followed suit.

poorer for this indicator. The difference between the hybrid and subsidy approaches' means compared with the CLTS-WI approach are statistically significant *(P=.001)* and *(P=.02)*, respectively. **Figure 21** suggests that while the CLTS-WI approach broadly facilitates access to a latrine, it does poorly in facilitating access to basic sanitation. For additional context, **Figure 22** provides insight into the regional status of the basic sanitation indicator from multiple data sources: DHS (2010–11, 2013, 2017) and PEPAM (2018). However, it is important to note that the sample size differences preclude direct comparison. Qualitative data indicate that across approaches, community members value latrines and latrine access. PEPAM/USAID communities appear to be above or within 15 percent of the regional averages.

Figure 22. Latrines Meeting Basic Sanitation Services by Region and Data Source



PEPAM/USAID Latrine Designs. PEPAM/USAID promoted and aimed to create demand for three improved latrine designs: the Sanitation Platform (SanPlat), DVL, and VIP **(Table 6)**. Some of the interviewees (community members, IPs, government) indicated that they valued the quality and features (e.g., reduced water use) of the promoted latrines. In some instances, community members reported replacement of latrines with the same models as PEPAM promoted, however, more frequently they cited barriers to either building a PEPAM/USAID latrine in the first place or replacing one. The ET observed latrines and noted that PEPAM/USAID–promoted latrines did not appear to be widely used.[67]

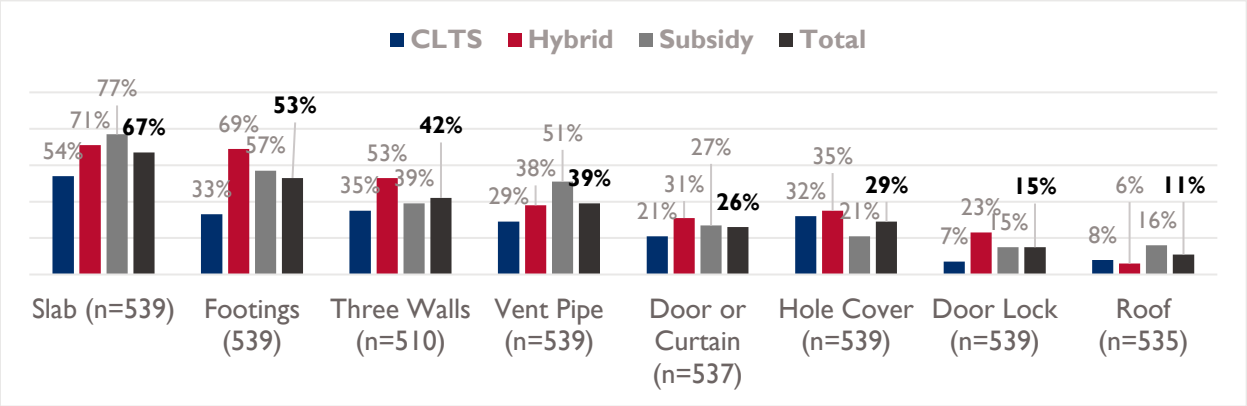
Across all approaches only 2 percent of HHs had a VIP latrine. The ET observed that 38 percent of HHs likely had a SanPlat or DVL latrine. That accounts for 48 percent of subsidy village HHs, 38 percent of hybrid village HHs, and 24 percent of CLTS-WI village HHs. The CLTS-WI results are statistically significant compared to hybrid and subsidy at *(P=.01* and *P<.001)* for both, but between subsidy and hybrid the results indicated no statistical significance. The qualitative data did not directly address the specific latrine types. Aside from a local entrepreneur who offered this explanation of why subsidy and hybrid intervention villages did not appear to rebuild PEPAM/USAID–promoted latrine options: "As for latrines, the proposed model is very well appreciated by people, but since the end of the project, people no longer have the means to build them. The head of the household chooses the type of latrine according

[67] Based on characteristics required of PEPAM/USAID's latrine design, the ET determined that if the enumerators observed a latrine with a vent pipe and slab, the HH was considered to have a likely SanPlat or DVL latrine. Those latrines with two pits, a roof, walls, vent pipe and a slab were categorized to likely be a VIP latrine.

to their means…." Further insight into latrine building, replacement, and repair are provided the "Factors Affecting Sustainability" section below.

Latrine Characteristics. Latrine characteristics, such as walls, roofs, and doors, are indicative of quality and have implications for use and sustainability. The latrines observed across approaches often lacked key superstructure, privacy, and other features. Notably, **Figure 23** illustrates that the CLTS-WI approach consistently underperformed on all indicators compared to villages involved with the hybrid and subsidy approaches except for the existence of drop hole covers and roofs. Across indicators, the hybrid and subsidy approaches show mixed results when compared to each other. However, the hybrid approach shows statistically significant differences for more indicators (walls, holes, locks, footings (P<.02) or less) compared to subsidy. For notably fewer indicators (vent pipes and roofs (P<.01) or less) the subsidy approach outperformed the hybrid approach. The ET found no statistically significant differences between approaches for slabs and doors.

Figure 23. Latrine Characteristics by Approach (Latrine Observations)



Overall, key structural characteristics such as presence of three latrine walls (42 percent) are sub-optimal, while latrines with a roof is very low at 11 percent. A regional government official and a few community members reported concerns about latrines without sound superstructure elements. Some of the same interviewees also noted that these latrines can be susceptible to failure.

Overall, only 2 percent of latrines had a door and 15 percent had a lock, two major privacy and safety components. Latrines that lack key privacy features like these are known to have a negative impact on use.[68]

USE

Latrine Use. Community members and NLs interviewed consistently shared that a majority of community members used latrines and often overcame access challenges (e.g., sharing with a neighbor). Evidence of observed proxy indicators suggested a high level of latrine use—86 percent of latrines observed appeared to be in use. Pairwise analysis indicated that latrines in hybrid villages showed the lowest signs of use, a difference with CLTS-WI and subsidy villages

[68] Garn. et al. 2017. The Impact of Sanitation Interventions on Latrine Coverage and Latrine Use: A Systematic Review and Meta-Analysis. https://www.sciencedirect.com/science/article/pii/S1438463916302619.

that is statistically significant in both cases (P<.001 and P=.001, respectively) **(Figure 24)**. The ET found no statistical difference between subsidy and CLTS-WI results. The CLTS-WI villages performed the best based on the general use indicators (appears in use and worn path), which contrasts with what one would expect, given that the hybrid and subsidy approaches had better structural latrine characteristics. A large meta-analysis on sanitation coverage and latrine use cited odor as a reason people indicated they did not use a latrine. **Figure 24** illustrates that the hybrid and subsidy villages HHs' latrines performed better on this indicator (e.g., they had less odor). The ET also found a positive correlation between a latrine having odor and not having a vent pipe (r=.11, P=.008). Also, of note, the hybrid approach performed best for cleansing materials, with subsidy not too far behind. However, overall the CLTS-WI village HHs recorded the highest level of use. Based on limited details of PEPAM/USAID's actual implementation of the CLTS-WI and hybrid approaches (beyond providing water as an incentive for ODF status under the CLTS-WI and introducing a subsidy a set time after CLTS triggering in the hybrid approach), it is unclear what may have factored into the differences in use. However, it could be possible that the way different implementers carried out their approaches impacted outcomes (e.g., one may have been better at behavior change communication). Alternately, perhaps hybrid HHs' became less motivated to carry out sanitation behaviors once they became aware that they would be eligible for a latrine subsidy. Understanding the potential differences could have an impact on future activities and drive use.

Figure 24. Observing Evidence of Latrine Use (Latrine Observation)

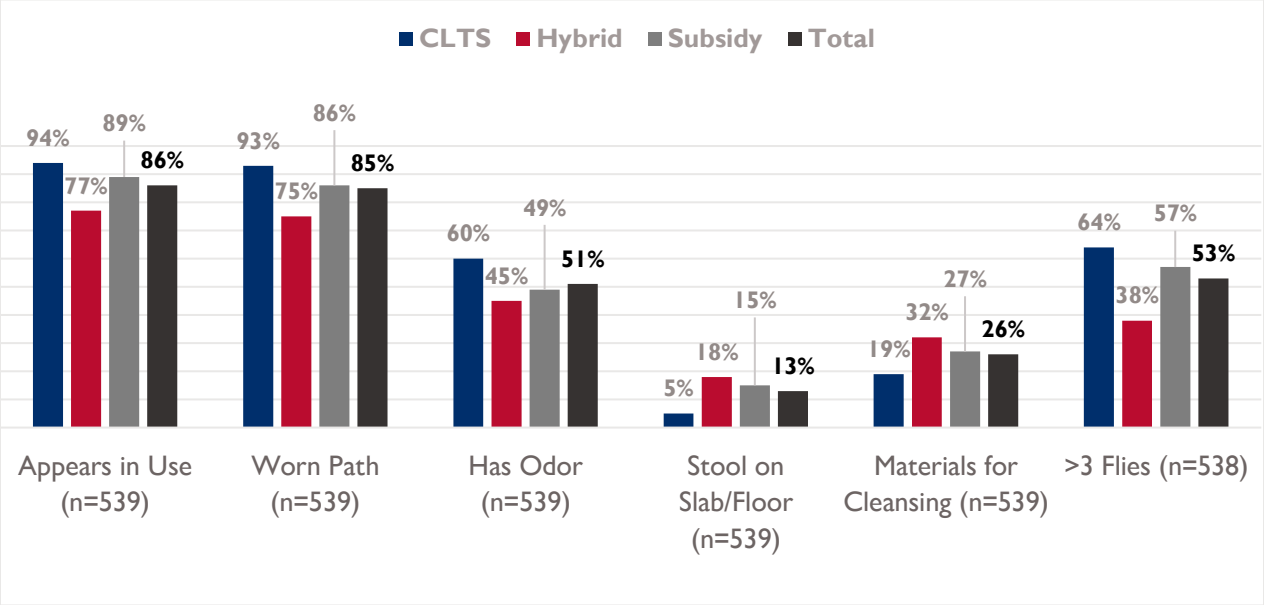
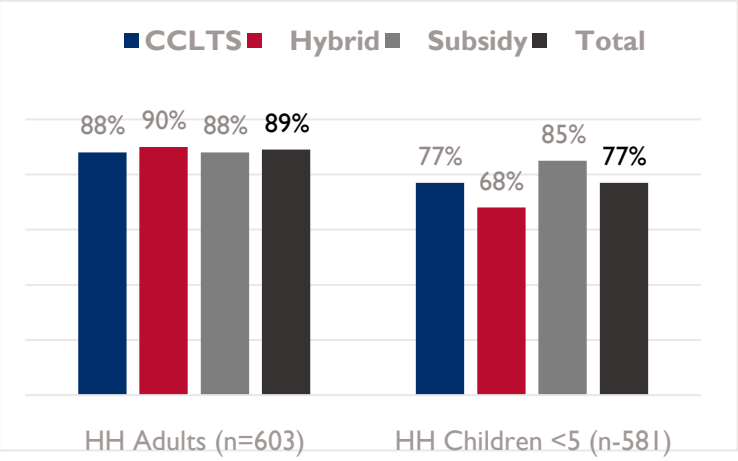


Figure 25 shows respondents self-reported safe feces disposal/defecation practices, which included using a latrine of any type (public, private), and children using potties and diapers when they defecated. Eighty-nine percent of adults and 77 percent of children under 5 reportedly practiced safe feces disposal and defecation. For children under 5, the subsidy and CLTS-WI village HHs performed well and within 5 percent to 7 percent of each other, however, the hybrid villages performed relatively poorly. When compared with either CLTS-WI or subsidy villages, hybrid approach village HHs showed lower percentages of safe feces disposal/defecation practices that reached statistical significance *(P=.04* and *<.001*, respectively). Latrine accessibility and proximity to one's house is often associated with latrine use.[69] The ET observed that 90 percent of latrines measured within 5 meters of the compound where the respondent resided. By approach, the CLTS-WI villages had more latrines 5 meters outside of their compound (20 percent) than subsidy villages (8 percent) or hybrid villages (5 percent).

Open Defecation. In the qualitative interviews across all approaches, both natural leaders and community members discussed open defecation in contrasting terms: either it never happened or had been eradicated (e.g., even when people worked in the fields they used latrines); it only happened in specific circumstances (e.g., in the field or because a HH lacked a latrine or resources to build one); or only among specific populations (e.g., young children, those from other villages, those without resources). The ET team received mixed reports from qualitative interviews regarding the occurrence of open defecation. While 68 percent of HH sanitation survey respondents stated that no one in their village defecated in the open, 14 percent of CLTS-WI, 31 percent of subsidy, and 43 percent of hybrid approach village HHs reported knowing someone in their community who openly defecated (all pairwise comparisons are statistically significant at (P<.01)).

Figure 25. Self-Reported Safe Feces Disposal/ Defecation Practices (Household Sanitation Survey)



While not directly comparable, regional trends in self-reporting of open defecation among PEPAM/USAID communities compared to notably larger DHS samples are shown in **Figure 28.**

The reasons that HH sanitation survey respondents cited that open defecation still occurs included: no other choices (19 percent), latrine is broken (10 percent), small children (7 percent), habit (6 percent), and latrine is full (6 percent). An NL from a water and sanitation CLTS village said: "The reasons people continue to defecate in the open air are that HHs without latrines have almost no manpower to build latrines…" Sustainability of latrines plays a key role in addressing the enabling environment to end open defecation. Overall, only 7 percent of respondents had visible feces in their compound: 10 percent of subsidy villages, 6 percent of hybrid villages, and 4 percent of CLTS-WI villages. Of note, during PEPAM/USAID all

[69] ibid.

CLTS-WI villages received ODF certification according to USAID indicator HL.8.2-1. While the ET did not assess entire communities for feces, the self-report and visible feces did represent at least minimal slippage.

SUMMARY OF CURRENT STATUS AND USE

All approaches reported a high level of access to sanitation facilities as well as the common practice of sharing latrines. Hybrid villages performed markedly better (20 percent) than CLTS-WI villages for access to basic sanitation service. The ET did not widely observe PEPAM/USAID latrine designs in use. CLTS-WI villages underperformed for all latrine characteristic indicators, whereas subsidy and hybrid villages showed better, but mixed results. However, CLTS-WI villages' latrine observations indicated that they showed the most signs of use. Sixty-eight percent of respondents reported that no one in their village defecated in the open.

FACTORS AFFECTING SUSTAINABILITY

Latrine Issues. HH sanitation survey respondents shared the issues they encountered with their latrine (n=357) and subsequently rated the most severe issues and indicated what, if any, action they took to remedy the situation. As seen in Table 8, respondents reported full pits as the most severe issue, followed by slab damage, and wall issues. Regardless of approach, community members and NLs commented on latrines filling and that they lacked the resources to empty them. PEPAM/USAID developed guidance plans for sanitation infrastructure and sludge/waste removal (e.g., pit emptying) for masons to use under the guidance of the IPs. In addition, indicators directly assessed pit emptying. However, it is unknown whether IPs implemented these guidance plans and whether they would have been sufficient to have an impact. A community member in a sanitation hybrid village put it simply: "The only problem is that some latrine pits are full, and people don't know how to empty them." The JMP reports that in rural areas of Senegal, only 37 percent of

Table 8. Latrine Issues Encountered and Rated Most Significant (Household Sanitation Survey)

ISSUE	% ENCOUNTERED (N=558)	% RATED SIGNIFICANT/ SEVERE
Full pit	21%	32%
Slab damage	24%	26%
Wall issue	29%	24%
Lid damage	20%	8%
Vent pipe damage	18%	6%
Roof issue	9%	4%
Other issue	5%	-

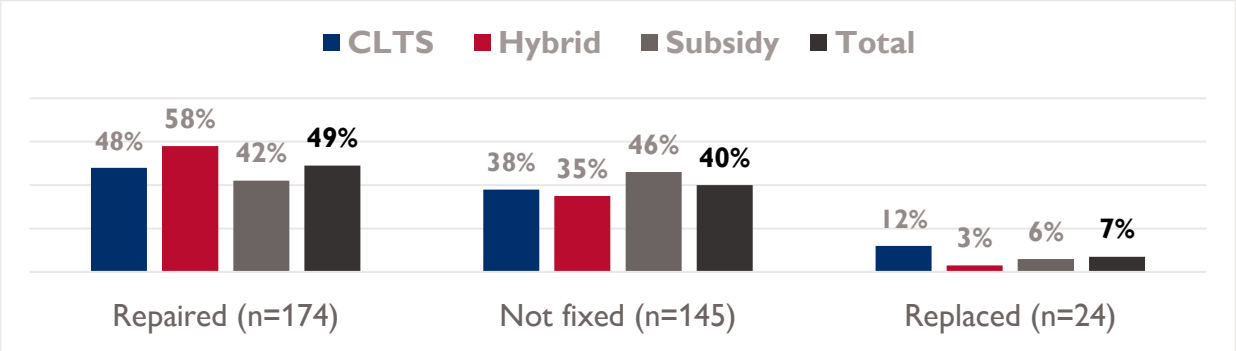
onsite sanitation facilities have ever been emptied.[70]

Overall, 49 percent of HH sanitation survey respondents indicated that they repaired the most severe issue, whereas 40 percent did not fix the issue (**Figure 26**). More hybrid village HHs repaired or fixed their most severe issue. When respondents reported they repaired or replaced their latrines, the ET detected no statistically significant differences among the types of approaches.

PEPAM/USAID trained masons to build and perform maintenance on latrines (including pit emptying). Government officials and local entrepreneur interviewees discussed the value of PEPAM/USAID's sanitation-related technical assistance and training contributions. Specifically, they cited the cadre of trained masons as a resource that the community and other projects can access. A regional government official said, "One of the positive points in the implementation of this program, PEPAM/USAID, is the training of masons. They have been capacitated for the construction of improved latrines. In many villages you will find masons capable of building improved latrines."

An NGO commented, "This situation is one of the forces behind sustainability because it has allowed the families after the departure of the project to dig latrines, but which are not traditional." It seems that the masons demonstrated how to dig structurally sound pits. The masons identified that the training received and skills developed as a result of PEPAM have made them "in demand." However, only 1 percent of HHs reported hiring someone to make a repair when they encountered a severe repair issue. It appears that only those who can afford the fees hired the trained sanitation masons and usually to build latrines, not to make repairs.

Figure 26. Method of Addressing Most Significant Issue (Household Sanitation Survey)



Community members and NLs indicated that latrine replacement commonly occurred across all regions and approaches. When latrines failed to be repaired or replaced, respondents attributed this to a lack of financial and material resources and insufficient manpower. A local entrepreneur stated, "All latrine models are good, but there were heads of households who were unable to dig their pit, and if the project could take it into account soon it would be better."

[70] WHO and UNICEF. 2017. Progress on Drinking Water, Sanitation and Hygiene: 2017 Update and SDG Baselines. Geneva: WHO and UNICEF.

A community member from a sanitation only CLTS-WI village said, "There are households that still use PEPAM latrines, but others are full and replaced. People replace their pit if it is full but sometimes if the head of the household does not have the financial means and physical strength to dig his own pit, these are the kinds of difficulties that can prevent some families from replacing their latrine. They use the neighbor's latrine until they can build their own..." Similar findings emerged from the HH sanitation survey. The 46 HHs that did not currently have a latrine gave lack of money (32 percent) and lack of materials (14 percent) as the primary reasons.

The photo on the left in **Figure 27** shows a full PEPAM/USAID latrine with its vent pipe still visible. The photo on the right shows the latrine built to replace it. While the replacement had a cement slab and raised footings, it lacked a vent pipe, roof, drop hole cover, or other characteristics that the previous latrine likely had. This is an example of latrine replacement that may have been considered "improved," but latrine quality is likely diminished.

Figure 27. Full PEPAM/USAID Latrine and Replacement Latrine

An additional theme that emerged related to latrine construction and replacement touches on quality and frequency of replacement. A community member in a village that opted for the water incentive following ODF verification under the CLTS approach summed it up saying: "However, they [PEPAM/USAID] should have supported us financially so that we could build modern toilets. Because the ones we build with our own means don't last and we have to dig every year."

These quotes also illustrate the linkage between financial barriers and latrine quality. Training a cadre of local masons and creating demand for latrines did not appear to be sufficient enough to move all members of a community up the sanitation ladder to basic sanitation.

Latrine Quality and Sustainability. As reported earlier **(Figure 25)**, suboptimal latrine characteristics led to quality and sustainability concerns. A salient theme that emerged from the qualitative interviews with community members and NLs indicated that limited material resources led to poor quality latrine construction, which in turn impacted sustainability. Specifically, respondents frequently discussed limitations based on cement use or lack thereof. CLTS-WI village respondents commonly referred to cement as important for latrine construction and cited the material as the difference between latrines that last and those that do not. Respondents also noted that the use of cement depended on the HHs' means. An NL in a CLTS-WI village that opted for the water incentive said, "The latrines built as part of this project by some have lasted but others have not because these toilets were built without cement." A community member from a subsidy village shared almost identical sentiments but also discussed the need for cement in relation to soil type to help latrines last. Based on the qualitative interviews, it appeared that the demand creation in subsidy villages motivated people to build latrines. Some HHs availed themselves of the subsidies, but the respondents noted that if they did not have the means they did not build with cement. It seems that those that did not build with cement did not use the subsidy PEPAM/USAID offered. The hybrid approach

respondents did not provide much detail but almost universally mentioned that PEPAM/USAID provided cement, iron, and a mason in the case of subsidized construction and they expressed satisfaction with their latrines.

While acknowledging that traditional latrines helped address open defecation, NLs, community members, and IPs cited the overall quality of traditional latrines several times as a concern related to sustainability. Reportedly, many HHs used traditional latrines of poor quality (e.g., no roof) that also raised health and environmental concerns (e.g., pit too close to water source) and, as mentioned above, needed to be replaced frequently. An NL from a CLTS-WI village that opted for a WP, summed up the concerns:

"There is no challenge except that the larine models they [PEPAM/USAID] proposed do not last. Every two years we build them. It is at this level that I appeal to them, we really need financial or material support to be able to build modern, sustainable latrines."

An NL from a sanitation subsidy intervention village elaborated:

"Frankly, we are not faced with a challenge in trying to convince the population to build or maintain latrines because the majority of households had latrines before the implementation of the PEPAM project and we were aware of the consequences of defecation in the open air. Therefore, the support of the population in the construction of latrines does not pose any problem. Now it is the fact of having quality latrines, which lasts a long time that was difficult."

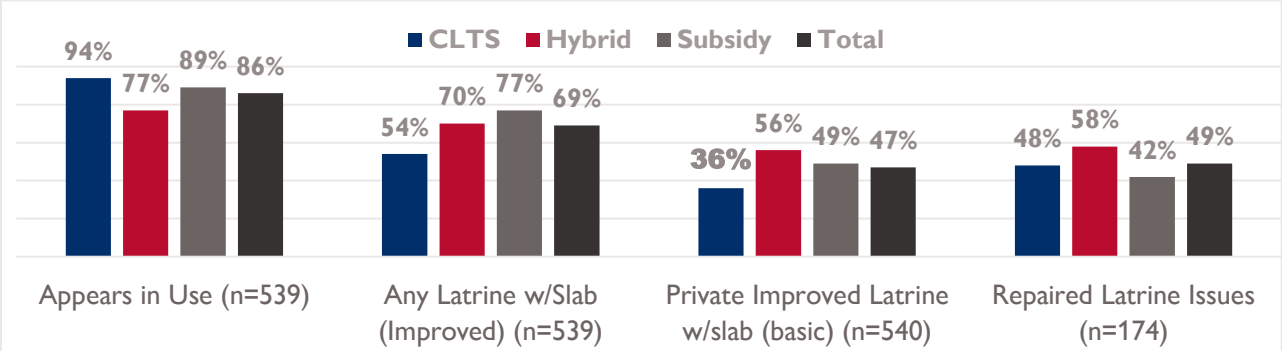
An IP shared a similar sentiment:

"It remains, however, a lot of things to do, especially in the field of the management of the sanitation facilities but particularly to reduce the gap of households that do not have adequate facilities to the standards of the PEPAM for better durability."

Additional Themes/Factors. Regional government respondents reported that funding and other resource limitations constrained the regional government's oversite of sanitation.[71] According to the interviewees, this resulted in limited human resource capacity, which in turn impacted the government's ability to fully monitor and track donor and project achievements. Central to WASH planning and monitoring is the Plan Locaux d'Hydraulique et d'Assainissement/Local Water Supply and Sanitation Plan (PLHA), which Senegal's sanitation code mandates that every rural community have. All four regions' government officials spoke of the utility of PLHAs when they exist. PEPAM/USAID supported the development of 52 PLHAs in Ziguinchor and Kolda. According to government officials, the plans helped identify communes' water and sanitation access rates and needs. Originally developed to help Senegal meet the Millennium Development Goals in 2015, the plans have not been updated, and some deemed them obsolete. While it did not emerge from the interviews, it seems evident that building a government monitoring information system for WASH would have longer term utility compared to one-time activities that are funded piecemeal like PHLAs.

[71] The regional government sanitation offices play many roles related to sanitation as the overall overseers of their regions' sanitation situation e.g., they should be aware of all government and non-government sanitation activities, statistics, and reporting where available, PHLAs, etc.

Figure 28. Key Outcomes by Approach (Latrine Observations and Household Sanitation Survey)



Comparing Implementation Approaches. In an effort to inform USAID, GoS, and other stakeholders, the ET sought to understand which implementation approach proved the most sustainable.

The qualitative interviews indicated that the hybrid villages had the most sustainable latrines in terms of latrine quality, based on multiple reports that the latrines built as part of PEPAM/USAID lasted until full. Whereas the CLTS-WI and subsidy interviewees often cited issues with latrine quality and durability leading to frequent replacement. The HH sanitation survey and observation data presented a trade-off between the approaches. Specifically, CLTS-WI had the best outcomes on primary indicators of use (which is the primary goal of CLTS and therefore considered a success), but respondents noted latrine quality concerns. While CLTS is recognized for galvanizing communities to build latrines, studies often note that many of the latrines built are unimproved (have quality concerns) and do not aid in progressing HHs up the sanitation ladder.[72] The hybrid approach performed best related to repairs and for USAID's indicator for access to basic sanitation. Most regional government officials, IPs, and some community members expressed notable support for the hybrid approach. After providing an explanation of how CLTS helps raise community awareness of sanitation and mentioning challenges with building traditional latrines, a regional government official concluded:

"This is why the door must remain open to the CLTS approach and the subsidized approach comes in behind for vulnerable households. It is the hybrid approach is the best."

Two implementing NGOs, neither of which participated in the hybrid approach, stated:

"We implemented the subsidized approach… It is a very good approach, but it should not be generalized. By the time that [it] ran its course it was abandoned by all development projects for its lack of sustainability in the facilities and the achievements in place. I think that we must start by the CLTS and subsidize after. We have certainly succeeded in changing behaviors by the CLTS approach, but the problem is the sustainability of the latrines…. If there was a subsidy, there at least the latrines would be more durable because more solid. If the latrine is not solid and that the owner *is not in the provisions to be able to rebuild, this person returns to its bad habits.*"

[72] Cavill, S., R. Chambers, and N. Vernon. 2015. "Sustainability and CLTS: Taking Stock," *Frontiers of CLTS: Innovations and Insights Issue 4*. Brighton: IDS

Community members shared somewhat similar sentiments without explicitly naming the approaches. As noted above, they focused more often on quality of materials and the need for assistance for some HHs.

CONCLUSIONS

The evaluation team analyzed HH sanitation survey and latrine observation data and qualitative interviews to understand the extent to which HHs in PEPAM/USAID villages have been using and replacing latrines and what factors contributed to sustainability. Demand for quality latrines is high, and it is evident that latrines are valued among PEPAM/USAID communities. In PEPAM/USAID villages latrine access is high and this is likely due to reported ability to access other community members' latrines. Looking forward to future USAID programming, latrines that meet basic or safely managed sanitation service definitions are critical. As such, findings related to these indicators are of importance.

The latrine models that PEPAM/USAID promoted do not appear to be widely in use, and many HHs instead appear to rely on traditional latrines. Across approaches, observed latrine characteristics indicate that latrine quality in PEPAM/USAID villages is suboptimal. Specifically, CLTS-WI village HH latrines appear to be of poorer quality than the other approaches, which aligns with reports from CLTS-WI villages that rely upon traditional latrine construction as well as previous studies. Overall, relatively few latrines observed had key superstructure (such as roofs or walls) and quality components, which are known to have a negative impact on use but did not have much of an actual impact based on this evaluation. Reported latrine use is high overall, but results are mixed by approach. This may relate to implementation of the different approaches. For example, the CLTS-WI approach used ODF certification as an incentive for a subsidized water point, whereas the hybrid approach did not. It is of critical importance for future WASH activities to further explore the impact of differences between the implementation approaches and how they motivated behavior change around latrine use and OD practices. Despite reported high latrine access, open defecation persists across approach type, with the highest rates recorded in hybrid communities. The reports and presence of observable stool in some compounds in CLTS-WI communities previously certified as ODF represent minimal slippage. It should be noted that at least some slippage occurs after implementation of CLTS and other sanitation interventions, and the CLTS villages' slippage appears to be within a "normal range."[73] The complex factors that contribute to slippage rates are beyond the scope of this evaluation.[74, 75, 76]

Both the qualitative and quantitative data indicated that the most severe issue encountered related to latrines are full pits. PEPAM/USAID's reports indicate that the activity developed guidelines to address this issue, but their exact mode of implementation is not known, and no communities discussed these potential resources. According to the qualitative interviewees, latrine construction and replacement commonly occurs and latrines are valued across approaches, but they noted several barriers. Resource limitations of some HHs contributed to

[73] Research indicated that the ranges varied widely e.g., about 2%–50%, although based on a number of studies ranges in the lower teens were the most common.
[74] Tyndale-Biscoe, P. et al. 2013. ODF Sustainability Study. Plan International.
[75] Shivanarain, S. et. al. 2015. Sustainability of ODF Practices in Kenya. UNICEF.
[76] We Consult. 2013. Sustainability Check 2013. UNICEF.

the inability to build/replace or maintain a latrine and/or to the use of poor materials (e.g., without cement). In addition, it appears that latrine standards/quality characteristics are not always maintained when replacement occurs. Reportedly, the cadre of trained masons are only hired for latrine construction when a HH can afford them; they do not appear to be used for maintenance as PEPAM/USAID envisioned. However, regional government officials appear to highly value the trained masons and view them as an asset to regional sanitation improvement and sustainability. The interplay among latrine quality, repair, and replacement influence sanitation habits (defecation behavior) and norms. Moving up the sanitation ladder does not guarantee latrine quality, which is critical to enable and sustain sanitation norms.

Comparing Implementation Approaches Conclusions. As the GoS National Strategy of Rural Sanitation shifts its focus to a market based/private sector approach and moves from full subsidy to none or limited subsidies, it is important to consider the evidence and determine the trade-offs to achieve sanitation service for rural residents. In the past, many in the WASH sector viewed sanitation subsidies and traditional CLTS as diametrical, however, PEPAM/USAID's hybrid approach is an example of a shift in thought that the approaches can be complementary. The quantitative data indicate a trade-off between the approaches. However, given aspirations to move HHs up the sanitation ladder, which HHs are likely to repair their latrine, the barriers noted above, and a variety of stakeholder opinions, it appears that the hybrid approach strikes a balance and may be able to bring more HHs basic sanitation service as well as establish norms.[77] However, implementers need to understand the factors that drove high latrine use in CLTS-WI villages and comparatively poor use in hybrid villages. Perhaps, requiring ODF verification as a prerequisite for a water point subsidy provides a common communal goal and, therefore, a stronger commitment to changing sanitation behavior. Based on some limitations in understanding exactly how implementation occurred, it is likely that hybrid implementation approaches could be modified to address use and other issues and maximize sanitation service in rural contexts. For example, ensuring the presence of trained masons is likely not sufficient to spur quality latrine construction because of limited resources in rural communities. Demand creation appears to have been internalized as most community members reported valuing latrines, however, HHs built latrines that lacked the quality and sustainability to move a high percentage of community members toward lasting basic satiation. Across all of the implementation approaches, the larger structures that PEPAM/USAID used to facilitate sanitation service (e.g., training masons, behavior change, etc.) likely had an impact and would need to be considered in terms of their role in facilitating sustainable sanitation service delivery.

HANDWASHING

This section addresses the current status of PEPAM/USAID's handwashing infrastructure and behavior among PEPAM/USAID communities. This report presents the quantitative and qualitative data based on the sanitation approach (CLTS-WI, subsidy, hybrid) paired with each handwashing activity. The ET assessed handwashing indicators during the HH sanitation survey, which included handwashing station observations (n=291).

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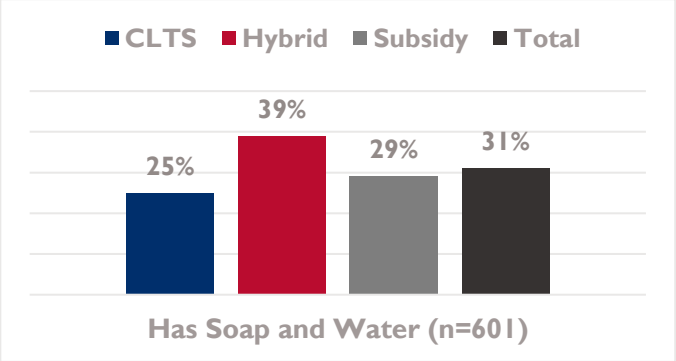
[77] USAID, 2018. An Examination of CLTS's Contributions Toward Universal Sanitation. Washington, DC.: USAID Water, Sanitation, and Hygiene Partnerships and Sustainability (WASHPaLS) Project.

FINDINGS

CURRENT STATUS

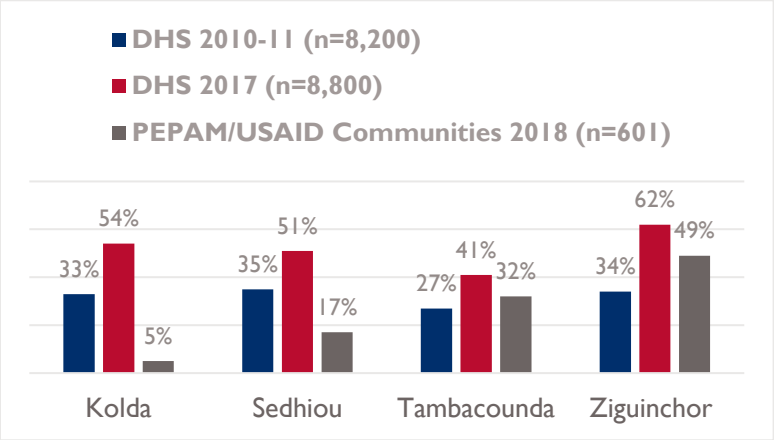
PEPAM/USAID promoted the use of tippy taps, which are fixed handwashing stations,[78] during activity implementation and provided manuals to help community members build them. These handwashing stations cue users to practice handwashing behavior at critical times, such as after defecating when placed outside of a latrine or before food preparation when placed near a kitchen area. In the qualitative interviews, community members and NLs indicated that regardless of village type (e.g., water only, sanitation and water combined, etc.) and approach (CLTS-WI, subsidy, or hybrid) tippy tap construction guidance was a component of the WASH interventions in each village. All but one interviewee from a sanitation intervention village reported that they or others in their community built tippy taps as a result of PEPAM/USAID sensitization. Of the 600 HH handwashing observations, only 6 percent of HHs had a fixed handwashing station or facility (this includes tippy taps), and 51 percent of HHs did not have any handwashing facilities or materials. The current status of handwashing stations based on observation aligned with the qualitative results, which indicated that across all regions, WASH interventions, and implementation approaches, respondents almost universally reported that no tippy taps introduced during PEPAM/USAID were in use. Almost all respondents cited a reversion to mobile handwashing stations (water kettle or bottle). An NL in a CLTS-WI village reported, "At the very beginning of the sensitization, people applied these measures. But as soon as the tippy tap breaks down, I notice that tippy tap are not recommended and as a result, some no longer have these tippy tap but we have replaced them with other ways of washing hands. By replacing the tippy tap with basins, pots, kettles."

Figure 29. HH with Observed Soap and Water for Handwashing by Approach (Handwashing Station Observations)



[78] USAID indicator HL.8.2-5 specifies that a handwashing station can be in a fixed location or a movable device that can be used by the HH.

Figure 30. Observed Handwashing Station with Both Soap and Water (Handwashing Stations Observations)



The HH sanitation survey reported that the average length of time a **handwashing station lasted** ranged from 25 months in hybrid village HHs to 72 months in CLTS-WI village HHs. Subsidy village HHs reported their tippy taps lasted 49 months—the middle of the range. Convenient access to a handwashing station with soap and water is widely accepted as a key factor in enabling handwashing behavior.[79]

PEPAM/USAID encouraged HHs to install handwashing stations in their compounds, and some qualitative interviewees reported that the activity promoted installment near latrines. When enumerators observed handwashing station location, they found 15 percent near a cooking area, 10 percent near a latrine, and 35 percent had no specific place or were used at multiple places. These findings indicated a limited ability for handwashing stations to be a cue to action at critical times.

Overall, 35 percent of HH sanitation survey's respondents had a handwashing station/materials for observation. The enumerators found that more villages that applied the hybrid approach had handwashing materials (63 percent) compared to 46 percent of subsidy villages and 33 percent of CLTS-WI villages; all pairwise comparisons reached statistical significance at *P<.02*. Only 62 percent of HHs overall had soap present during the observation. Comparing approaches, CLTS-WI villages recorded the highest number of HHs with soap (76 percent), followed by subsidy (66 percent), and the substantially lower number of hybrid HHs (52 percent) (the latter two figures are statistically significant; *P=.002* and *P=.02,* respectively). Only 28 percent of HHs met USAID indicator HL.8.2-5: percentage of HHs with soap and water at a handwashing station commonly used by family members (no statically significant difference in pairwise comparisons by approach). However, a statistically significant and positive correlation should be noted between other WASH activities being carried out in a village and having soap and water available (r=.18: *P<.001*). This aligns with what one would expect (e.g., presence of WASH activities leads to improved signs of handwashing). Regional variations appeared to be substantial with all differences being statistically significant at *P<.04* or lower. Among the HHs observed, **Figure 33** shows low to extremely low adherence to the practice of handwashing with soap and water in all regions. The figure also presents the much larger DHS sample to provide a sense of regional trends. While direct comparison is not possible, it does appear that the PEPAM/USAID HHs are worse off than others in the region. The qualitative interviews with community members and NLs yielded high levels of self-reported handwashing habits, including use of soap and ash. HH sanitation survey respondents corroborated this fact; 85 percent of

[79] Devine, J. 2010. Beyond Tippy-Taps: The Role of Enabling Products in Scaling Up and Sustaining Handwashing. https://www.ircwash.org/sites/default/files/Devine-2010-Beyond.pdf.

respondents self-reported that they wash their hands with soap. Qualitative interviewees offered two different perspectives: some said that before PEPAM/USAID people did *not* often wash their hands with soap; others stated that they *did* wash their hands before, but sensitization activities reinforced this practice.

USE

PEPAM/USAID provided training on how to make soap, which one qualitative interviewee indicated still occurs. The ET noted regional variations of about 25 percent in reports of handwashing with soap. Hybrid village HHs (91 percent) reported the highest level of handwashing with soap, and subsidy village HHs (79 percent) reported the lowest, a statically significant difference *(P<.001)*. More respondents self-reported that they washed their hands with soap than had soap available during observation, as discussed above. However, only 38 percent of HHs with handwashing stations showed any signs of use (e.g., wet soap, wet ground, wet basin, etc.). CLTS-WI HHs showed the highest signs of use (60 percent), followed by subsidy HHs (47 percent), and hybrid HHs (21 percent), which had a lower statistical significance than the CLTS-WI and subsidy approaches at *(P<.001)* in each case. The ET found a statically significant and positive correlation between other WASH activities being carried out in a village and signs of handwashing (r=.13: P=*.03*). While the ET did not specifically determine what other WASH activities focused on or promoted, it does seem evident that additional WASH programming had a positive impact on observed proxy indicators for use.

Figure 31. PEPAM/USAID Latrine

SUMMARY OF CURRENT STATUS AND USE

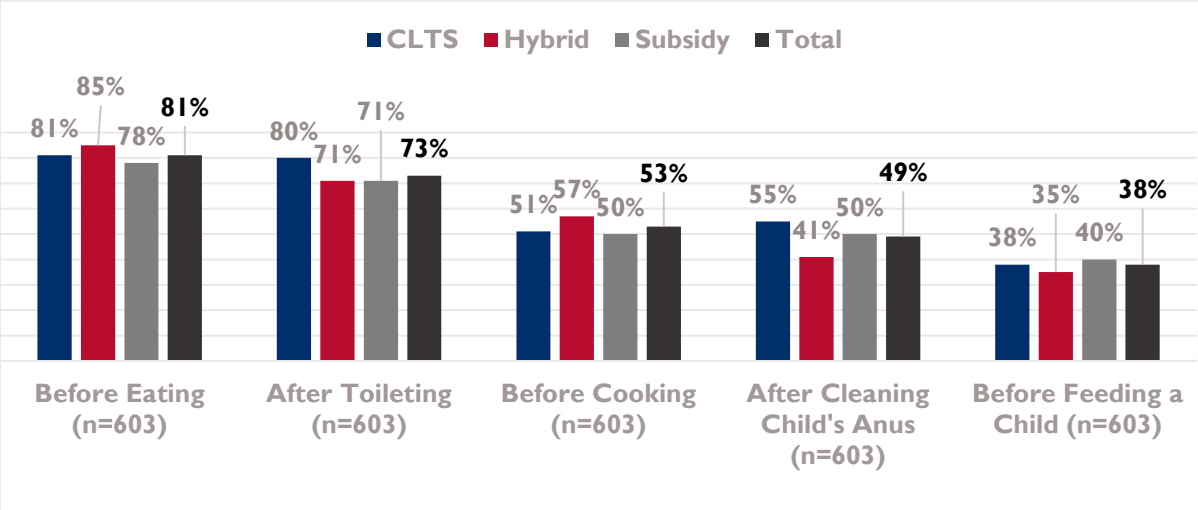
In sum, CLTS-WI village HHs displayed the most durable handwashing stations (72 months) and the highest signs of use (60 percent). However, PEPAM/USAID–promoted tippy taps did not stand the test of time and appeared to no longer be in use. Overall signs of handwashing station use of any kind across the intervention approaches was low (38 percent) and indicates that handwashing promotion during PEPAM/USAID did not become normative.

FACTORS AFFECTING SUSTAINABILITY

Behavioral Sustainability Factors. PEPAM/USAID did not measure handwashing behavior change at the conclusion of the activity. However, PEPAM/USAID used the SARAR/PHAST strategy to conduct 10,245 HH visits to share WASH behavior change messages. Across implementation approaches, community members and NLs shared health and wellness themes as motivators for handwashing. In addition, they demonstrated consistent knowledge of critical times for handwashing with soap—one of PEPAM/USAID's primary behavior change messages. While PEPAM/USAID strengthened knowledge of critical handwashing times and health messages (e.g., handwashing can decrease germs, reduce diarrheal disease, etc.), it did not appear to have shifted norms. This is also evident based on HH sanitation survey respondents' self-reporting of when they washed their hands **(Figure 35)**. Handwashing at critical times occurred most frequently among all approaches before eating, followed by after using the latrine; CLTS-WI village HHs reported the highest level of compliance. All other critical times

for handwashing recorded suboptimal results: before cooking (range 51–57 percent), after cleaning a child's anus (range 41–55 percent), and before feeding a child (range 35–40 percent).

Figure 32. Self-Report of Handwashing at Critical Times (Household Sanitation Survey)



The potential of response bias should be noted when interpreting respondent's self-report of handwashing at critical times.

> "They [PEPAM/USAID] made us aware of handwashing with soap and it was very useful because we found that there are fewer diarrheal diseases."
>
> *– Community member in a sanitation CLTS village*

PEPAM/USAID carried out HH visits and used social marketing in an effort to change behavior across all implementation approaches. A key factor in changing behavioral norms and supporting habit formation is the promoter's consistent follow up of that behavior.[80] In qualitative interviews with a regional WASH official, an IP, and community members, interviewees shared their thoughts on the need for consistently engaging with HHs on handwashing behavior. An NL from a CLTS-WI village who opted not to take the water incentive shared his perspective on what may be required to change norms in a PEPAM/USAID village long term, "…what has not worked is the fact that the people from the project who came to teach us these practices did not come back later to at least refresh our thoughts. If you show or learn things to people and you stay for years without coming back to refresh their ideas about what has been done, people will eventually forget what they have learned. It would be interesting to follow up with people until they assimilate what they have learned…"

[80] Wantland, D., B. Bewick, and T. Palermo. 2009. (Ed). Ritterband, L. "Periodic Prompts and Reminders in Health Promotion and Health Behavior Interventions: Systematic Review." *Journal of Medical Internet Research*, 11(2). and Ory, M., M. Smith, N. Mier, and M. Wernicke. 2010. "The Science of Sustaining Health Behavior Change: The Health Maintenance Consortium." *American Journal of Health Behavior*, 34(6), 647-659.

In reference to sustaining behavior change, a regional official added, "This is not easy, people tend after the departure of the promoters and entrepreneurs to return to their different habits."

A systematic review of handwashing behavior found that of the 30 handwashing studies reviewed only four demonstrated behavior change lasting one year after the intervention.[81] The findings in this evaluation align with the review's findings, e.g., handwashing behavior is unlikely to be sustained. As mentioned above, consistent presence of a handwashing promoter or behavior change agent is integral to shifting norms and helping to enshrine behavior.[82] PEPAM/USAID's behavior change appeared to be insufficient to establish handwashing habits and norms.

Tippy Tap Sustainability Factors. The ET observed tippy tap failures occurred for a number of reasons: sun damage and time affected the durability of the plastic containers and poor durability made the device prone to damage. In reference to the PEPAM/USAID tippy tap, an NL from a CLTS-WI village said: "The only problem with the device is that it does not last long. The cans do not resist the sun, the fact that they were built all the time made the population discouraged. Nevertheless, we have other handwashing devices that are mobile, different from the PEPAM model."

The PEPAM/USAID midterm evaluation report noted these factors and others related to understanding the maintenance manuals as undermining tippy tap sustainability. It is unclear based on the data and interviews if PEPAM/USAID made any course corrections/adjustments.

Repair and replacement of handwashing stations occurred 56 percent of the time. The reasons respondents cited for handwashing station replacement included: no specific reason (91 percent), structural damage (7 percent), container damaged (5 percent), and generally needing replacement (12 percent). When respondents encountered a problem with their handwashing station, 37 percent fixed the issue within their own HH, 12 percent either built or purchased a new handwashing station, and 32 percent did not fix the issue.

CONCLUSIONS

The ET examined whether, and to what extent, PEPAM/USAID–promoted handwashing stations or other handwashing stations were in use, reported handwashing behaviors, and factors influencing the sustainability of handwashing. These factors could be both structural (enabling environment) and behavioral. Based on the interviews and direct observations, it is evident that the PEPAM/USAID–promoted handwashing stations are by in large no longer in use. This is ascribed to poor quality and durability issues. The lack of handwashing observed is not surprising given that few of these handwashing stations have been replaced, so just under half of the HHs have any observable means of washing hands. When replacement does occur, it appears to be with a movable handwashing station, which limits the potential for it to act as a cue to action at critical times. The qualitative interviewees consistently shared their desire and motivation for handwashing with soap. However self-reported handwashing at critical times is

[81] Vindigni, S. 2011. Systematic Review: Handwashing Behaviour in Low- to Middle-Income Countries: Outcome Measures and Behaviour Maintenance. https://onlinelibrary.wiley.com/doi/full/10.1111/j.1365-3156.2010.02720.x
[82] Wantland, D., B. Bewick, and T. Palermo. 2009. and Ory, M., M. Smith, N. Mier, and M. Wernicke. 2010.

suboptimal. This, coupled with the lack of actual handwashing materials, makes habit formation difficult. It is simpler to revert to previous practices when the enabling hardware does not last.

Details about the implementation of the PHAST/SARAR behavior change approaches are insufficient to draw a definitive conclusion, however, based both on qualitative interviews with multiple stakeholders and the quantitative data, the behavior change strategy does not appear to have been sufficient to change handwashing behavior long term. Respondents pointed to the need for sustained behavioral intervention and promoter presence to enable HHs to change habits and shift norms.

RECOMMENDATIONS

1. **Consider building on the hybrid (combined CLTS and subsidy) approach for future rural sanitation service programming.** To meet basic sanitation service (USAID HL.8.2-2) or higher, promote quality latrines, and support maintenance across communities, consider modeling future sanitation projects after the hybrid approach of initial CLTS triggering activities with subsidies to follow a period of time later. Pay attention to enhancing promotion of improved quality latrine facilities and determining the appropriate subsidy.
2. **Conduct a cost-benefit analysis of WP pump, well borehole options, and the three sanitation implementation approaches.** PEPAM/USAID created extensive cost estimation documents for WP construction and O&M costs. USAID should build off of existing cost documents and combine them with benefit data to create an additional resource to aid in decision-making for future programming. Determining the cost of achieving specific benefits will provide evidence for USAID and other stakeholders to make informed decisions.
3. **Consider alternative models for small-scale WP management and governance**. Ensure that these models include linkages and consistent interactions with larger WASH governance and support structures. Given the GoS's shift toward private-sector management of larger scale (multi-village) rural water supply systems, work with the government to explore how the private-sector model might influence and inform best practices/systems for small-scale water points. Finally, any approach should continue to include women in a significant way.
4. **Consider incorporating human-centered design of handwashing stations** into future projects, provide access (via markets, subsides, or other mechanisms) to fixed handwashing stations (enabling environment) beyond a basic tippy tap, and develop supply chains for quality handwashing station materials appropriate for rural and peri-urban settings. In addition, develop guidelines on handwashing station material quality (e.g., if program's handwashing stations will be placed outside, ensure that materials are UV resistant).
5. **Continue to engage in private-sector partnerships that foster local capacity building and entrepreneurship training** while ensuring that specific plans are in place to transition financial systems (bank accounts/guarantee of payment) for WASH services when a project ends. Poor transition plans for committee financial systems under PEPAM/USAID contributed to poor financial practices and challenges with contracts. Simultaneously, ensure that supply chain systems are sustainable after the project concludes,

potentially by focusing on limited technology options or transitioning oversight to government or other entities.

6. **Support system strengthening for sustained championing of WASH behavioral norms.** Promote the journey to self-reliance through work with host governments to strengthen systems that support community health workers or community WASH champions to provide longstanding and consistent behavior change activities. Changing behavior and shifting norms around water, sanitation, and handwashing with soap and water will require sustained messaging.
7. **Support adaptive management recommendations in midterm evaluation reports and follow up** to ensure that implementers have the flexibility to make course corrections. Based on the data, it appears that IPs did not modify all implementation approaches in accordance with independent midterm evaluation findings regarding threats to sustainability. For example, it appears that IPs stopped using the Erobon pump as the evaluation recommended, but handwashing station sustainability concerns did not appear to be addressed.

EVALUATION REPORT ANNEXES

MILLENNIUM WATER AND SANITATION PROGRAM (PEPAM/USAID) EX-POST EVALUATION

WASH Ex-Post Evaluation Series—Water Communications and Knowledge Management (CKM) Project

July 2019

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USAID
FROM THE AMERICAN PEOPLE

ANNEX A: INCEPTION REPORT

THE COCA COLA FOUNDATION

INCEPTION REPORT: MILLENNIUM WATER AND SANITATION PROGAM (PEPAM/USAID) EX-POST EVALUATION

WASH Ex-Post Evaluation Series—Water Communications and Knowledge Management (CKM) Project

September 14, 2018

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ACRONYMS

ACIEHA	Integrated Community-based Approach for Water, Hygiene, and Sanitation
ASUFOR	Associations of Water Users, *Association d'Usagers de Forage*
CBO	Community-Based Organization
CKM	Water Communications and Knowledge Management (CKM) Project
CG	Village Management Committee, *comité de gestion*
CLTS	Community-led Total Sanitation
CR	Rural Communities, *communautés rurales*
E3	USAID Bureau for Economic Growth, Education, and Environment
ET	Evaluation Team
ETL	Evaluation Team Lead
GoS	Government of Senegal
GI	Group Interviews
HH	Household
IDIQ	US Government indefinite delivery/indefinite quantity contract
KII	Key Informant Interviews
MDG	Millennium Development Goal
NGO	Non-Governmental Organization
NL	Natural Leaders
ODF	Open Defecation Free
PEPAM/USAID	The Millennium Water and Sanitation Program
PHAST	Participatory Hygiene and Sanitation Transformation
RTI	Research Triangle Institute
S	Sanitation
SARAR	Self-Esteem, Associative Strengths, Resourcefulness, Action Planning and Responsibility
SI	Social Impact, Inc.
TBD	To Be Determined
USAID	United States Agency for International Development
USAID/E3	Bureau for Economic Growth, Education and Environment
W	Water
WADA	Water and Development Alliance
WASH	Water, Sanitation, and Hygiene
WatSan	Water and Sanitation
WP	Water Points
WSS	Water Supply and Sanitation

INTRODUCTION

BACKGROUND ON EX-POST EVALUATION SERIES

On September 17, 2015, USAID signed a contract with ECODIT for the Bureau for Economic Growth, Education and Environment (USAID/E3) Water Communications and Knowledge Management (CKM) Project (AID-OAA-TO-15-00046), a five-year, $15 million task order under the Water and Development Indefinite Delivery, Indefinite Quantity contract. Under this contract, ECODIT is implementing knowledge management and communication services in support of the USAID Water and Development Plan. The project supports USAID's E3 Water Office and its partners in increasing water program knowledge and data capture; enhancing knowledge creation and knowledge sharing internally and among a wide range of external water sector stakeholders working in the water sector; and improving communication and outreach through diverse stakeholder engagement. As part of Task 1.1, Knowledge and Data Capture, ECODIT and its subcontractor, Social Impact, Inc. (SI), are conducting a series of ex-post performance evaluations of USAID water activities (Task 1.1.1) to further USAID's understanding of why its completed water, sanitation, and hygiene (WASH) activities have or have not been sustained. The series of ex-post evaluations builds on lessons learned from the development of the Sustainability Index Tool and its application in several countries. The first four evaluations have been completed in Madagascar, Indonesia, Ethiopia, and India. The fifth focuses on the PEPAM/USAID Millennium Water and Sanitation Program activity in Senegal.

ACTIVITY CONTEXT

In 2005, the Government of Senegal (GoS) launched PEPAM, a unified framework geared towards meeting the Millennium Development Goal (MDG) targets for water and sanitation, specifically to "provide drinking water to an additional 2.3 million people, increase rural households (HHs') access to drinking water[1] from 64% in 2004 to 82% in 2015; and expand sanitation provision to 355,000 rural HHs, increasing the rate of access to sanitation in rural areas from 17% in 2004 to 59% in 2015."[2] In addition to its own PEPAM interventions, the GoS also partnered with a number of international donors under its auspices, implementing specific interventions with PEPAM/USAID in the Casamance and Tambacounda (2009-2014), PEPAM/European Union (dates unknown) in southern Senegal, PEPAM/Luxembourg in Louga and Thiès (2008-2012), PEPAM/World Bank in northwestern Senegal (2010-2015), and PEPAM/African Development Bank nation-wide (2005-2013). These efforts yielded notable progress: by 2008, urban access to water and sanitation exceeded the 2015 MDG targets (with 92% access to water and 69% access to sanitation), and collectively, improved rural access to water and sanitation had narrowed the gap towards achieving the MDG targets nation-wide.[3]

Even with this progress, by 2008, Senegal's rural areas, particularly in the southern Casamance and Tambacounda (highlighted in **Figure 1.** Map of Senegal Regions with PEPAM/USAID Activities Highlighted in Gray**)**, remained behind in terms of access to water and sanitation.

[1] PEPAM's Final Report specifies that the indicator used to measure rural household access to drinking water follows the USAID definition for improved drinking water

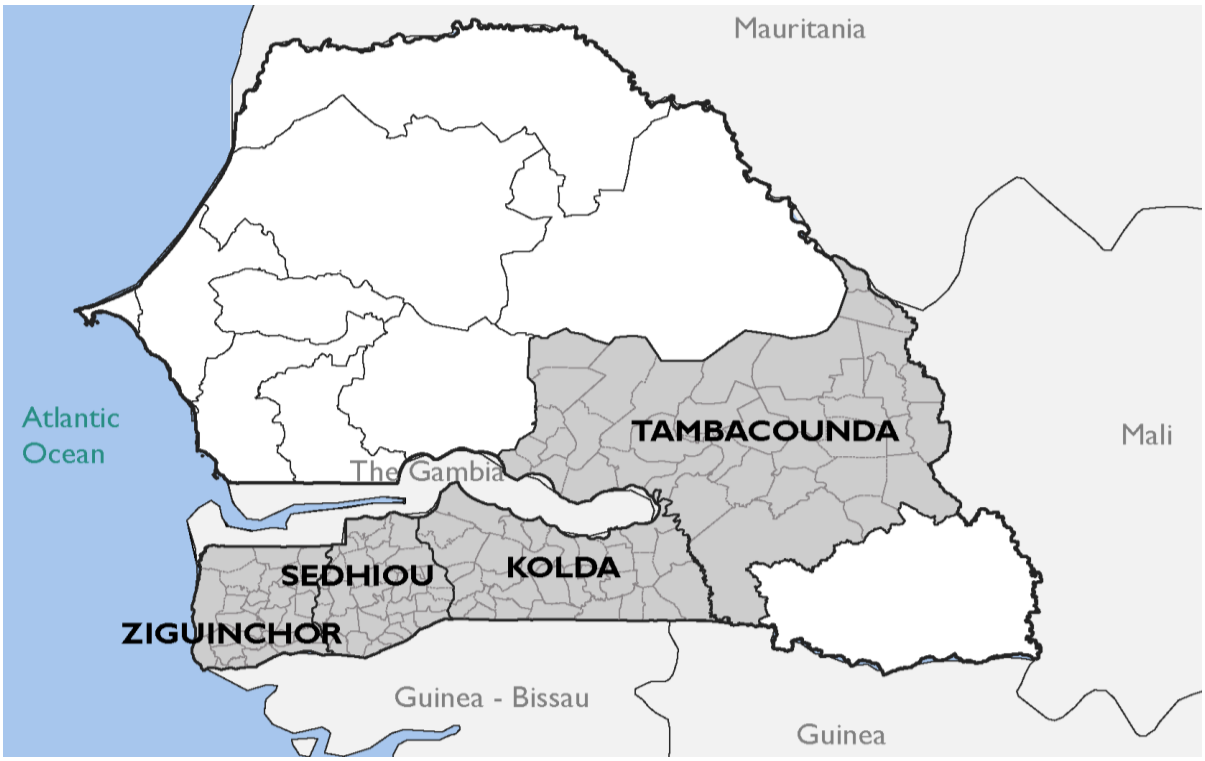
[2] PEPAM. "Vue d'ensemble." http://www.pepam.gouv.sn/ensemble/index.php?rubr=vue.

[3] Mendez England & Associates, Inc. 2009. Senegal Water and Sanitation Profile. USAID.

Ongoing, low-level conflict in the Casamance since the 1980s further exacerbated poverty and lack of access to resources in the region.[4] PEPAM documented these conditions in a 2010 Coordination Unit study, that found that "the Casamance region in Senegal ranks at the bottom of the list for access to potable water (i.e., Kolda's rate is 36.8%). Access to sanitation facilities is even lower, with the rate in Ziguinchor at 29%, and the rate in Sédhiou and Kolda both at a very low 8.1%."[5]

To address these challenges, in partnership with the GoS, USAID selected a consortium led by Research Triangle Institute (RTI) International to manage and implement the $21 million PEPAM/USAID activity from September 2009 to December 2014. Together with TetraTech-ARD, and Relief International/Enterprise Works, RTI worked with the GoS, local non-governmental organizations (NGOs), community entrepreneurs, and other stakeholders to implement the primary objective of PEPAM/USAID: "Improve sustainable access to water supply and sanitation (WSS) and to promote better hygiene in targeted rural, small town, and peri-urban areas of Senegal"(**Figure 3.** PEPAM/USAID Results Framework).[6] The consortium partnered with a wide range of local associations, non-profits, and community-based organizations (CBOs) – approximately 18 in total – to carry out activities.

Figure 1. Map of Senegal Regions with PEPAM/USAID Activities Highlighted in Gray



From 2009–2012, the activity worked in Senegal's Casamance area: Ziguinchor, Sédhiou, and Kolda regions (**Figure 1**). Responding to recommendations from USAID/Senegal and the Ministry of Habitat, Construction, and Hydraulics, PEPAM/USAID integrated the Tambacounda region into the activity from

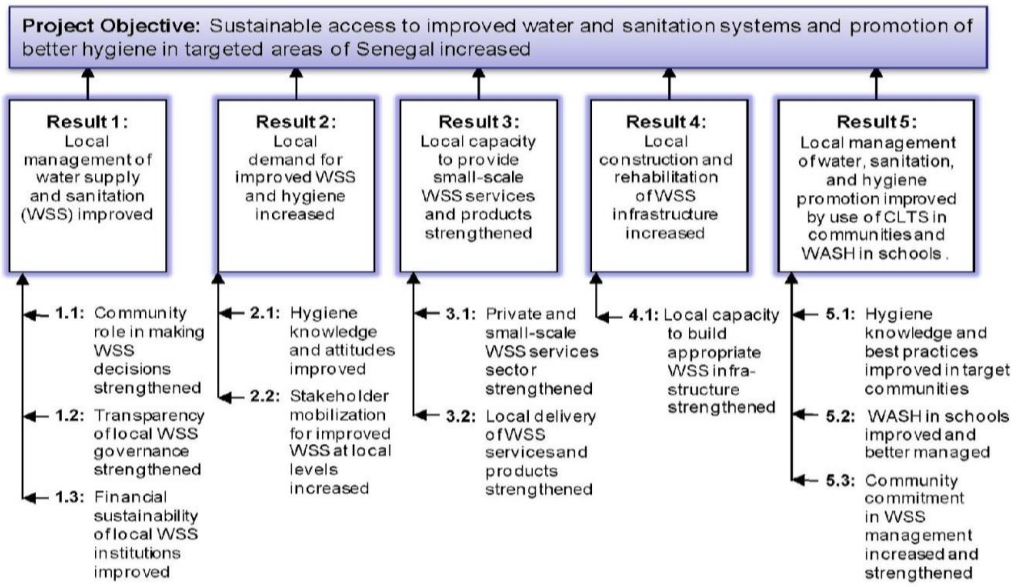
[4] CIA World Factbook. "Senegal Country Profile." https://www.cia.gov/library/publications/the-world-factbook/geos/sg.html.
[5] Swerdlin, D. & Seck, M, August 2013, Final Report – Senegal WADA I & II Activities Community Led Total Sanitation Infrastructure Planning and Construction (Water Wells and Latrines) in the Regions of Ziguinchor, Sédhiou, and Kolda,p.38.
[6] RTI International, December 2014, PEPAM/USAID Senegal Final Project Report.

mid-2012 through 2014. Additionally, the Water and Development Alliance (WADA) collaborated with PEPAM/USAID and the Coca-Cola Africa Foundation on a $1.3 million sub-component, in a subset of activity sites in Ziguinchor, Sédhiou, and Kolda from May 2011-Aug 2013 (**Figure 2.** A Timeline of PEPAM/USAID Activities by Component.[7]

Figure 2. A Timeline of PEPAM/USAID Activities by Component

	2009	2010	2011	2012	2013	2014
PEPAM/USAID	Activities in Casamance				Casamance + Tambacounda	
WADA Sub-Component			WADA Sub-Component in Casamance			

Figure 3. PEPAM/USAID Results Framework



In order to achieve their objective laid out in the PEPAM/USAID Results Framework, PEPAM/USAID included five key components, each of which was respectively envisioned to lead to one of the five results (**Figure 3** above):[8]

- ***Development Result 1. Improve Local Management of Water & Sanitation Supply***: Strengthen participatory governance by improving village-level governance of WSS services and supporting participatory infrastructure planning, management, construction, and maintenance;
- ***Development Result 2. Increase Local Demand for Improved WSS and Hygiene***: Increase demand for sustainable WASH services and products through a communications and social marketing program that increases the demand and access to safe drinking water, promotes appropriate low-cost sanitation systems, and changes behaviors surrounding hygiene practices;
- ***Development Result 3. Strengthen Local Capacity to Provide WSS Services***: Create local business opportunities; strengthen the capacity of small-scale service providers, the private sector, and Water Users' Associations (WUAs) to improve the ability of local enterprises to respond to the demand for improved WSS and ensure sustainable operations and maintenance of the infrastructure;

[7] RTI International, August 2013, Senegal - WADA 1 WADA 2 Monitoring Data for the Final Close Out Report.

[8] RTI International, December 2014, PEPAM/USAID - Senegal Final Project Report.

- ***Development Result 4. Increase Local Construction & Rehabilitation of WSS Infrastructure:*** Install and rehabilitate improved drinking water and sanitation infrastructure, using a service delivery framework;
- ***Development Result 5. Community-led Total Sanitation (CLTS) & WASH-in-Schools Improve Local WSS Management:*** Use and promote CLTS as a strategy for diversifying the program methods, reducing or eliminating subsidies, and as an entry point into the rural communities; support hygiene promotion and behavior change activities, as well as WASH in schools.

In pursuit of these results, PEPAM/USAID implemented three different approaches to water and sanitation activities as outlined in **Table 1**. All approaches included materials developed based on the Self-Esteem, Associative Strengths, Resourcefulness, Action Planning and Responsibility (SARAR) and Participatory Hygiene and Sanitation Transformation (PHAST), which targeted Development Results 2 and 5. The first approach was pure CLTS, which focused primarily on sanitation and integrated water in a subset of villages who were eligible after they obtained open defecation free (ODF) status. The WADA sub-component principally focused on this approach and drove efforts towards Development Result 5. The second approach used demand creation through community promoters and a subsidy to finance water and sanitation and included villages that received only water (W), only sanitation (S), or water and sanitation (WatSan) interventions. Under this approach, presidents of Associations of Rural Borehole Users (*Association d'Usagers de Forage*, ASUFOR) and village management committees (*comité de gestion*, CGs), heads of villages, or Mayors could request financing support for desired water and sanitation infrastructures in their communities, and PEPAM/USAID would finance the difference between what the community could contribute and the total cost of the well or latrine infrastructure.[9] CLTS was not a part of the subsidy approach, and thus it focused primarily on Development Results 1-4. The final approach, implemented in parts of Tambacounda, was the Integrated Community-based Approach for Water, Hygiene, and Sanitation (ACIEHA), which combined pure CLTS and subsidy for water and sanitation infrastructure approaches, and will be hereafter described as the '*hybrid*' approach. Implementers triggered communities with CLTS and approximately three months later re-visited to introduce the subsidy structure. The approach included W, S, and WatSan interventions geared towards addressing Development Results 1-5.

Table 1. Approaches Pursued by PEPAM/USAID

APPROACH (Activity Name)	DESCRIPTION	REGION	# VILLAGES	W	S & H
Pure CLTS approach (once ODF, eligible for water incentive) (WADA)	Implementers triggered, post-triggered, implemented local development action plans, verified, and certified each CLTS village for ODF status. While all CLTS villages were successfully CLTS certified, not all chose to obtain a water point.[10]	Kolda, Sédhiou, Ziguinchor	ODF Verified 36		✓
			ODF Verified 72	✓	✓
Subsidized water and sanitation approach (no CLTS) (PEPAM/USAID)	Villages and households identified preferred WASH infrastructure, fundraised, and cost-shared 10% of the project's capital expenses. PEPAM/USAID subsidized the	Kolda, Sédhiou, Tambacounda Ziguinchor	58	✓	
			57		✓
			94	✓	✓

[9] RTI International, October 2012, USAID/Millennium Water and Sanitation Program (USAID/PEPAM) Annual Report No 3 - FY 2012 (October 2011 - September 2012), p 96.

[10] These three approach descriptions are derived from calls with PEPAM/USAID implementers of the CLTS and water infrastructure components, held in August 2018.

	remaining costs. User fees covered ongoing operational expenses.				
Hybrid CLTS/subsidy approach for water or sanitation: ACIEHA (PEPAM/USAID)	ACIEHA integrated lessons learned from the other two approaches by promoting community engagement through CLTS and later subsidizing sanitation infrastructure.	Tambacounda	72	✓	✓

PEPAM/USAID accompanied the infrastructure components with numerous soft-side support components promoting community governance, capacity, and local ownership of water and sanitation systems. These soft-side components included empowering natural leaders (NL) to mobilize their communities around good hygiene practices, strengthening existing or establishing new ASUFORs and CGs, providing Regional Hygiene Offices with water quality measuring equipment to facilitate local water quality testing, promoting the development of local WSS plans, and promoting CLTS.[11] ASUFORs, WUAs, and CGs, which oversaw the construction and maintenance of water and sanitation infrastructure, as well as the promotion of good WASH practices, also served as key contacts for the private sector engagement component.[12] PEPAM/USAID trained private sector artisans and entrepreneurs with the skills and knowledge to construct and maintain water and sanitation infrastructure in their communities. Additionally, PEPAM/USAID employed the PHAST/SARAR (Participatory Hygiene and Sanitation Transformation/ Self-esteem, Associative strengths, Resourcefulness, Action-planning and Responsibility) approach to behavior change communication across activity sites. PEPAM/USAID constructed sanitary blocks and boreholes to promote WASH-in-schools in the Casamance and built public sanitary blocks at health centers and health posts in Tambacounda.

According to the PEPAM/USAID Final Close Out Report, the program, "achieve[d] major results," surpassing targeted levels of performance across indicators. Key achievements included:

- 135,311 individuals gaining access to improved drinking water sources;
- 74,170 people gaining access to an improved sanitation facility;
- 742 producer's organizations, water user's associations, trade and business associations and CBOs receiving USAID assistance[13];
- 18,349 rural HHs directly benefiting from the program; and
- 147 improved toilets provided in schools and health facilities.[14]

In their close-out report, though sustainability was not measured, WADA implementers claimed particular aspects of their activity were successful and felt they were likely to contribute to long-term sustainability. Namely, these included combining subsidy and CLTS approaches; leveraging CLTS and PEPAM/USAID partnerships in lieu of pure subsidies; and creating partnerships around CLTS.

ONGOING WASH ACTIVITIES IN SENEGAL

The CKM team conducted an extensive document review to identify other WASH activities that USAID, GoS, or other donors implemented in the same regions after PEPAM/USAID closed. Full findings are available in **Inception Report Annex A: Assessment of** Site Contamination. Since the conclusion of PEPAM/USAID activities in 2014, USAID has launched a number of other activities in southern Senegal

[11] SEMIS. April 2013. Mid-term Evaluation of the PEPAM/USAID Water and Sanitation Project. USAID.

[12] RTI International. 2011. USAID/Millennium Water and Sanitation Program Annual Report No. 2. USAID.

[13] On the private sector side specifically, 33 enterprises and 236 individuals were trained and/or equipped to provide private sector construction, operations, and maintenance to WatSan infrastructure in PEPAM/USAID activity villages.

[14] RTI International, December 2014, PEPAM/USAID Senegal Final Project Report.

promoting locally-driven access to water and sanitation, including Governance for Local Development from 2016-2021 which strengthened *collectivités locales* by improving basic services, and the *Projet Assainissement – Changement de Comportement et Eau pour le Senegal* WASH activity from 2016-2021, which seeks to improve nutrition through investments in WASH in the most malnourished regions of Senegal.

The GoS has also continued the broader PEPAM effort promoting access to water and sanitation across 11 regions nation-wide in collaboration with NGOs, the World Bank, and local CBOs.[15] In 2015, the GoS met its MGD targets of increased access to safe drinking water and sanitation. These contextual changes and past evaluation findings have informed the development of the methodology and specific questions for this ex-post evaluation.

EVALUATION DESIGN AND METHODOLOGY

PURPOSE

This ex-post evaluation will assess the sustainability of the PEPAM/USAID's water supply, sanitation, and hygiene activities in the Ziguinchor, Sédhiou, Kolda, and Tambacounda regions since project close. The evaluation seeks to elucidate which WASH outcomes were sustained and which factors facilitated or constrained sustainability. The evaluation results will be presented to USAID, implementers, and the broader WASH sector with the aim of informing the design, and overall sustainability of future WASH activities.

EVALUATION QUESTIONS

Drawing on the PEPAM/USAID framework, this evaluation will answer the following questions:

Water

1. What is the present level of service at water points (WPs) installed or rehabilitated by PEPAM/USAID four years after activity close in terms of functionality, water quantity, quality, accessibility, and reliability?
    a. To what degree are community members using activity-sponsored WPs relative to other water sources, for which purposes and why?
2. Which factors influenced sustainability of water services?
    a. How effective have governance and management activities been?
    b. To what extent have PEPAM's efforts to build private sector capacity for WP construction and maintenance influenced WP sustainability?
3. To what extent are women continuing to participate in management and governance structures put in place under PEPAM/USAID?

Sanitation

4. To what extent have HHs been using and replacing (as needed) their latrines in PEPAM/USAID communities?
5. What factors have contributed to use and maintenance of HH latrines?
    a. Which of the three implementation models (subsidy, CLTS - no subsidy and a CLTS - hybrid) was the most sustainable?

Hygiene

[15] PEPAM, "Accès à l'eau potable et à l'assainissement," http://www.pepam.gouv.sn/infrastructure.php?rubr=inf.

6. In sanitation communities, to what extent are USAID/PEPAM-promoted handwashing stations, or other models, used today?
7. Which factors influenced sustainability of handwashing behaviors?

INDICATOR DEFINITIONS

For water, the ET will use USAID's WASH indicator definitions HL.8.1-1, HL.8.1-2, and HL.8.1-3 to assess service level at the WP (Table 2). This includes indicators of quantity, quality, accessibility, and reliability.

Table 2. Basic Levels of Water Services

USAID WASH Indicators	Quantity	Quality	Accessibility	Reliability
	HL.8.1-1	HL.8.1-2	HL.8.1-1	HL.8.1-3
Basic Access	≥ 20 Liters per person per day	Fecal coliform[16] standard of 0 CFU/100 mL, arsenic 10 ppb, * Fluoride 1.5 mg/L maximum,0.01 mg/l iron	30 min or less total round-trip collection time (including wait time)	Year-round access without regular supply rationing or seasonal failure

Latrine and handwashing device observation will assess standards set by PEPAM/USAID and USAID WASH indicators:

Table 3. USAID WASH Indicators for Latrines and Handwashing Devices

Indicators	Standard
HL.8.2-2	A basic sanitation service is a sanitation facility that hygienically separates human excreta from human contact and that is not shared with other HHs. Sanitation facilities meeting these criteria include: flush or pour/flush facility connected to a piped sewer system; a septic system or a pit latrine with slab; composting toilets; or ventilated improved pit latrines (with slab).
HL.8.2-5	There should be a "commonly used" handwashing station, including water and soap, is one that can be readily observed by the enumerator during the HH visit, and where study participants indicate that family members generally wash their hands.

DATA COLLECTION METHODS

The evaluation will use a mixed-method approach consisting of a desk review, key informant interviews (KII) or group interviews (GI) with stakeholders and beneficiaries, structured observations of WPs, water quality testing and record review, surveys with WP users, GIs with WUA and ASUFOR members, and structured observations of HH latrines and handwashing stations accompanied by a mini-household survey. The qualitative interviews will consist of KII or GI with 1-5 people. All interviews will be carried out in French or the local language, if possible. Data collection tools will be developed prior to field work; however, the ET may make nuanced modifications based on initial interviews and piloting of tools. The varied data collection tools will allow for triangulation of methods. Further details relating to data collection methods are described individually below, summarized in **Table 4**, and outlined in detail in the Evaluation Design Matrix (**Table 7**). The ET will obtain informed consent for all structured and

[16] The water quality testing kits will test for *E.coli,* which is a more stringent metric than fecal coliforms.

qualitative interviews and latrine observations. The ET will obtain permission from appropriate village leaders before conducting data collection in each village. Please see **Inception Report** Annex B: Draft Data Collection Instruments for the consent forms and data collection instruments referenced below.

Table 4. Data Collection Methods and Their Corresponding Evaluation Questions

Data Collection Method	EQ1	EQ2	EQ3	EQ4	EQ5	EQ6	EQ7
Document Review	✓	✓	✓	✓	✓	✓	✓
KII/GI: USAID		✓	✓	✓	✓	✓	✓
KII/GI: Implementers		✓	✓	✓	✓	✓	✓
KII/GI: Regional Hygiene Office	✓	✓	✓	✓	✓	✓	✓
KII/GI: Community and Natural Leaders, Health Extension Workers	✓	✓	✓	✓	✓	✓	✓
KII/GI: Private Sector Entrepreneurs		✓					
Structured Observation of WPs	✓						
Water Quality Testing	✓						
Water Quality Record Review	✓						
Group Survey with WP Users	✓	✓					
Group Interviews with WUAs and ASUFORs	✓	✓	✓				
Structured Observation of HH Latrines and Handwashing Stations				✓	✓	✓	✓
WASH HH Mini-Survey	✓			✓	✓	✓	✓
GI with Community Members		✓	✓	✓	✓	✓	✓

DOCUMENT REVIEW

The ET has commenced a comprehensive French and English language document review from a range of sources which offer insights into activity implementation and accomplishments, as well as the broader WASH context in Senegal. Primary among them are PEPAM/USAID activity documents, reports and policy documents from the GoS, and general WASH sector reports. The ET will continue document review as requested documents from the implementer are made available and as appropriate for the duration of the evaluation. Please see **Inception Report Annex C:** Documents Reviewed for a list of documents reviewed to date.

KEY INFORMANT OR GROUP INTERVIEWS WITH USAID AND IMPLEMENTERS

Prior to field work, the ET will conduct KIIs or GIs with USAID and implementers to provide context for the overall evaluation. These interviews will focus on project implementation details, such as their perceptions of the PEPAM/USAID activities' implementation challenges and successes, factors that may have impacted sustainability, and lessons learned. The ET will also seek perspectives on past and current sector policy, private sector engagement, and outlooks for the future.

KEY INFORMANT OR GROUP INTERVIEWS WITH REGIONAL WASH OFFICES

To support **Evaluation Questions (EQs) 1-7**, the ET will seek the Regional WASH Office key staff's insight related to their perception of the government's policy framework, sector involvement (oversight, financial support, technical support), their roles, views on the PEPAM/USAID project, and sector-wide challenges and opportunities relating to village-level WSS sustainability factors. The ET will also seek

secondary water quality data at these meetings. The *Water Quality Testing* section below describes the process. In addition, the ET will interview a sub-set of commune offices and health post staff to understand their perspectives on local WASH activities and behaviors. During all interviews, the ET will seek support in determining if other water and sanitation projects have occurred in proposed sample villages to further assess contamination (see **Inception Report Annex A: Assessment of** Site Contamination for more details).

KEY INFORMANT OR GROUP INTERVIEWS WITH COMMUNITY AND NATURAL LEADERS, HEALTH EXTENSION WORKERS

The ET will seek the perspectives of community leaders, NL, and health extension workers in PEPAM/USAID villages. The interviews will support answering **EQs 1-7**. The ET will seek their perspectives on PEPAM/USAID activity implementation, the community's retention of WASH behaviors, WASH norms, and sustainability of water supply infrastructure and sanitation activities. In addition, the ET will seek their thoughts on the PEPAM/USAID project's village-level governance, private sector engagement, and other topics that emerge from interviews with USAID, implementers, and regional officials.

KIIS OR GROUP INTERVIEWS WITH THE PRIVATE SECTOR (WATER AND SANITATION)

The ET will capture the perspectives of private sector stakeholders in water (drillers, manufacturers, repair artisans, and entrepreneurs) and sanitation (construction and repair artisans) who participated in the PEPAM/USAID project. Interview type will depend on timing and availability of respondents and will be geared specifically towards water or sanitation entrepreneurs. This method will contribute to answering **EQ 2**. The ET will seek private sector water actors' perspectives on the impact of PEPAM/USAID training, program implementation, and sustainability of systems (e.g. new contracts). The ET will seek latrine builders' perspectives on PEPAM/USAID implementation, sustainability of systems, and barriers and facilitators to latrine maintenance and replacements in communities they serve.

STRUCTURED OBSERVATION AT WATER POINTS

To answer **EQ 1,** the ET will conduct structured observations of WPs. Each observation period will last ~1 hours. For logistical reasons, the ET will not be able to observe each WP during the same time of day. The observation tool will capture function, (e.g. if WPs dispense any water), flow rate, stroke rate, leakage tests, fill time, and observed risk of contamination. The ET will also capture responses relating to reported water function and assess WP infrastructure for factors that might impact sustained functionality, such as engineering aspects or other relevant factors.

WATER QUALITY TESTING AND RECORD REVIEW

To further contribute to answering **EQ 1,** and in line with USAID WASH indicator HL.8.1-2, the ET will test WPs for E. coli. HL.8.1-2 specifies fecal coliforms as the indicator; however, the ET will test for E. coli, which is a more stringent measure of contamination. The ET will use the Most Probable Number method with the Aquagenx compartment bag test[17]. The ET will test for arsenic, fluoride, and iron, if feasible. The ET will attempt to access water quality records dating back to 2010 from the Regional Hygiene Offices that house the Hygiene Brigades, who are responsible for water quality testing. The records, if available, may help determine the frequency of water quality testing and whether results meet

[17] E. coli testing used Aquagenx compartment bag tests. Water was collected directly from the WP using sample collection bottles. Details on the testing process are available online: http://www.aquagenx.com/how-to-use-the-cbt/

GoS water quality standards. Available data will be requested and/or recorded in the water record review template.

SURVEY WITH WATER POINT USERS

In conjunction with the WP observation and water quality testing, the ET will identify WP users to participate in a brief survey to support **EQs 1-2**. If participants are available, the ET will do one or more interviews at each WP. If the WP is not producing water at the time of visit we will attempt to seek out community members who collect water from other sources to participate. The interviews will collect data on the respondents' experiences and thoughts on service level indicators such as functionality, quality, quantity, accessibility, reliability, source switching/mixing, challenges, and other related questions.

GROUP INTERVIEWS WITH WUAS/ASUFORS AND RECORDS REVIEW

The ET will conduct group interviews with WUA and select ASUFOR members to support answering **EQs 1-3**. If possible, two to four members will participate in each interview. If female committee members exist, the ET will seek their participation. The interview guides will have a mix of semi-structured and structured questions and, if possible, will include questions based on a review of the association's records. The ET will seek to understand key aspects related to WP user details, water quality, governance (including relationship with local government), operations, maintenance, financial stability, and engagement with the private sector. If records are available, the ET will request a copy. If records are not available, the ET will rely on qualitative responses from interviewees. If a WP is no longer functional or the association no longer exists, the ET will attempt to interview former WUA or ASUFOR members to understand why.

STRUCTURED OBSERVATION HH LATRINES/HANDWASHING STATIONS AND WASH MINI SURVEY

The ET will partially assess **EQs 1, 4-7** based on observations of HH latrines and handwashing stations, if they exist. Latrine observation will assess the facility's cleanliness, signs of usage, and its structure for safety, privacy, ventilation, and presence of a washable slab. The ET will also complete a mini-survey with a female head of HH to assess history of latrine installation, replacement/maintenance, private sector capacity to support replacement/maintenance, community ODF, knowledge of critical times for handwashing, water sources they use, for which purpose they use each, and round-trip collection time. and other WASH aspects. The ET will also observe whether the HH has a handwashing station, and the ET will note whether a PEPAM/USAID-sponsored handwashing station is present. The ET will ask the respondent about use and maintenance and look for the presence of soap and water. Within sampled villages these activities will be done at a convenience sample of HHs with respondents available. If the female head of HH is not available, the ET will speak to another HH member.

GROUP INTERVIEW WITH COMMUNITY MEMBERS (SANITATION AND HYGIENE)

Group interviews with community members on water (limited questions) sanitation, hygiene will aid the ET in answering **EQs 3-7**. Interviews will address the perceptions of barriers and facilitators to latrine replacement and maintenance (e.g. life cycle costs), reported status of open defecation, latrine usage, and aspects related to gender. The ET will seek perspectives of both male and female community members across a spectrum of ages.

SAMPLING STRATEGY

CONTAMINATION

The Ex-Post evaluation series focuses on communities that have not received additional WASH activities since the PEPAM/USAID activity ended/closed (**Inception Report Annex A: Assessment of** Site Contamination). The ET is still investigating the locations and content of WASH activities conducted by USAID, GoS, or other donors since PEPAM/USAID ended. While the ET has identified many other WASH activities that occurred in the same regions and even communes as PEPAM/USAID, it is working, with the help of a local consultant, to verify whether these activities affected the same villages targeted by PEPAM/USAID. Villages that received follow-on WASH support from USAID or other donors will be excluded from sampling. Villages that have not had a follow-on activity and meet other inclusion criteria will be included in the sample frame. If there are not sufficient communities that meet inclusion criteria, the ET will select communities that have had limited, additional WASH activities and, where possible, capture details of what those activities entailed. For example, the PEPAM/USAID activity provided a WP, and occasionally multiple WPs, in each village. The WSS interventions were not necessarily designed to meet the water needs of an entire village (sufficiency) and did not take population growth into account. As such, the ET will consider including villages that had subsequent water activity. In addition, if villages had another donor rehabilitate their PEPAM/USAID WP, the ET will inquire about why the WP required repair to learn about the failings of the PEPAM/USAID activity. In cases where there are not sufficient sanitation beneficiary communities without follow-on support, the ET will assess contamination considerations on a case-by-case basis.

SAMPLING FRAME

The sampling frame of eligible villages will be derived from the ~500 villages listed in USAID/PEPAM document that indicates key activity details such as intervention approach (CLTS, subsidy, hybrid), the year interventions began, and village intervention type (W, S, or WatSan). To develop the final sampling frame, the ET will draw on data from the activities document, inclusion and exclusion criteria, and contamination information. See **Table 5** below for exclusion criteria.

To provide in-depth analysis on the EQs, the sampling frame will exclude villages that received institutional WASH interventions, and which are not covered in the EQs. Furthermore, the ET will exclude villages where the implementation approach or funding source cannot be verified, or in difficult to access areas. All other villages will be eligible for sampling.

Table 5. Sampling Frame Exclusion Criteria

Activity Detail	# Villages Excluded	Reason for Exclusion
Received similar WASH support from USAID or other donor	TBD	Villages that received follow-on WASH support from USAID or other donors will be excluded from sampling because they will make it difficult to understand the sustainability of the PEPAM/USAID project. If there are not sufficient communities that meet inclusion criteria, the ET will select communities that have had limited additional WASH activities and, where possible, capture details of what those activities entailed.
Setting: School and Clinics	73	PEPAM implementation activities and indicators at schools and clinics differed from those at community WPs and those addressing HH sanitation. Evaluating these components would require data collection at new locations and with additional stakeholders. Evaluating aspects of school and clinic sanitation activities are beyond the scope and design constraints of the evaluation.

Funding: ACPP	5	The ET is unable to verify if there was a different implementation approach taken with these villages who had a different co-funding source. Because there are only five villages, this represents a limited impact on the sample.
Unclear source of funding	2	All but two CLTS villages are listed as receiving WADA funding. Determining the source of the discrepancy and how it may have impacted implementation may be beyond the scope of the evaluation.
Difficult-to-access areas	TBD	The ET may exclude villages based on logistical considerations that would inhibit the data collection timeline.
Total	**80+ exclusions**	

SAMPLING OF WATER INTERVENTION VILLAGES

From the sampling frame of eligible sites, the ET will take a random sample of villages that received any type of water intervention, stratified by the type of approach in which it was embedded (CLTS, subsidy, or hybrid). The sample will include 175 villages that received either water-only (W) or combined water and sanitation (WatSan) interventions. This sample size will allow the ET to detect a conservative estimate of 50% of WPs meeting service-level criteria with a precision of +/- five percentage points.[18] If the proportion of WPs meeting service-level criteria is above or below 50%, this sample size will be sufficient to provide even greater precision. At each of the WPs, the ET will carry out a structured observation and water user surveys. The ET will also seek WUA records in each of the villages.

Within the 175-village sample, the ET will purposively sample villages for inclusion in qualitative data collection. Purposive sampling will enable the representation of a variety of perspectives, approaches, and conditions. The ET will conduct ~eight WUA or ASUFOR GIs in W and WatSan villages until saturation is reached.[19] In addition, the ET will conduct four KII or GIs with WP private sector entrepreneurs.

SAMPLING OF SANITATION INTERVENTION VILLAGES

The ET will create another sampling frame of villages comprised those that that received only sanitation interventions (no water intervention) and the subset of the sampled 175 water intervention villages that also had a sanitation component. For the sanitation-only communities, the ET will randomly sample 30 villages, stratified by implementation approach (CLTS, subsidy, or hybrid). Combined, the ET estimates including approximately 120 villages that included a sanitation component. In these villages, the data collection firm will complete HH mini-surveys with latrine and hygiene facility observations. At the villages, they will systematically sample HH for this exercise.

The ET will purposively select approximately 12 of these villages in which to conduct KIIs or GIs with community leaders/HEW/NLs until saturation is reached, based on fieldwork timing constraints.

Table 6. Data Collection Activities

[18] The ET reached the sample size by researching water point failure e.g. studies have shown ~60% functional WPs, as such we were conservative in selecting 50% of WPs meeting service level criteria. We will allocate the sample proportionally across the three strata. In this scenario we wouldn't be able to give that level of precision for each stratum, but rather for one measure that combines WPs across all three categories.

[19] In small communities, the program created a WUA to sustain the WPs. In larger communities receiving larger infrastructure, an ASUFOR was created. Thus, whether a WUA or an ASUFOR is interviewed will depend on the final sample selected.

Data Collection Activity	Approximate Sample Size	
Quantitative Data Collection Activities	Villages	Respondents
Structured observations at WPs	175	175
Group survey for WP users	175	350
Water quality testing	175	175
Observations of latrines and handwashing stations	120	360
HH mini-survey	120	360
Qualitative Data Collection Activities	Villages	Respondents
USAID KII	2	2
Former implementers (RTI and others) KIIs	7	7
Regional government officials	4	~6
ASUFORs GI	~4	~16
WUAs GI	~8	~32
WP private sector entrepreneurs KIIs or GIs	~4	~8
Community leader (e.g., village chief, HEW, and NL) KIIs	~12	~36
Community members group WSS interview	~12	~32

Figure 5: Sampling Frame at the Village Level

DATA ANALYSIS

QUALITATIVE DATA PREPARATION AND CODING

The ET will take detailed notes and, with consent, record audio of qualitative interviews. The ET will use the recordings to augment the notes at the end of each day to ensure completeness and clarity. The evaluation team lead (ETL) will review notes weekly to evaluate quality. The ETL will develop a codebook derived from EQs and further expand it based on emerging themes during data collection. A team of coders trained on the codebook will conduct initial coding exercises and contribute to the development of the final codebook before applying it. Inter-rater reliability will be assessed based on a select number of double coded interviews. Senior members of the evaluation team will use MaxQDA qualitative analysis software to deductively conduct thematic analysis, frequency searches, lexical searches, and crosstabs with the data. To ensure reliability of findings, the qualitative data will be triangulated between the different respondents' viewpoints along with quantitative results.

QUANTITATIVE DATA PREPARATION AND ANALYSIS

The ET will use Stata to analyze the observational, survey, water quality and WP data obtained from regional water offices and WUAs. The data collected will be cross-sectional, aside from potential historical data collected on water quality and WP characteristics. The ET will clean data for errors such as duplicates, missing values, and other discrepancies. The ET will calculate summary statistics, including means with a 95% confidence interval, disaggregating by region, gender and approach where appropriate.

The ET estimates the following precision for the stratified analyses of PEPAM/USAID sub-components based on the sample in Figure 5:

Project types:

- Water Only: precision of +/- 4.6%
- Water & Sanitation: precision +/-7.1%
- Sanitation Only : precision +/- 15.1%

Approaches:

- Subsidy: precision +/- 8.1%
- Hybrid: precision +/- 3.71%
- CLTS : precision +/- 9.6%

GENDER AND SOCIAL ANALYSIS PLAN

EQ 3 specifically addresses gender considerations related to women's continuing participation management and governance structures. The ET will triangulate the water user surveys, structured observations, the review of WUA and ASUFORs charters and women's membership, and KII and GIs to evaluate men and women's perceptions of vulnerabilities, empowerment, barriers, and inclusion related to WASH management and governance activities. Where feasible, GIs will be separated by gender.

Table 7. Evaluation Design Matrix [20]

EVALUATION QUESTIONS	INDICATORS	DATA SOURCES	DATA COLLECTION TOOLS	ANALYSIS METHODS	RISKS
WATER					
EQ1. What is the present level of service at WPs installed or rehabilitated by PEPAM/USAID four years after activity close in terms of functionality, water quantity, quality, accessibility, and reliability? a.) To what degree are community members using activity-sponsored WPs relative to other water sources, for which purposes and why?	QUANTITATIVE **I, i:** Functionality: % of presently functional WPs **I, ii:** Water quantity: % of WPs providing water quantity at basic service level (≥ 20 liters per person per day) **I, iii:** Water quality: % meeting USAID quality standards **I, iv:** Accessibility**:** % of respondents who report less than 30-minute round trip collection time. Wait time at WP. **I, v:** Reliability/continuity: % WPs with clear indication of year-round access without regular supply rationing or seasonal failure **I, a:**. Estimated proportion of local community population using activity sponsored WPs compared to other water sources QUALITATIVE Perspective of water source users, WUA members on WP and larger water questions of quality, accessibility, function. Etc.	**I i, ii, v:** Structured observation at WPs, including functionality test; flow rate; stroke rate and leakage tests; length and wait time in queue; observed contamination risk, observed operational /structural quality. **I iii:** Water quality testing by evaluation team. **I i-v:** Group survey for WP users assessing perception of water service level factors and source use; Group surveys with water users; semi-structured group interviews with WUA; review of documents from ASUFOR & WUA. Group surveys with WP users; and semi- structured group interviews with WUA and commune offices and health post staff.	**I i, ii, iv, v:** WP structured observation tool **I i-v:** Group survey for WP users **I i-v:** ASUFOR & WUA qualitative semi-structured group interview guide **I iii:** Water record data from the CR Hygiene Offices' water quality testing records; Water quality testing **I a**: Community, NL, and HEW qualitative interview guide	Quantification of proportion of WPs meeting service level criteria (by type and region) Coding, and thematic analysis of qualitative data	Distance between WPs has not yet been determined. Records/data may not be available from Regional Hygiene Office, ASUFOR, and WUA There may be a lack of people to interview depending on time of day.

[20] Please note that this table provides example indicators and that data collection instruments will collect indicators not listed which will inform analysis and results.

EQ 2. Which factors influenced sustainability of water services? a.) How effective have governance and management activities been? b.) To what extent have PEPAM/USAID's efforts to build private sector capacity for WP construction and maintenance influenced WP sustainability?	<u>QUANTITATIVE</u> **2, 2a:** # WUA in existence # of WUAs that record minutes from three WUA meetings in each quarter (looking at past year, PEPAM/USAID indicator 1.2.A) # of WUA whose recorded minutes were published or made publicly available (PEPAM/USAID 1.2.B) # of WUA and VMCs/CGs with sufficient capital funds to cover operations and maintenance # of WUAs and CGs with bank accounts and transparent record keeping # of ASUFORs that are actively (e.g. last 12 months) reporting data to PEPAM/USAID data base **2, 2b:** # of private sector contracts that remain active # of new contracts signed by CGs, local authorities, and PEPAM/USAID trained enterprises <u>QUALITATIVE</u> **2, 2a**: Perceived factors that improved or inhibited ASUFORS, WUAs, community members and others ability to manage/maintain/use of water services	**2, 2a**: Group interviews with and review of documents from ASUFOR and WUAs. KIIs with local government officials (e.g. Hygiene Office), community leaders, NLs, HEWs, and commune offices and health post staff. **2, 2b:** Review of partnership agreements from NGOs, communities and rural council presidents. E.g. maintenance contract records. **2, 2a, 2b**: Group interviews with and review of documents from ASUFOR and WUAs. KIIs with local government officials (e.g. Hygiene Office), community leaders, NLs,	Qualitative semi-structured interview and group interview guides Qualitative semi-structured interview and group interview guides.	Descriptive quantification of indicators Coding, and thematic analysis of qualitative data	Records/data many not be available from Regional Hygiene Office, ASUFOR, and WUA

	2, 2b: Perspective of ASUFORS, WUA, local officials and private sector entrepreneurs trained by PEPAM/USAID on water services maintenance, governance and sustainability	HEWs, and commune offices and health post staff, and private sector entrepreneurs.			
EQ3. To what extent are women continuing to participate in management and governance structures put in place under PEPAM/USAID?	QUANTITATIVE % of WUA management positions in PEPAM/USAID activities that are held by women (PEPAM Gender Indicators 1.1.B) % of women on the WUA committee % of women are CLTS committee members (if they still exist) QUALITATIVE Perspective of ASUFORS, WUA, local officials on barriers and facilitators to women's participation in WUAs	Group interviews with and review of documents from ASUFOR and WUAs. KIIs with local government officials (e.g. Hygiene Office), community leaders, NLs, HEWs, and commune offices and health post staff.	Qualitative semi-structured group interview guide; qualitative semi-structured KII guide		
SANITATION					
EQ4. To what extent have HHs been using and replacing (as needed) their latrines in PEPAM/USAID communities?	QUANTITATIVE % of latrines in PEPAM-supported villages that are in use and meet PEPAM/USAID/CLTS quality standards % of latrines reported as replaced since activity close	Semi-structured group interviews with community members related to sanitation and hygiene practices; Sanitation survey; Structured observation tool for sanitation Semi-structured interviews with community leaders, NLs, HEWs, and commune offices and health post staff.	HH mini-survey Qualitative semi-structured group interview guides	Quantification of % of latrines replaced, % of latrines meeting PEPAM/USAID activity standards, categorized by JMP criteria Coding, Thematic analysis of qualitative data	
EQ5. What factors have contributed to use and maintenance	QUANTITATIVE 5a: % of existing or replaced latrines, by implementation approach type.	5,5a: Semi-structured group interviews with community	Qualitative semi-structured group	Descriptive quantification of	

of the latrines? a.) Which of the three implementation approaches (subsidy, CLTS - no subsidy and a CLTS -hybrid) was the most sustainable?	 QUALITATIVE 5, 5a: Perceived factors that improved or inhibited community members and others ability to manage/maintain/use HH sanitation	members; interviews with community leaders, NLs, HEWs, and commune offices and health post staff; HH mini-survey;	interview guides; qualitative semi-structured KII guide, HH mini-survey instrument	indicators coding, and thematic analysis of qualitative data	
HYGIENE					
EQ6. In sanitation communities, to what extent are PEPAM/USAID-promoted handwashing stations, or other models, used today?	QUANTITATIVE % of HH with a handwashing station present by type % of HH with a handwashing station, soap, water, and/or signs of use	Structured observation tool for hygiene HH mini-survey Group interviews with community members; interviews with community leaders, NLs, HEWs, and commune offices and health post staff.	Structured observation tool for hygiene Sanitation semi-structured group interview guide	Descriptive quantification of indicators Coding, and thematic analysis of qualitative data	Direct observation of a large quantity of latrines may be beyond the constraints of the evaluations human resource capacity and budget
EQ7. Which factors influenced sustainability of handwashing behaviors?	QUANTITATIVE % of survey respondents selecting each potential factor as having influenced sustainability QUALITATIVE Perceived facilitators and barriers to HHs maintaining handwashing stations	HH mini-survey Group interviews with community members; Interviews with community leaders, NLs, HEWs and commune offices and health post staff.	Qualitative semi-structured group interview guide; qualitative semi-structured KII guide		

EVALUATION DESIGN LIMITATIONS AND RISKS

As with any evaluation design, there are limitations and risks to consider. The ET notes potential limitations as well as risks to the evaluation and provides mitigation strategies. The ET has carefully considered the limitations and risks, and believes this proposal includes the best possible evaluation approach for this context, given time and resource constraints.

Contamination. Given the GoS' strong commitment to national improvements in WASH,[21] the breadth of communities impacted by PEPAM/USAID activities and the scale of need in the region, there is an increased likelihood that other donors or local governments have completed WASH interventions in proposed sampled locations. Indeed, the Water CKM team's desk research on potential sources of contamination has identified that at least 48 projects carried out 254 WASH activities across the regions of Kolda, Sédhiou, Ziguinchor, and Tambacounda between 2009 and present day (see **Inception Report Annex A: Assessment of** Site Contamination, for further details). These other interventions may contribute to a "multiple treatment interference" effect, which will be mitigated to the extent possible by reaching out to USAID, PEPAM/USAID implementers active in targeted villages, government officials, NGOs, and other local groups to identify WASH activities in those locations since 2009. The ET will continue to seek out information about other donor activities throughout the planning process. Adjustments to sampled locations can be made in cases where another intervention will have affected outcomes of interest. The ET may still discover other activities having taken place when they arrive in the field. To mitigate this, the ET will work to complete its interview with each regional and some local government officials and ASUFOR before data collection at WPs. During these interviews, the team will verify whether any other interventions have occurred in sampled communities. If there are not sufficient villages to have an "uncontaminated" sample, the team will seek to visit villages with minimal contamination, to document the contamination found and include it as part of the analysis.

Biases. Biases such as self-selection, recall and positive response may occur. Because of the purposive nature of respondent recruitment for some aspects of the evaluation and the time allocated to each WP or latrine observation (e.g. we will only be in a village one day with no re-visits) we will not have a random and fully representative sample. Participants may choose to participate or not based on their interests in the topic and feelings about it in their community. Because the PEPAM/USAID activity spanned from 2009-2014, in some villages it may be over nine years since the activity, and respondents may not be familiar or able to recall details to adequately answer questions posed by the ET. Respondents may want to provide a "correct or expected" answer because of social norms in their community. There is the potential that this could provide a skewed picture of WASH in their community. To guard against the biases listed above, we will triangulate findings among several sources and data types.

Consistency and Accuracy of Secondary Data. Components of EQs 1, 2, 3, and 4 rely on official record data as a key data source; however, it is possible that records will not be consistently or accurately maintained and may not be available to the ET in particular villages or *communautés rurales* (Rural Communities, CRs). To mitigate this, the ET will include a request for record data when making appointments with these stakeholders to increase the likelihood they can locate and bring relevant records to the interview. The ET will note irregularities or gaps in record data that may influence their reliability and will triangulate this data to the extent possible with other data sources. If record data are not usable in certain sites, the team will rely on qualitative responses to provide a general impression of these outcomes.

[21] PEPAM. "Vue d'ensemble." http://www.pepam.gouv.sn/ensemble/index.php?rubr=vue.

Unavailability of Respondents. Additionally, the ET will seek to meet with ASUFORs and WUAs to respond to EQs 1 and 2, but it is also possible that some of these groups will no longer be active or accessible. To mitigate this risk, a local member of the ET will reach out to these organizations in September and October, ahead of the full ET's arrival, to ascertain the ongoing nature of these associations to extent possible. The ET will also seek to meet with private sector entrepreneurs to answer EQ 2, but it is possible that their contact information will not be up-to-date or readily available. In such cases where associations are no longer active, or entrepreneurs are no longer accessible, the ET will note this finding and consult with local government officials and the CR hygiene Offices about alternative groups or records from which to triangulate findings.

Geographic Limitations. The distance between WPs has not yet been determined, and some may be too geographically distant to be reached given limited amount of time in the field. It is possible that, during sampling, some very distant or hard-to-reach sites may be excluded from the sample.

Local Holidays. Finally, one major Islamic holiday, Mawlid an Nabi, or the birthday of the prophet Muhammad, took place during the team's field work from November 20 – November 21, 2018. The ET will plan field work accordingly, as this day will be a public holiday across Senegal, and government agencies and most offices will be closed.

UTILIZATION PLAN

The ET presented emergent themes to USAID/Senegal in Dakar at the conclusion of data collection, which can include relevant implementing partners as deemed appropriate by USAID/Senegal. This will likely only capture qualitative work, as compilation, cleaning, and analysis of quantitative data will require more time to complete after field work has ended. An additional emerging themes presentation will be held with USAID/E3 following field work. These emerging themes presentations will provide the ET early feedback on results as well as help USAID understand the direction in which results seem to be going. The ET will then deliver a draft evaluation report first to USAID/E3 and USAID/Senegal and then to RTI International for comments prior to finalization to ensure it accurately portrays activities and clearly and effectively presents findings and actionable recommendations. To encourage utilization and synergies with other sustainability evaluation "chapters" in the Water CKM series, the report will succinctly highlight actionable recommendations for the evaluation's intended users.

The ET will also give a presentation of the final report findings in DC to USAID/E3 and via webinar connection to the USAID/Senegal mission, RTI International and other WASH sector stakeholders. The Water CKM team will post the final report to USAID's Development Experience Clearinghouse and collaborate with RTI International to facilitate dissemination to key stakeholders, including USAID missions, USAID/Washington staff, and implementing partners. A short evaluation brief will be written following approval of the final report, as well as a blog post on Water CKM's Globalwaters.org website to share findings more broadly. Findings from this evaluation, and future sustainability evaluation chapters, will be of interest to the wider WASH community and will be distributed broadly to inform sectoral discussions on sustainability. The Water CKM team will work with the USAID/E3 team to identify additional channels and timing for dissemination of findings. Potential channels may include conferences, brown bags, and webinars in the water sector, or alternative formats such as videos, podcasts, or social media. Finally, the clean quantitative datasets will be posted to the Development Data Library, per USAID policy.

TEAM COMPOSITION AND MANAGEMENT PLAN

The ET was comprised of several individuals who possess the expertise in the technical areas necessary to conduct the evaluation. Specifically, this included expertise in evaluation methodology,

rural WASH, water engineering, and local languages and context. Though the team composition and individual roles may shift among members, the following is an illustrative listing of a team for this evaluation:

TEAM COMPOSITION

- **Dr. Kari Nelson, Senior Technical Specialist (SI),** designed the sampling strategy, reviewed the evaluation design and contributed to data analysis and report writing.
- **Holly Dentz, Team Leader (SI),** led background research and planning; coordinated data collection planning, training, and piloting; led data analysis; and co-authored the evaluation report and dissemination materials. She has an MPH and over 10 years' experience in the WASH sector.
- **Alioune Watt, Senior Evaluation Specialist,** contributed technical and local knowledge to design and implementation of evaluation activities. He contributed to logistical planning, carried out qualitative interviews, and conducted preliminary qualitative data coding and analysis. The ET received USAID's approval on Aug. 23.
- **Data collection firm (Atraxis),** conducted quantitative and qualitative data collection in the field and provide technical guidance and field coordination support to the local team.
- **Interpreters** supported the evaluation and team with French, Wolof, Pulaar, and Diola interpretation as needed during fieldwork data collection.

EVALUATION TIMELINE & DELIVERABLES

DATA COLLECTION TIMELINE

The list below provides a preliminary timeline for conducting data collection for the evaluation. This is illustrative and will be finalized prior to data collection. All days noted are working days (Monday–Saturday). In-country fieldwork will likely follow this approximate schedule, but the exact duration and route will be determined after final sample locations are known and in consultation with the fully staffed evaluation team.

- Day 1: Evaluation team planning meeting
- Day 2: In-briefing with USAID mission; interviews with USAID, IPs: additional internal evaluation team planning
- Day 3-4: Data collection training quantitative and qualitative instruments; translator training for KIIs/GIs
- Day 5-6: Pilot and refinement of quantitative and qualitative instruments
- Days 7 – 26: Data collection across regions
- Day 27: Evaluation team preliminary data analysis workshop
- Day 28 Mission out-briefing and preliminary results presentation

EVALUATION DELIVERABLES

DELIVERABLE	DUE DATE
Evaluation Report	
Draft Evaluation Report due to USAID	Thu 07/Mar/19
USAID's comments due	Thu 21/Mar/19
Second Draft Evaluation Report due to USAID	Mon 15/Apr/19
USAID's comments due	Mon 29/Apr/19
Final Evaluation Report due to USAID	Fri 17/May/19
USAID approves Evaluation Report	Mon 03/Jun/19
Blog and Four-Pager	

DELIVERABLE	DUE DATE
Webinar	
Draft webinar due to USAID	Thu 27/Jun/19
USAID's comments due	Fri 05/Jul/19
Final webinar due to USAID	Fri 12/Jul/19
USAID approves webinar	Fri 19/Jul/19
Holly conducts webinar	Mon 29/Jul/19

Draft blog and four-pager due to USAID	Fri 14/Jun/19
USAID's comments due	Fri 21/Jun/19
Final blog and four-pager due to USAID	Fri 28/Jun/19
USAID approves blog and four-pager	Mon 08/Jul/19

The ET expects to produce the following deliverables. Dates are estimates and subject to change as the evaluation context changes.

INCEPTION REPORT (IR) ANNEXES

INCEPTION REPORT ANNEX A: ASSESSMENT OF SITE CONTAMINATION

The Water CKM team conducted a detailed desk review of different sources of potential contamination and has flagged a number of implementer's interventions for follow-up research by a local consultant on-the-ground. This research will ensure the ET identifies other interventions located in the same areas of PEPAM/USAID activities that may "contaminate" the evaluation sampling frame. The aim of this research is to understand other interventions activity at the village level to aid in selecting an "uncontaminated" sample or if that is not possible, a less contaminated sample.

Through desk research, Water CKM identified other interventions in Senegal carried out from 2009 to present day focusing on access to water and sanitation, specifically those that related to: promoting participatory governance and associations, WASH behavior change, CLTS approaches to sanitation, expanded access to sanitation at the HH and community level, training of entrepreneurs and artisans, expanded access to water, improved drinking water quality, or WASH governance and policy. The ET searched online for activities funded by USAID, DFID, JICA, UNICEF, and the World Bank, as well as for other WASH activities in the regions shared on Akvorsr.org, NGOAidMap.org, and WASHFunders.org. Water CKM also searched for follow-on activities conducted by PEPAM/USAID's ~ 21 implementing partners and local partners in the evaluations regions.

These searches found that 48 organizations coordinated at least 254 WASH interventions across the regions of Kolda, Sédhiou, Ziguinchor, and Tambacounda between 2009 and present day. An additional ten WASH interventions *may* have been conducted in the evaluation regions but did not include sufficient information online for the Water CKM team to make this determination. While not all implementers reported their projects at the village level, of the four PEPAM/USAID regions, the most regional/high level contamination was found in Kolda (103 activities); followed by Tambacounda (67 activities); Sédhiou (43 activities), and Ziguinchor (41 activities).

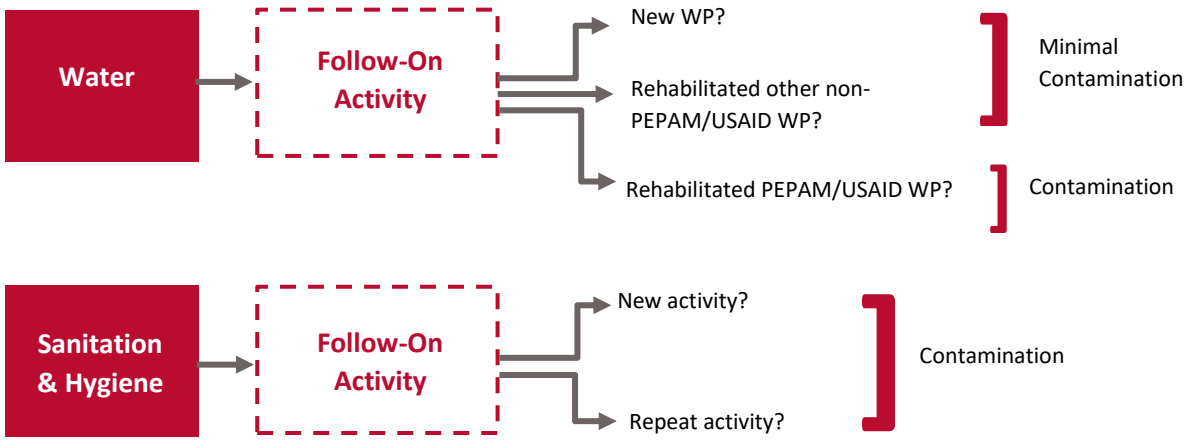
In cases where locations of other WASH interventions were not specified in documents obtained by the Water CKM team, Water CKM will reach out to implementers to request location information. The evaluation team will use this information to inform the sampling frame. To the extent possible, villages with known contamination will be excluded from the sampling frame. However, given the large number of projects in the regions, it is likely many of the villages have received additional interventions. Thus, there may not be 200+ villages meeting the sampling criteria that are completely free of contamination. Thus, it may be necessary to assess the extent of contamination, with the aim of including villages with either no contamination or the least amount of contamination possible.

The concept of contamination within PEPAM/USAID activity villages differs between water and sanitation interventions. It is important to differentiate WASH follow-on interventions that may indicate sustainability issues versus those that may indicate a challenge with sufficiency. A process diagram for how this contamination will be assessed is outlined in **Figure 4.** Process for Assessing Contamination below. For water activities specifically, the PEPAM/USAID activity provided a WP and occasionally multiple WPs in each village. The WP intervention was not necessarily designed to meet the water needs of an entire village (sufficiency). Considering that a village's water needs may increase as their population grows and additional water infrastructure may be needed, a follow-on water activity in a PEPAM/USAID village would not necessarily be a proxy for lack of sustainability.

Because PEPAM/USAID sanitation activities targeted an entire village and aimed to change their behavior and construction/use of latrines and handwashing stations in a holistic manner, any subsequent (follow-on or new) sanitation activities in those villages is considered contamination.

To the extent that the ET is able to obtain village-level details about follow-on WASH interventions in evaluation villages we will do so. However, there may be cases where we arrive in a village for data collection and learn of an additional WASH intervention. In those cases, we will obtain details about the follow-on intervention and include it in the analysis. The ET will keep USAID apprised of the contamination assessment throughout the evaluation process.

Figure 4. Process for Assessing Contamination



The above process will be followed based on activity type. In WatSan villages, both the water and sanitation & hygiene processes will be followed to assess contamination.

INCEPTION REPORT ANNEX B: DRAFT DATA COLLECTION INSTRUMENTS

Please find the updated Data Collection Tools in Annex B of the Final Report.

INCEPTION REPORT ANNEX C: DOCUMENTS REVIEWED

Global Environment & Technology Foundation. February 2012. *Water & Development Alliance (WADA) 2011 Annual Report.*

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RTI International. "Water SupplyTechnology Selection in Senegal: Experiences and Analysis from the USAID / PEPAM Project." PowerPoint Presentation. December 31, 2014. USAID.

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RTI International. August 2013. *Senegal - WADA 1 WADA 2 Monitoring Data for the Final Close Out Report*. USAID.

RTI International. December 2014. *USAID/PEPAM Millennium Water and Sanitation Program – Senegal Final Project Report*. USAID.

RTI International. January 2014. *Guide d'utilisation et de fonctionnement des édicules scolaires*. USAID.

RTI International. March 2012. *DLV Manuel pour les Techniciens d'Assainissement*. USAID.

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RTI International. March 2012. *VIP Manuel pour les Techniciens d'Assainissement*. USAID.

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RTI International. October 2012. *USAID/Millennium Water and Sanitation Program (USAID/PEPAM) Annual Report No 3 - FY 2012 (October 2011 - September 2012)*. USAID.

RTI International. October 2013. *USAID/Millennium Water and Sanitation Program (USAID/PEPAM) Annual Report No 4 - FY 2013 (October 2012 - September 2013)*. USAID.

RTI International. *USAID Programme d'Eau Potable et d'Assainissement du Millénaire (USAID/PEPAM). Fact Sheet*. USAID.

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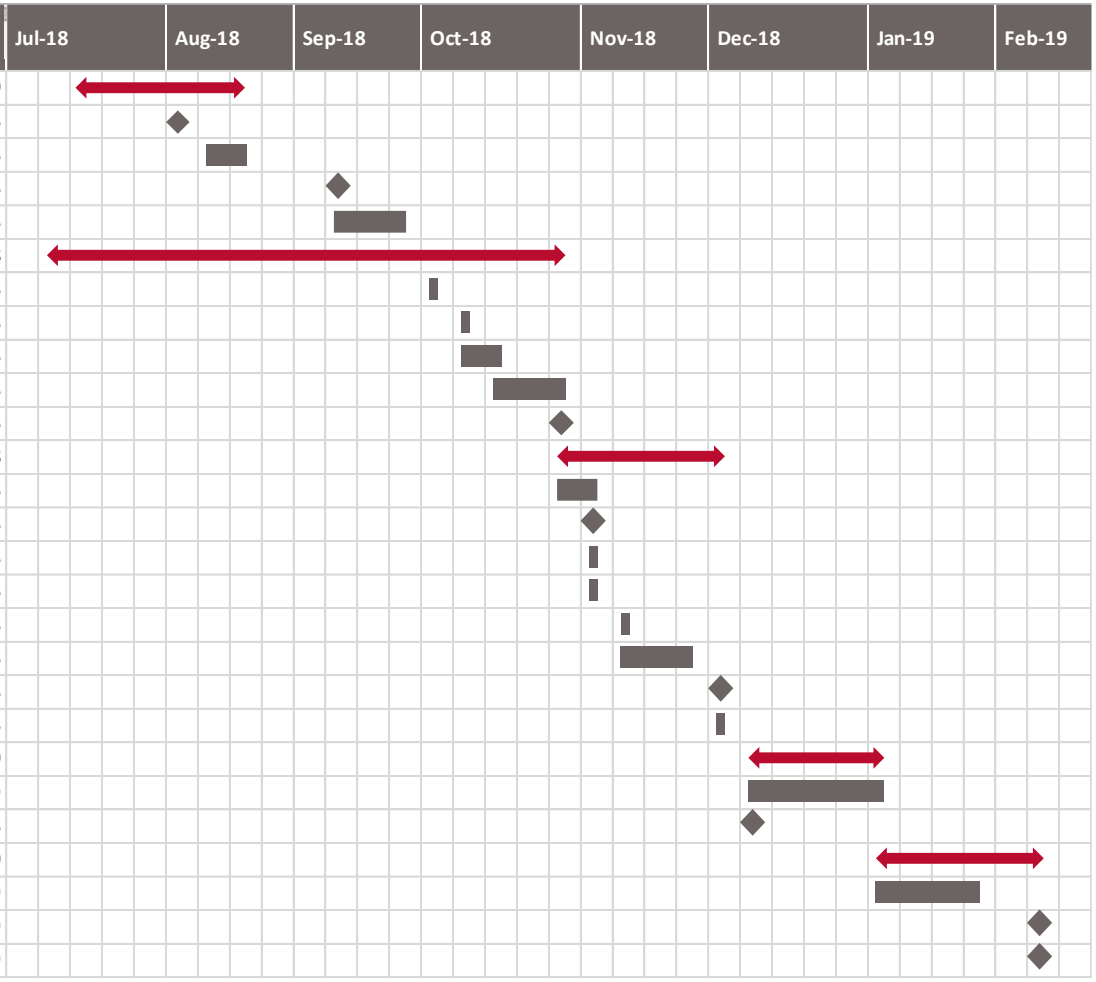
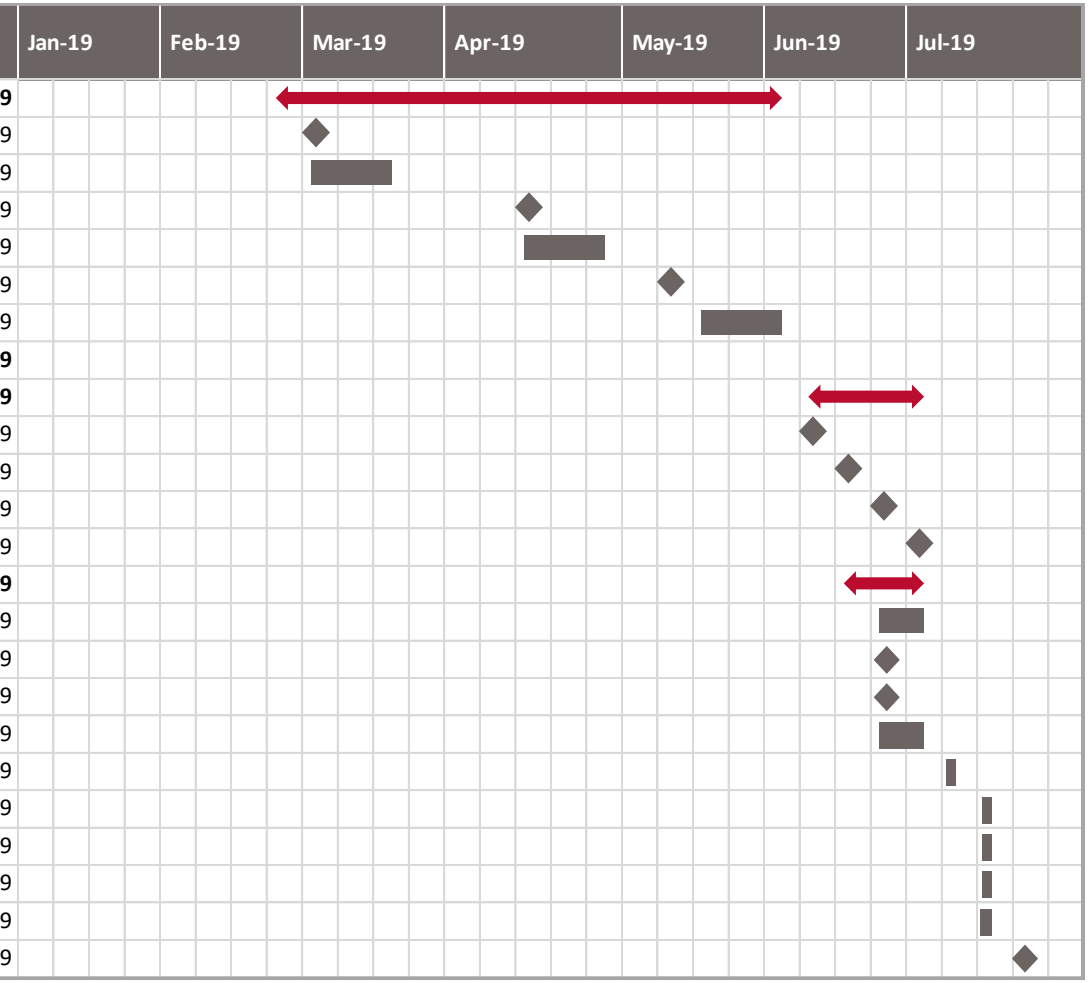
INCEPTION REPORT ANNEX D: WORK PLAN

Task Name	Start	Finish
Senegal Planning	**Wed 29/Nov/17**	**Mon 29/Jul/19**
Inception Report due to USAID	Fri 10/Aug/18	Fri 10/Aug/18
USAID's comments due	Mon 13/Aug/18	Fri 24/Aug/18
Final Inception Report due to USAID	Mon 10/Sep/18	Mon 10/Sep/18
USAID approves inception report	Tue 11/Sep/18	Mon 24/Sep/18
Travel Mobilization	**Mon 09/Jul/18**	**Fri 02/Nov/18**
Hold initial Team Planning Meeting (TPM)	Fri 05/Oct/18	Fri 05/Oct/18
Submit travel approvals to USAID	Tue 09/Oct/18	Tue 09/Oct/18
ET refines data collection instruments	Tue 09/Oct/18	Mon 15/Oct/18
Submit data collation instruments for translation	Tue 16/Oct/18	Mon 29/Oct/18
All trip logistics & subcontracting finalized	Fri 02/Nov/18	Fri 02/Nov/18
Senegal Fieldwork	**Thu 01/Nov/18**	**Wed 05/Dec/18**
Team travels to Senegal	Thu 01/Nov/18	Mon 05/Nov/18
In-brief presentation	Tue 06/Nov/18	Tue 06/Nov/18
Enumerator training	Tue 06/Nov/18	Wed 07/Nov/18
Pilot test instruments	Thu 08/Nov/18	Fri 09/Nov/18
Finalize instruments	Mon 12/Nov/18	Mon 12/Nov/18
Field data collection	Tue 13/Nov/18	Tue 27/Nov/18
Out-brief presentation	Tue 04/Dec/18	Tue 04/Dec/18
Travel to home country	Wed 05/Dec/18	Wed 05/Dec/18
Senegal Data Cleaning and Coding	**Tue 11/Dec/18**	**Wed 09/Jan/19**
Data cleaning and coding	Tue 11/Dec/18	Wed 09/Jan/19
Emerging themes presentation	Fri 14/Dec/18	Fri 14/Dec/18
Senegal Data Analysis	**Thu 10/Jan/19**	**Fri 15/Feb/19**
Data Analysis	Thu 10/Jan/19	Thu 31/Jan/19
Findings presentation	Tue 12/Feb/19	Tue 12/Feb/19
USAID provides feedback on presentation	Fri 15/Feb/19	Fri 15/Feb/19



Task Name	Start	Finish
Senegal Reporting	**Mon 25/Feb/19**	**Mon 03/Jun/19**
Draft Report due to USAID	Thu 07/Mar/19	Thu 07/Mar/19
USAID's comments due	Fri 08/Mar/19	Thu 21/Mar/19
Second Draft due to USAID	Mon 15/Apr/19	Mon 15/Apr/19
USAID's comments due	Tue 16/Apr/19	Mon 29/Apr/19
Final Report due to USAID	Fri 17/May/19	Fri 17/May/19
USAID approves final report	Mon 20/May/19	Mon 03/Jun/19
Senegal Dissemination Materials	**Mon 10/Jun/19**	**Mon 29/Jul/19**
Blog & Four Pager	**Mon 10/Jun/19**	**Mon 08/Jul/19**
Blog and Four Pager due to USAID	Fri 14/Jun/19	Fri 14/Jun/19
USAID's comments due	Mon 17/Jun/19	Fri 21/Jun/19
Final blog and four pager due to USAID	Fri 28/Jun/19	Fri 28/Jun/19
USAID approves blog and four pager	Mon 01/Jul/19	Mon 08/Jul/19
Webinar	**Mon 17/Jun/19**	**Mon 29/Jul/19**
Water CKM advertises Webinar	Thu 27/Jun/19	Thu 25/Jul/19
Draft Webinar due to USAID	Thu 27/Jun/19	Thu 27/Jun/19
Send webinar details, presenter bio, photos and gues	Fri 28/Jun/19	Fri 28/Jun/19
USAID's comments due	Fri 28/Jun/19	Fri 05/Jul/19
Final Webinar due to USAID	Fri 12/Jul/19	Fri 12/Jul/19
Holly does 1t dry run	Mon 15/Jul/19	Mon 15/Jul/19
USAID approves Webinar	Mon 15/Jul/19	Fri 19/Jul/19
Submit slides, handouts, and poll questions for CKM	Mon 22/Jul/19	Mon 22/Jul/19
Holly does 2nd dry run	Wed 24/Jul/19	Wed 24/Jul/19
Holly and Leslie conduct Webinar	Mon 29/Jul/19	Mon 29/Jul/19



ANNEX B: DATA COLLECTION TOOLS

DATA COLLECTION INSTRUMENTS

MILLENNIUM WATER AND SANITATION PROGAM (PEPAM/USAID) EX-POST EVALUATION

WASH Ex-Post Evaluation Series—Water Communications and Knowledge Management (CKM) Project

September 19, 2018

DATA COLLECTION INSTRUMENTS

1. INFORMED CONSENT STATEMENT TO BE USED FOR ALL DATA COLLECTION EFFORTS (INTERVIEWS, GROUP DISCUSSIONS)

Hello, my name is _____ and I am here on behalf of Social Impact, an evaluation company based in the United States. We are independent evaluators working on behalf of the USAID Water Communications and Knowledge Management Project, evaluating the long-term sustainability of a USAID project called Millennium Water & Sanitation Program, known as PEPAM/USAID. It was implemented by RTI International in Kolda, Sédhiou, Ziguinchor, and Tambacounda from 2009-2014. Specifically, we are conducting research on how rural access to water and sanitation has evolved since the time PEPAM/USAID ended, as well as current challenges and successes in sustaining community access to water and sanitation. This evaluation will help USAID understand how to improve its activity design in the future.

We are asking you to participate because your position would make you knowledgeable about this topic in [location]. We kindly request approximately 1 hour of your time so we can hear about your experiences and opinions. We'll ask for details you're able to share about recent planning initiatives and projects as well as changes in access to water and sanitation. We'll also ask for your thoughts about some issues related to your work. There are no risks to participating in this interview, and there are no direct benefits, though your participation may broadly inform improvements in future water and sanitation programs. We will not ask anything sensitive, but you are free to say you do not want to answer particular questions. Your participation in this study is completely voluntary and you are under no obligation to participate. If you start the interview and wish to stop at any time for any reason, simply let us know.

We plan to conduct up to ## interviews across the Casamance and Tambacounda regions with other individuals like yourself who are knowledgeable about water and sanitation access in this region. We will summarize what we learn from you and other interviewees according to the location and sometimes the type of organization you represent. This means information you share would not be anonymous. Our final report will be shared with USAID and eventually posted online.

I want to assure you that all the responses you provide during this interview will be kept confidential to the furthest extent possible under local and U.S. Government policy. Only a handful of researchers directly involved in this study will have access to your personal information. Your name, address, contact information, and other identifiers will not be shared with anyone outside of the research team. Your personal information will be recorded on a separate sheet of paper from the rest of the survey and will be kept separately, so that none of your responses can be traced back to you personally. While all identifying information will be kept strictly confidential, de-identified data may be combined with other study participants' data and shared publicly for future research purposes.

Do you have any questions about this interview? If you are willing to be interviewed, please indicate this by verbally agreeing. If you have any concerns, you may contact [EDIT: INCLUDE DATA COLLECTION FIRM CONTACT INFO ONCE ITS HIRED] or the Social Impact Institutional Review Board at irb@socialimpact.com or +1 703 465 1884 with questions about the study or results. I will leave a copy of this form with you.

Do you agree to participate? Yes / No

In order to ensure we capture everything correctly in our notes, is it OK if we record this conversation? We will not share the recordings or transcripts with anyone outside of the evaluation team. Yes / No

2. KEY INFORMANT/GROUP INTERVIEW – USAID EMPLOYEE

Location of Interview: _____
Date of Interview [DD/MM/YY]: |__|__|/|__|__|/|__|__|
Name of Interviewer: _____
Name of Note-taker: _____
Name of Anyone Else Present: _____
Recorder Number & Folder Location: _____
Time Interview Began [HH:MM]: |__|__|:|__|__|
Time Interview Ended [HH:MM]: |__|__|:|__|__|

INTERVIEWEES **Gender**

Name(s): _____ **Position(s):** _____ **M / F**
Name(s): _____ **Position(s):** _____ **M / F**
Name(s): _____ **Position(s):** _____ **M / F**
Name(s): _____ **Position(s):** _____ **M / F**

MUST READ THE CONSENT STATEMENT AND GAIN CONSENT FROM ALL RESPONDENTS BEFORE PROCEEDING

Questions (10)

1. What was the nature of your involvement with the PEPAM/USAID activity (2009- 2014)?
    a. PROBE: If not familiar with PEPAM/USAID, when did you begin your current role with USAID?

2. What can you tell me about the activities and achievements of PEPAM/USAID?
    a. PROBE: What were the most successful aspects?
    b. PROBE: The least successful aspects?

3. In what ways, if any, did the PEPAM/USAID approach differ from other WASH projects before it?
    a. PROBE: What do you think of that approach?
    b. PROBE: What can you tell us about the CLTS subsidy, and hybrid (ACIEHA) and approaches. [REFER TO DEFINITIONS ON YOUR FILED REFERENCE DOCUMENT FOR EACH AND EXPLAIN IF THE RESPONDENT IS NOT FAMILIAR]

I would like to share with you a reminder of the PEPAM USAID' activities primary components which aimed to improve sustainable access to water supply and sanitation and promote hygiene in rural, small towns and peri-urban areas of Senegal. The first component aimed to

1. **Improve Local Management of Water & Sanitation Supply via** strengthen governance at village-level
2. **Increase Local Demand for Improved WSS and Hygiene** through a communications and social marketing program
3. **Strengthen Local Private Sector Enterprise Capacity to Provide WSS Services** to meet demand for WSS infrastructure and operations and maintenance
4. **Increase Local Construction & Rehabilitation of WSS Infrastructure** using a service delivery framework, e.g. community water supply
5. **Community-led Total Sanitation (CLTS) & WASH-in-Schools Improve Local WSS Management:** Use and promote CLTS as a strategy

NOTE – this evaluation will not include the WASH in schools or clinics components

4. Are you aware of the degree to which PEPAM/USAID WASH outcomes in particular were sustained since it closed 4 years ago? If so, to what extent?
    a. PROBE: READ TEXT BOX TO EXPLAIN PEPAM/USAID RESULTS AND THEN PROBE ON: Any guesses? Why?

5. What factors influenced the ability of PEPAM/USAID project interventions to sustain WASH infrastructure and behaviors? Why?
    a. PROBE: What does it take to reach sustained use of Water Sources, latrines, handwashing with soap in rural Senegal and in particular in Kolda, Sédhiou, Tambacounda, and Ziguinchor?

6. What is particular to Senegal that we should be aware of that may have impacted (positively or negatively) the sustainability of PEPAM/USAID?
    a. PROBE: How has USAID taken this into account in WASH programming since 2014?
    b. PROBE: Governance, policy environment?

7. Are there any particular aspects of the PEPAM/USAID activity that you think we should look at closely in our study?
    a. PROBE: Why?

8. Based on your experience with WASH in Senegal, what are the biggest threats to sustainability for access to water, sanitation and hygiene projects?
    a. PROBE: Where have you seen evidence of that? Anything in the context of PEPAM/USAID?

9. Have you seen any promising programmatic strategies to improving sustainability of WASH outcomes in Senegal? Describe.
    a. PROBE: Were any of those traceable to PEPAM/USAID? E.g. Influence on the GOS, sector, policy

10. What are your thoughts on the government's role in the WASH sector since 2009? For example, what is working well, what could be improved, what are the challenges?
    a. PROBE: Difference between national and evaluation regions impacts.

11. Is there anything else you would like to share with us today?

Do not forget to record interview end time!

3. KEY INFORMANT INTERVIEW – PEPAM/USAID IMPLEMENTER

Region: 1) Kolda 2) Sédhiou 3) Tambacounda 4) Ziguinchor 5) National
Type of Implementing Organizations: _____
Location of Interview: _____
Date of Interview [DD/MM/YY]: |__|__|/|__|__|/|__|__|
Name of Interviewer: _____
Name of Note-taker:
_____
Name of Anyone Else Present: _____
Recorder Number & Folder Location: _____
Time Interview Began [HH:MM]: |__|__|:|__|__|
Time Interview Ended [HH:MM]: |__|__|:|__|__|

INTERVIEWEES **Gender**

Name(s): _____ **Position(s):** _____ **M / F**
Name(s): _____ **Position(s):** _____ **M / F**
Name(s): _____ **Position(s):** _____ **M / F**
Name(s): _____ **Position(s):** _____ **M / F**

MUST READ THE CONSENT STATEMENT AND GAIN CONSENT FROM ALL RESPONDENTS BEFORE PROCEEDING

Please note that we are focusing our evaluation on PEPAM/USAID activities in villages and NOT those in clinics or schools. Please keep that in mind when sharing your thoughts with us.

1. What was the nature of your involvement with PEPAM/USAID (2009-2014)?
    a. PROBE: Where applicable, what is your relationship to PEPAM now?

2. What types of WASH activities did your organization complete for PEPAM/USAID?

3. How did your organization manage the implementation approach(es)?
    a. PROBE:
        i. Kolda, Sedhiou, Ziguinchor: Water and Development Alliance (WADA) PURE CLTS,
        ii. All four regions: Subsidized water and sanitation, no CLTS,
        iii. Tambacounda implementers only: CLTS/Subsidy hybrid (ACIEHA)
    b. PROBE: Behavior change approaches (e.g. PHAST, SARAR)?

4. Was your organization involved in the private enterprise component of the project (e.g. drilling enterprises, metal workshops, repair people, replacement part enterprise, etc.)? Or was this component implemented in the communities where your organization worked?

a. PROBE: If yes, what are your thoughts or experiences with the private enterprise components after the PEPAM/USAID activity closed?
b. PROBE: If yes, what are your thoughts on the sustainability of the private enterprise components?

5. What are your thoughts and/or experiences with governance and management of water and sanitation infrastructure in the PEPAM/USAID communities that you worked in?
    a. PROBE: Mechanisms e.g. ASUFORS, WUAs, CG influence, and sustainability?
    b. PROBE: Larger governance systems e.g. community or regional systems
    c. PROBE: extent and role of women's continuing participation in governance and management structures in place

6. From your perspective, which PEPAM/USAID activities were the most successful in terms of achieving adoption of WASH outcomes at the time of project completion? Why?
    a. PROBE: pure CLTS, subsidy water and sanitation, hybrid (ACIEHA) CLTS then delayed triggering
    b. PROBE: What do you think made those activities successful?
    c. PROBE: Are there any examples of very successful communities you can highlight? Please describe.

7. What were the least effective activities under PEPAM/USAID?
    a. PROBE: What were the barriers/hindrances to achieving outcomes?

8. How, if at all, did the project plan for or anticipate long-term sustainability of WASH benefits? Please describe.
    a. PROBE: What worked well for enabling sustainability of outcomes?
    b. PROBE: What were some of the major challenges?

9. In your experience in Senegal and in particular in these four regions, what are some of the challenges to achieving long-term sustained water, sanitation and hygiene infrastructure?
    a. PROBE: Ensure they address both water, sanitation and hygiene infrastructure sustainability

10. What about sustaining good water, sanitation and hygiene behavior? What are the challenges to achieving targeted behaviors for the long term?
    a. PROBE: Ensure they address both water, sanitation and hygiene behavior change sustainability
        i. Governance and management
        ii. Private sector

11. Do you or your organization still have any contact with the villages your organization targeted for PEPAM/USAID, either formal or informal? If so, what types of contact or project monitoring are occurring?
    a. PROBE: What, if anything, do you know about what happened in those villages since the project ended 8 years ago, related to WASH and any other changes?

12. Are you aware of any new WASH-related programs from other donors that occurred in the same communes within the past four years?

13. Is there anything your organization does differently today to improve long-term sustainability, based on lessons you've learned from PEPAM/USAID? If so, please describe the changes made and why.

14. What are your thoughts on the government's role in the WASH sector since 2009? For example, what is working well, what could be improved, what are the challenges?
    a. PROBE: Difference between national and evaluation regions impacts.

15. Do you have any other thoughts to share about PEPAM/USAID or these general issues?

Do not forget to record interview end time!

4. KEY INFORMANT/GROUP INTERVIEW – REGIONAL WASH OFFICE STAFF

Location of Interview: _____
Date of Interview [DD/MM/YY]: |__|__|/|__|__|/|__|__|
Name of Interviewer: _____
Name of Note-taker: _____
Name of Anyone Else Present: _____
Recorder Number & Folder Location _____
Time Interview Began [HH:MM]: |__|__|:|__|__|
Time Interview Ended [HH:MM]: |__|__|:|__|__|

INTERVIEWEES		**Gender**
Name(s): _____	**Position(s):** _____	**M / F**
Name(s): _____	**Position(s):** _____	**M / F**
Name(s): _____	**Position(s):** _____	**M / F**
Name(s): _____	**Position(s):** _____	**M / F**

MUST READ THE CONSENT STATEMENT AND GAIN CONSENT FROM ALL RESPONDENTS BEFORE PROCEEDING

General

1. What is your role in the Ministry?

2. What roles does your office play in supporting water, sanitation and hygiene in this department?

3. How do you encourage good governance related to water, sanitation and hygiene at the household, community, and local government levels?
    a. PROBE: policies and bylaws, planning, finance,
    b. PROBE: infrastructure development, institutional arrangements for service provision, and regulation
    c. PROBE: Please discuss the role that women play or are intended to play in water and sanitation governance and management structures at the village level and more generally. What are some examples of women participating in governance activities?

4. Are you familiar with the PEPAM/USAID activities that were carried out from 2009-2014?
    a. PROBE: If Yes, What are your thoughts on the activities implementation and sustainability of the output/results?
    b. PROBE: Cost share from government/ co-financing, thoughts on that process smaller vs larger water infrastructure
    c. PROBE: Training manuals utility, use of the private sector for the construction and maintenance, relationship with these providers, constraints and difficulty identified?

Water

5. What if any steps are taken to ensure that water is safe to drink by your office and/or local government?
    a. PROBE: How is water quality tested or confirmed?
        i. Frequency, challenges?
    b. PROBE: Where is this recorded/saved? Can we see this data at the end of the meeting? If possible, can we have a electronic file with the data.

6. Can you discuss the role the private sector enterprises play in construction and maintenance of water sources?
    a. PROBE: What is their role, if any, and how have private enterprises improved the sustainability of the WASH sector?

7. In what ways do you interact with Associations d'Usagers de Forages (ASUFORs)/Water User Associations (WUA)/Comités de Gestion (CG) that manage water schemes?
    a. PROBE: On frequency of interaction? Who interacts?
    b. PROBE: Do you provide any support to the ASUFORs/WUAs/CGs? If so, what kind?
    c. PROBE: What, if any, sort of training do you provide to ASUFORs/WUAs/CGs?

8. In your opinion, how effective have the ASUFORS/WUA/CGs at managing water (especially drinking water) needs in their communities/catchment areas?
    a. PROBE: Why have or haven't they been effective?
    b. PROBE: Infrastructure functionality, operations and maintenance, sufficient fee collections.
    c. PROBE: Please discuss the role of women in ASUFORS/WUA/CG structures.

9. How are water user fees set in this area?

10. What are the primary challenges to ensuring that the population has adequate access to clean drinking water in your area?
    a. PROBE: What is being done to address them?

Sanitation

11. In what ways, if at all, does your office support sanitation infrastructure and/or sanitation behavior change to impact household sanitation?
    a. PROBE: What types of activities does your ministry undertake to support this?

12. From your perspective, what are the primary challenges to getting people to build, use, replace and maintain household-level latrines?
    a. PROBE: how are the challenges addressed?

13. Are you familiar with various financing approaches, e.g. pure CLTS, subsidy and hybrid approach (ACHIEA) CLTS followed by subsidy approach?
    a. PROBE: Which approaches are in your department? Which approach is most sustainable in your opinion?
14. Does your ministry track latrine coverage rates in your area?
    a. PROBE: Do you have the figures disaggregated by commune?
        ii. If so, what is the current coverage rate(s)?

iii. If so, would you be able to share that data with us? (IDEALLY COLLECT DATA FROM BEFORE 2009 UP UNTIL TODAY)_

Hygiene

15. In what ways does your office support handwashing (with soap) behavior change and infrastructure in your area?
    a. PROBE: What types of activities does your ministry undertake to support this?

16. From your perspective, what factors influence sustained handwashing behaviors?
    a. PROBE: Challenges
17. Do you track or perform studies of hygiene behaviors in your area?
    a. If so, would you be able to share that data with us?

WASH Overall

18. What changes have there been to the government standards and roles in general across agencies for WASH since 2014?

19. Is there anything else you'd like to discuss with me?

Do not forget to record interview end time!

5. KEY INFORMANT INTERVIEW WITH NATURAL LEADERS AND/OR HEALTH EXTENSION WORKERS

Region: 1) Kolda 2) Sédhiou 3) Tambacounda 4) Ziguinchor 5) National

Commune: _____

Village: _____

Village ID: |__|__|__|

Location of Interview: _____

Date of Interview [DD/MM/YY]: |__|__|/|__|__|/|__|__|
Name of Interviewer: _____
Name of Note-taker: _____
Name of Anyone Else Present: _____
Recorder Number & Folder Location: _____
Time Interview Began [HH:MM]: |__|__|:|__|__|
Time Interview Ended [HH:MM]: |__|__|:|__|__|

INTERVIEWEES		**Gender**	**Age**
1 Name(s): _____	**Member Role(s):** _____	**M / F**	|__|__|
2 Name(s): _____	**Member Role(s):** _____	**M / F**	|__|__|
3 Name(s): _____	**Member Role(s):** _____	**M / F**	|__|__|
4 Name(s): _____	**Member Role(s):** _____	**M / F**	|__|__|

RECRUITMENT NOTE: Please convene 1-4 community members who hold or have held the role of natural leader, health extension workers. Where possible, please ensure female member participation.

MUST READ THE CONSENT STATEMENT AND GAIN CONSENT FROM ALL RESPONDENTS BEFORE PROCEEDING

Project-Specific

1. What, if any, role did you play during the PEPAM/USAID project that was implemented from 2009-2014?
    a. PROBE: What were your responsibilities?

2. Please think about the activities in your village and share what worked well and what could have been improved about the project?
    a. PROBE: how did the project do in trying to create demand for WASH?
    b. PROBE: What could have been done to improve the project?

3. What, if any, support did the project provide people in your community for building latrines and if applicable water sources?
    a. PROBE: Financial support e.g. subsidy for water or sanitation, hybrid (CLTS and then subsidy)
    b. PROBE: Training, CLTS

4. How successful do you think that support was in getting people to build latrines and handwashing stations?
    a. PROBE: IF CLTS community (PURE CLTS and HYBRID) what about achieving and maintaining open defecation free status
    b. PROBE: IF Water how successful was the support

5. What, if any, support or training did the project provide people in your community for improving handwashing?
    a. PROBE: How successful do you think that support was in getting people to wash their hands with soap?
    b. PROBE: Handwashing stations general and fixed handwashing station (tippy tap)
    c. PROBE: behavior change messages e.g. picture cards

6. What, if any, support (either financial or technical/training) did the project provide people in your community for building a water source?
    a. PROBE: How successful do you think that support was in getting people to build a water source?
    b. PROBE: pure CLTS, subsidy and hybrid approach (ACHIEA) CLTS followed by subsidy approach?

Sanitation and Hygiene

7. What roles, if any, do you play now with regard to promoting safe WASH practices in this area?
    a. PROBE: If you have a role for supporting WASH, what activities do you undertake?

8. Do you track the number of latrines in the village/community?
    a. If so, what percentage of households in the communities you cover have a latrine?
    b. If not, about what proportion of households do you think have a latrine:
        i. Most (>50%)
        ii. Half (Approximately 50%)
        iii. Some (<50%, but >10%)
        iv. Few or None (<10%)

9. What are the biggest challenges to convincing people to build, maintain and replace their own latrine?
    a. PROBE: Have any latrines built as part of the PEPAM/USAID activities been sustainable/lasting in your community?
    b. PROBE: What, if anything, can be done to overcome these challenges?

10. To what extent do you think people in this community actually use latrines consistently (e.g. every time)?
    a. All the time

b. Most of the time
c. Sometimes
d. Rarely/Never

11. What are the biggest challenges to getting people to use a latrine every time?
    a. PROBE: What, if anything, can be done to overcome these challenges?
    b. PROBE: What if anything (positive or negative), from the PEPAM/USAID activity impacted these challenges

12. What role did PEPAM/USAID have or not have in eliminating or reducing open defecation in your community?
    a. PROBE: Has it been sustained?

13. Please talk about the handwashing stations that were built because of PEPAM/USAID?
    a. PROBE: How did the community receive them? E.g. did they build?
    b. PROBE: Do community members use the PEPAM model still today? Why?
    c. PROBE: Discuss replacement and other models

14. What PEPAM/USAID activity components do you think did or did not influence the sustainability of the handwashing behaviors?

15. How often do you think people in the community wash their hands at critical/important times (e.g. After going to the bathroom? Before eating?) Why or why not?
    a. After using the bathroom:
        i. Most of the time
        ii. Some of the time
        iii. Rarely/Never
    b. Before eating a meal:
        i. Most of the time
        ii. Some of the time
        iii. Rarely/Never

Water

16. To what extent do you think this community has adequate access to drinking water sources?
    a. PROBE: What water sources do people have available to them?

17. Are you aware of any water sources provided by the PEPAM/USAID activity _____local partner? 1) Yes 2) No
    a. If yes, how does their use by community members compare to other water sources in your community?

18. How common is it for people in your community to use multiple sources to meet all of their water needs?

a. PROBE: If they do or do not use multiple sources, why?
b. PROBE: If they use multiple sources, what do they use the different sources for?
c. PROBE: community members use of PEPAM water sources (if they exist) to other water sources

19. From your perspective, do any of the sources provide clean drinking water?
    a. PROBE: If yes, which ones? Is the PEPAM source included?

20. Do you know, is the quality (is it safe to drink) of any of the water sources in the community tested?
    a. PROBE: If so, how often and what do they test for?
    b. PROBE: What happens if the quality test shows the water is contaminated?

20. In your opinion, how effective have the ASUFORS, /WUA/CGs at managing water (especially drinking water) needs in their communities/catchment areas?
    a. PROBE: Why have or haven't they been effective?
    b. PROBE: infrastructure functionality, operations and maintenance, sufficient fee collections, responsiveness to community

21. To what extent to do women participate in the ASUFORS/WUA, CG?
    a. PROBE: management, governance, leadership roles, responsibilities

22. Have there been any functionality or water availability issues with community water sources
    a. PROBE: IF IN A COMMUNITY THAT HAD WATER INTERVENTIONS specify PEPAM compared to others?
    b. PROBE: If so, what issues have there been and why?
    c. PROBE: If so, what was done to solve the issues (if anything)? Length of time issue lasted?

Closing

23. Since 2009 have there been any big issues/problems in your area (e.g. major drought, violence/insecurity, natural disaster (flooding, earthquake), political instability, etc.) that have impacted your community?
    a. PROBE: Please discuss the event or events and their impact on your community.
24. Do you have any questions for us?

Do not forget to record interview end time!

6. KEY INFORMANT/GROUP INTERVIEW – PRIVATE SECTOR

Region: 1) Kolda 2) Sédhiou 3) Tambacounda 4) Ziguinchor
Commune: _____
Village: _____
Location of Interview: _____
Date of Interview [DD/MM/YY]: |__|__|/|__|__|/|__|__|
Name of Interviewer: _____
Name of Note-taker: _____
Name of Anyone Else Present: _____
Recorder Number & Folder Location: _____
Time Interview Began [HH:MM]: |__|__|:|__|__|
Time Interview Ended [HH:MM]: |__|__|:|__|__|

INTERVIEWEES		**Gender**	**Age**
1 Name(s): _____	**Member Role(s): _____**	**M / F**	**|__|__|**
2 Name(s): _____	**Member Role(s): _____**	**M / F**	**|__|__|**
3 Name(s): _____	**Member Role(s): _____**	**M / F**	**|__|__|**
4 Name(s): _____	**Member Role(s): _____**	**M / F**	**|__|__|**

RECRUITMENT NOTE: Please convene 2-4 members from the private sector that participated in PEPAM from the following (please include at least 1 drilling enterprise, 1 metal working shop, and 1 repairperson):

- **14 local drilling enterprises trained and equipped to install boreholes**
- **5 metal-working shops (owners) trained to manufacture manual pumps**
- **60 local repairman identified, trained and equipped to operate and maintain water supply infrastructure**
- **2 enterprises established in Tambacounda and Ziguinchor to provide equipment and import new replacement borehole parts**
- **Well drilling economic interest groups were transferred ownership of deep drilling rigs for boreholes (Tambacounda and Kolda)**

Where possible, please ensure female member participation

MUST READ THE CONSENT STATEMENT AND GAIN CONSENT FROM ALL RESPONDENTS BEFORE PROCEEDING

1. What was the nature of your involvement with PEPAM/USAID's activities as a private sector entrepreneur or enterprises during 2009-2014?
    a. PROBE: have you worked with other private sector entrepreneurs or enterprises as a result of working with PEPAM/USAID? If so, which ones and in what context?
    b. PROBE: how has this changed or not over time?

2. What kind of training and support did you receive from the PEPAM/USAID activity?

a. PROBE: Improve business knowledge, skills, techniques, or other business practices
b. PROBE: How did/do you utilize that training and support?

3. How, if at all, did the PEPAM/USAID activity influence the products or services that you provide?
    a. PROBE: What products and/or services do you provide to the water sector? Are they different than what you provided before PEPAM/USAID?
    b. PROBE: How often and to whom do you provide these products and/or services?

4. Please discuss the process of securing maintenance contracts with ASUFORS/WUA/CGs initially and the process of servicing and marinating them over time?
    a. PROBE: what challenges did you face in maintaining contracts?
    b. PROBE: Difference from when PEPAMUSAID was ongoing vs when it ended?

5. Over the last 4-5 years, how strong has demand for your products and services been?
    a. PROBE: Is any of that demand a result of relationship or contracts developed during the PEPAM/USAID activity? Please describe how it has worked.
    b. PROBE: Are more of your clients in urban, peri-urban, or rural areas?
    c. PROBE: To what extent are you able to meet demand?
    d. PROBE: have ASUFORs/WUA/CG been a part of that demand and if so how?

6. What are your thoughts on the model PEPAM used to provide a subsidy as an incentive to communities to install or rehabilitate water sources?
    a. PROBE: What worked well about it?
    b. PROBE: What could have been improved?
    c. PROBE: Are there other models they have seen that work or that are more sustainable?

7. From your perspective, to what extent, if at all, did the PEPAM/USAID facilitate linkages between water committees (ASUFORS/WUA/CGs) and you/the private sector?
    a. PROBE: In what ways?
    b. PROBE: What, if anything, is better as a result?
    c. PROBE: What still needs improvement?

8. What do you see as the role of a private sector entrepreneur/enterprises such as yourself play a in providing sustainable drinking water access in communities?
    a. PROBE: What about the sector as a whole?

9. Does your business still exist today?
    a. PROBE: How did you keep your own business sustainable?
    b. PROBE: Is there still demand for their product or services?
    c. PROBE: Have they diversified their products or services ?
    d. PROBE: If no, what happened?

10. What benefits or constraints have you encountered when promoting and implementing your products and/or services? E.g. policy and institutional, financial, commercial, infrastructural, or capacity benefits or constraints

a. PROBE: Did PEPAM/USAID help with any of the challenges or make any issues more challenging?

11. Is there anything else regarding your work and the PEPAM/USAID project that you would like to talk about today?

Do not forget to record interview end time!

7. STRUCTURED OBSERVATIONS AT WATER SOURCES

MODULE A: WATER SOURCE LOCATION		
A1.	DATE OF OBSERVATION (DD/MM/YY)	 |__|__|/|__|__|/|__|__|
A2.	WAS A GPS POINT TAKEN FOR WATER QUALITY DATA COLLECTION?	[1] YES → SKIP to A4. [2] NO
A3.	TAKE A NEW GPS READING BY **MARKING A NEW WAYPOINT**. WAIT UNTIL YOU HAVE LESS THAN 10M ACCURACY IF POSSIBLE.	WAYPOINT ID: |__|__|__| N ° |__|__|. |__|__|__|__|__| E ° |__|__|__| |__|__|__|__|__|
A4.	NAME OF OBSERVER 1: /_____/ /_____/ /_____/ (NAME 1) (NAME 2) (FAMILY NAME)	
A5.	NAME OF OBSERVER 2: /_____/ /_____/ /_____/ (NAME 1) (NAME 2) (FAMILY NAME)	
A6.	**Region:**	[1] Kolda [2] Sédhiou [3] Tambacounda [4] Ziguinchor
A7.	**Commune:**	/_____/
A8.	**Village:**	 /_____/
A9.		

A10.	**Village ID:**	|__|__|__|
A11.	**Water Source ID:**	|__|__|__|__|__|
A12.		

MODULE B: WATER SOURCE PERMISSION & CONTACTS		
B1.	What is your name? LOCAL CONTACT NAME: /_____/ /_____/ /_____/ (NAME 1) (NAME 2) (FAMILY NAME)	
B2.	What is your role in this community?	[1] Chief [2] Representative from the health post or health hut [3] Community health worker (CHW) [4] Water User Association representative [77] Other, specify:_____
B3.	What is your phone number? LOCAL CONTACT NUMBER:	|__|__| |__|__|__| |__|__| |__|__|
B4.	Is this an AEP/AEMV water supply system? NOTE: AEP (SMALL SINGLE VILLAGE PIPED WATER SUPPLY SYSTEM) /AEMV IS A MULTI VILLAGE SUPPLY SYSTEM AND INCLUDES WATER TOWERS AND SPECIFIED BOREHOLES	[1] YES [2] NO → SKIP to B6.
B5.	What are the number of water sources connected to this scheme?	[1] |__|__| WATER SOURCES
B6.	When was this water source built or last rehabilitated? (YYYY)	[1] YEAR: |__|__|__|__| [2] DON'T KNOW
B7.	Was this water source built or reconstructed during the PEPAM/USAID project?	[1] YES [2] NO → END DATA COLLECTION TRY TO FIND THE SOURCE THAT WAS PART OF

	(BETWEEN 2009 -2014)	THE PEPEAM/USAID ACTIVITY AND START THIS FORM OVER AGAIN [99] DON'T KNOW
B8.	Is there a USAID branding plaque present?	[1] YES [2] NO
B9.	Do I have your permission to observer the water source? WAS PERMISSION GAINED FROM THE VILLAGE AUTHORITY OR LOCAL CONTACT TO OBSERVE THIS WATER SOURCE?	[1] YES → PROCEED TO CONDUCT OBSERVATION [2] NO → END DATA COLLECTION, DO NOT CONDUCT OBSERVATION
B10.	Who manages this water source? SELECT ALL THAT APPLY IF WATER SOURCES MANAGED SEPARATELY, LIST MANAGEMENT BODIES FOR EACH POINT.	[1] Water User Associations [2] Comité de gestion (CG) [3] ASUFOR [77] Other, SPECIFY: _____ [99] DON'T KNOW
B11.	Who is the <u>main contact</u> person for the management body? MANAGEMENT BODY CONTACT NAME: /_____/ /_____/ /_____/ (NAME 1) (NAME 2) (FAMILY NAME)	
B12.	What is their phone number?	+221 |__|__|__| |__|__|__|__|

MODULE C: WATER SOURCE OBSERVATION NOTE: USE TALLY PAPER AND PENCIL TO TICK OFF AS UNIQUE PEOPLE VISIT THE WATER SOURCE TO COLLECT WATER THROUGHOUT THE 1 hour OBSERVATION PERIOD. COLLECT THEIR GENDER AND AGE (OLDER THAN ~15 OR YOUNGER THAN ~15). ENTER THE TOTAL NUMBER AT THE END OF THE OBSERVATION PERIOD IN QUESTION, NUMBER C13.		
C1.	START TIME OF OBSERVATION: (24 HOUR TIME, E.G., 13:30)	|__|__|:|__|__|

C2.	IS THE WATER SOURCE CURRENTLY FUNCTIONAL? E.G. DISPENSING WATER	[1] FULLY FUNCTIONING [2] NON-FUNCTIONING → SKIP TO **C4.**
C3.	At the beginning of observation, how many containers are in the queue to be filled? ENTER THE NUMBER IN THE BLANK SPACES IF NONE ARE PRESENT ENTER 00	[1] |__|__| 20 L JERRY CANS [2] |__|__| 10 L JERRY CANS [3] |__|__| SMALL BUCKETS (10 OR LESS LITERS) [4] |__|__| LARGE BUCKETS (20+ LITERS) [77] |__|__| OTHER (SPECIFY): _____
C4.	IS THE WATER SOURCE A HANDPUMP?	[1] YES [2] NO → SKIP TO Error! Reference source not found..
C5.	IF HANDPUMP: NOTE THE NUMBER OF STROKES IT TAKES FOR WATER TO INITIALLY FLOW	[1] |__|__| STROKES
C6.	INDICATE CONTAINER VOLUME YOU WILL FILL. IDEALLY A 20 LITER CONTAINER OR CONTAINERS EQUIVALENT.	[1] |__|__| LITERS
C7.	FILL A CONTAINER AND USE A STOPWATCH TO MEASURE THE TIME IT TAKES TO FILL THE CONTAINER WITH WATER. IF THIS IS A HANDPUMP, ALSO COUNT THE NUMBER OF STROKES IT TAKES TO FILL IT.	[1] |__|__|__| SECONDS [2] |__|__| STROKES
C8.	NOTE THE SEVERITY OF ANY APPARENT WATER LEAKAGE FROM PIPES OR ANY OTHER WATER SOURCE INFRASTRUCTURE: NOTE: MINOR LEAKAGE IS DEFINED AS_____ MODERATE LEAKAGE IS DEFINDED AS SEVERE LEAKAGE IS DEFINED AS _____	[1] NO LEAKAGE [2] MINOR LEAKAGE [3] MODERATE LEAKAGE [4] SEVERE LEAKAGE
C9.	NOTE ANY APPARENT REPAIR OR MAINTENANCE NEED:	[1] HANDLE BROKEN [2] MOTOR NO LONGER WORKING [3] PIPE BROKEN [4] ROPE BROKEN OR MISSING

	CIRCLE ALL THAT APPLY	[5] EVIDENCE OF SUB-STANDARD REPAIRS [6] CEMENT IS CRACKED [77] OTHER STRUCTURAL ISSUE, SPECIFY:_____
C10.	Are any of the following present at the water point? CIRCLE ALL THAT APPLY	[1] Fencing [2] Drainage slab [3] SOAK AWAY PITS [4] SEPARATE WATER TROUGHS FOR ANIMALS [5] SEPARATE TROUGHS FOR GRAY WATER [77] OTHER, _____
C11.	THROUGHOUT THE [1] HOUR OBSERVATION, HOW MANY PEOPLE WAITED AT THE WATER SOURCE?	|__|__| People
C12.	AT THE END OF OBSERVATION, HOW MANY CONTAINERS ARE IN THE QUEUE TO BE FILLED? ENTER THE NUMBER IN THE BLANK SPACES IF NONE ARE PRESENT ENTER 00	[1] |__|__| 20 L JERRY CANS [2] |__|__| 10 L JERRY CANS [3] |__|__| SMALL BUCKETS (10 OR LESS LITERS) [4] |__|__| LARGE BUCKETS (20+ LITERS) [77] |__|__| OTHER (SPECIFY): _____
C13.	THROUGHOUT THE 1 HOUR OBSERVATION, WHAT WERE THE GENDERS AND AGES OF THOSE GATHERED AT THE WATERING POINT SPECIFICALLY TO COLLECT WATER: NOTE: USE YOUR BEST JUDGEMENT TO ESTIMATE THE FOLLOWING	|__|__| ADULT WOMEN (AGE 15+ YEARS) |__|__| ADULT MEN (AGE 15+ YEARS) |__|__| FEMALE CHILD (UNDER 15) |__|__| MALE CHILD (UNDER 15)
C14.	DID ANYONE (ONE PERSON) WAIT IN THE LINE FOR MORE THAN 30 MINU TES?	[1] YES [2] NO
C15.	Is there a source of potential contamination (e.g. latrines) within 15 meters of the water source?	[1] YES [2] NO
C16.	END TIME OF OBSERVATION: (24 HOUR TIME, E.G., 13:30)	|__|__|:|__|__|
TAKE PHOTOS OF THE WATER SOURCE		

C17.	COMMENT ON OVERALL CHALLENGES OR THREATS TO THE FUNCTIONALLY OF THE WATER SOURCE:

TO BE COMPLETED AT TIME OF DATA ENTRY IF PAPER VERSION WAS USED IN FIELD

DE.1 Was this survey entered on netbook in field? [1] YES [2] NO

DE.2 Was this survey entered in field on netbook AND paper and partially entered on netbook in office? [1] YES [2] NO

DE.3 Was this survey entered on paper in field and then netbook in office? [1] YES [2] NO

DE.4 Data Entry PERSON 1 NAME/ID _____ /|__|__|__|__|

DE.5 Date of Data Entry PERSON 1 |__|__|/|__|__|/|__|__|__|__|

DE.6 COMMENTS ON DATA ENTRY (PUT INITIALS NEXT TO COMMENTS):

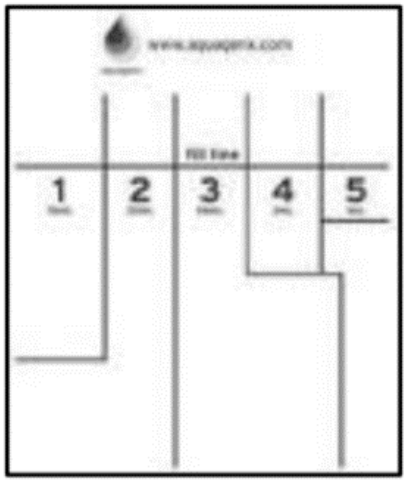
8. PEPAM/USAID EX-POST EVALUATION WATER QUALITY TEST SHEET

MODULE A: WATER SOURCE SAMPLING NOTE: FILL NEW FORM FOR EACH PEPAM/USAID WATER SOURCE IN A VILLAGE		
A1.	USE THE SAME GPS READING TAKEN FOR THE STRUCTURED OBSERVATION WAIT UNTIL YOU HAVE LESS THAN 10M ACCURACY IF POSSIBLE.	WAYPOINT ID: |__|__|__| N ° |__|__|. |__|__|__|__|__| E ° |__|__|__| |__|__|__|__|__|
A2.	NAME OF PERSON COLLECTING SAMPLE: /_____/ /_____/ /_____/ (NAME 1) (NAME 2) (FAMILY NAME)	
A3.	DATE OF SAMPLE COLLECTED: **(DD/MM/YY)**	|__|__|/|__|__|/|__|__|
A4.	**REGION:**	[1] KOLDA [2] SÉDHIOU [3] TAMBACOUNDA ZIGUINCHOR
A5.	**COMMUNE:**	/_____/
A6.	**VILLAGE:**	/_____/
A7.	**VILLAGE ID:**	|__|__|__|
A8.	**NUMBER OF WATER SOURCES CONNECTED TO THIS SCHEME:**	|__|__| WATER SOURCES
A9.	**WATER SOURCE ID**	|__|__|__|__|__|
A10.	**WATER SOURCE ID**	|__|__|__|__|__|
A11.	**ARE YOU ABLE TO TAKE WATER SAMPLES?**	[1] YES SKIP -> MODULE A.1: IRON TEST [2] NO
A12.	**IF NO, WHY?**	[1] Permission not granted [2] Non-functioning water point [77] Other, _____
MODULE A.1: IRON TEST		

REMINDER: FIRST GET YOUR TIMER READY, IMMERSE STRIP FOR 2 SECONDS. REMOVE WITH THE PAD FACE UP. SHAKE ONCE TO REMOVE EXCESS WATER. USE THE TIMER AND WAIT 60 SECONDS COMPARE TO COLOR CHART		
SAMPLE COLLECTION AND TESTING		
A13.	TIME SAMPLE POURED IN SAMPLE CONTAINER (24 HOUR TIME, E.G., 13:30)	|__|__|:|__|__|
A14.	Closest color chart result from INSTA TEST STRIP REFER TO QUICK ECONO II KIT COLOR CHART AND IDENTIFY THE CORRESPONDING NUMBER	[1] 0 PPM [2] 0.3 PPM [3] 0.5 PPM [4] 1 PPM [5] 3 PPM [6] 5 PPM
A15.	Note any problems with testing that could influence accuracy of results SELECT ALL THAT APPLY	[1] Inside of sample bottle may have been contaminated [77] Other, SPECIFY: _____
MODULE A.2: FLUORIDE TEST PART I		
SAMPLE COLLECTION – at water source **NOTE:** RINSE THE BOTTLE THREE TIMES WITH WATER FROM THE SOURCE AND THEN COLLECT AT LEAST 60 ML IN THE CONTAINER (BOTTLE)		
Label the compartment bag with the following: - Water Source ID - Sample collector initials - Date DD.MM.YY - Time collected HH:MM		
A16.	TIME SAMPLE POURED IN SAMPLE BOTTLE (24 HOUR TIME, E.G., 13:30)	|__|__|:|__|__|
A17.	SAMPLE ID	|__|__|__|__|__|__|
MODULE A.3: COMPARTMENT BAG TEST FOR E. COLI PART I		
SAMPLE COLLECTION Steps 1-6 at water source		
A18.	Date sample is collected (poured in compartment bag): (DD/MM/YY)	|__|__|/|__|__|/|__|__|

A19.	Outdoor temperature at time of sample collection: Remember: 35-44.5°C: incubate 20-24 hours 31-34°C: incubate 24-30 hours 25-30°C: incubate 40-48 hours If storing in hotel room, keep consistent incubation temperature!	|__|__|°C
Label the compartment bag with the following: - Water Source ID - Sample collector initials - Date DD.MM.YY - Time collected HH:MM		
A20.	Time sample poured in compartment bag and sealed: (24 HOUR TIME, E.G., 13:30)	|__|__|:|__|__|

MODULE B: COMPARTMENT BAG TEST FOR E. COLI PART II		
PART II COMPARTMENT BAG TEST FOR E. COLI - SAMPLING PROCESSING Steps 7-8		
B1.	NAME OF PERSON PROCESSING SAMPLE: /_____/ /_____/ /_____/ (NAME 1) (NAME 2) (FAMILY NAME)	
B2.	WATER SOURCE ID:	|__|__|__|__|__|
B3.	SAMPLE ID	|__|__|__|__|__|__|
B4.	DATE SAMPLE WAS READ: (DD/MM/YY)	|__|__|/|__|__|/|__|__|
B5.	TIME SAMPLE WAS READ (24 HOUR TIME, E.G., 13:30)	|__|__|:|__|__|
B6.	TOTAL INCUBATION TIME:	|__|__| HOURS

B7.	NOTE APPROXIMATE LOW AND HIGH TEMPERATURE RANGE DURING INCUBATION	LOW: |__|__|◦C HIGH: |__|__|◦C
B8. .	NOTE ANY PROBLEMS WITH SAMPLE PREPARATION, STORAGE, INCUBATION TEMPERATURE CONTROL, LEAKAGE, ETC. THAT COULD INFLUENCE ACCURACY OF RESULTS: SELECT ALL THAT APPLY	[1] INSIDE OF SAMPLE BOTTLE OR THIO BAG MAY HAVE BEEN CONTAMINATED [2] LESS THAN 100 ML WATER COLLECTED [3] E COLI TEST BUD DIDN'T TURN WHITE OR NEARLY WHITE [4] INCUBATION TEMPERATURE VARIED INTO EXTREMES E.G. 5 ◦C+/- [5] SAMPLE BAG LEAKED [77] OTHER, SPECIFY: _____
NOTE	ALIGN YOUR COMPARTMENT BAG SO COMPARTMENT #1 IS ON THE LEFT AND COMPARTMENT #5 IS ON THE RIGHT SEE FIGURE	

B9.	**RECORD RESULTS (1= YELLOW; 2 = GREEN):**					
		1	2	3	4	5
		10ML	30ML	56ML	3ML	1ML
	RECORD RESULT:					

NOTE	MATCH THE COLOR SEQUENCE OF YOUR FIVE COMPARTMENTS TO ONE OF THE 32 ROWS ON THE REFERENCE CHART.	
B10. .	MOST PROBABLE NUMBER (MPN/100ML) FROM CHART	|__|__| . |__| MPN/100ML
B11.	RE-ENTER MOST PROBABLE NUMBER (MPN/100ML) FROM CHART	|__|__| . |__| MPN/100ML

MODULE C: FLUORIDE TEST PART II		
NOTE: CALIBRATE THE FLUORIDE METER IF MORE THAN 12 HOURS HAS ELAPSED SINCE LAST USE.		
SAMPLE PROCESSING/ TESTING -		
C1.	NAME OF PERSON PROCESSING SAMPLE: /_____/ /_____/ /_____/ (NAME 1) (NAME 2) (FAMILY NAME)	
C2.	Water Source ID:	|__|__|__|
C3.	SAMPLE ID	|__|__|__|__|__|__|
C4.	DATE SAMPLE WAS READ: (DD/MM/YY)	|__|__|/|__|__|/|__|__|
C5.	TIME SAMPLE WAS READ (24 HOUR TIME, E.G., 13:30)	|__|__|:|__|__|
C6.	Confirm that you have calibrated the fluoride meter at the 1.0ppm range Note; if meter was stored dry soak in fluoride solution for 15 mins before use.	[1] YES [2] NO
C7.	RECORD TEMPERATURE	|__|__|°C
C8.	ENTER SAMPLE RESULTS.	|__|__|__|__|ppm:
C9.	ENTER SAMPLE RESULTS.	|__|__|__|__|ppm:
C10.	DID THE SAMPLE TEST ABOVE 10PPM?	[1] YES [2] NO SKIP TO C.13
	If the sample is above 10 ppm re-calibrate the fluoride meter with the 10 ppm reagent and test again.	
C11.	ENTER SAMPLE RESULTS.	|__|__|__|__|ppm:
C12.	ENTER SAMPLE RESULTS.	|__|__|__|__|ppm:
C13.	NOTE ANY PROBLEMS WITH TESTING THAT COULD INFLUENCE ACCURACY OF RESULTS SELECT ALL THAT APPLY	[1] Inside of sample bottle may have been contaminated [2] Incubation temperature varied into extremes [3] Sample leaked [77] Other, SPECIFY: _____ _____

9. WATER USER SURVEY

INSTRUCTIONS: IDENTIFY A WATER SOURCE USER, INTRODUCE YOURSELF, AND BRIEFLY EXPLAIN THAT YOU ARE COLLECTING DATA AND WANT TO ASK THEM A QUESTIONS ABOUT WATER SANITATION AND HANDWASHING. IF THEY AGREE, THEN READ THE FULL CONSENT BEFORE PROCEEDING.		
MODULE A: LOCATION AND DATA COLLECTION INFORMATION		
A1.	DATE OF SURVEY (DD/MM/YY)	|__|__|/|__|__|/|__|__|
A2.	TIME OF SURVEY: (24 HOUR TIME, E.G., 13:30)	|__|__|:|__|__|
A3.	**Region:**	[1] Kolda [2] Sédhiou [3] Tambacounda [4] Ziguinchor
A4.	**Commune:**	
A5.	**Village:**	
A6.	**Village ID**	|__|__|__|
A7.	**Water source ID**	|__|__|__|__|
A8.	NAME OF ENUMERATOR 1: /_____/ /_____/ /_____/ (NAME 1) (NAME 2) (LAST NAME)	
A9.	NAME OF ENUMERATOR 2: /_____/ /_____/ /_____/ (NAME 1) (NAME 2) (LAST NAME)	
A10.		
A11.		
A12.		
A13.	READ CONSENT STATEMENT TO RESPONDENT. WAS CONSENT GIVEN BY THE RESPONDENT?	[1] YES → PROCEED TO CONDUCT SURVEY [2] NO → DO NOT CONDUCT OBSERVATION
A14.	RESPONDENT ID	|__|__|__|__|
MODULE B: DEMOGRAPHIC INFORMATION AND WATER SURVEY		

B1.	WHAT IS THE GENDER OF THE PERSON YOU ARE SPEAKING TO?	[1] MALE [2] FEMALE
B2.	How old are you?	[1] |__|__|
WATER USAGE		
B3.	How often do you come to this water source?	[1] More than once a day [2] Once a day [3] 2-3 days a week [4] 4-7 days a week [5] Less [77] Other, _____
B4.	Where is the water source located?	[1] IN OWN DWELLING [2] IN OWN YARD/PLOT [3] PUBLIC [99] DON'T KNOW
B5.	How long does it take you to go get water and come back? E.G. ROUND TRIP FROM HOME TO SOURCE AND BACK TO HOME SELECT ONE ANSWER	[1] |__|__| MINUTES [2] |__|__| HOURS [99] DON'T KNOW
B6.	On average, how many trips per day you take to this source to meet you water needs?	[1] Once per day [2] 2-times per day [3] 3-4 times per day [4] 5 or more times per day [77] Other,_____
B7.	Is water always available from this water source? EXPLAIN: Always/consistently means year-round without regular supply rationing or seasonal failure.	[1] Yes, always → SKIP TO **B9**. [2] No, most of the time [3] No, some of the time [4] No, rarely available [99] Don't Know → SKIP TO **B9.**

B8.	If No, why not? CIRCLE ALL THAT APPLY	[1] Supply rationing [2] Seasonal failure/doesn't work seasonally [3] Broken/ needs maintenance/repair [77] Other, _____
B9.	What do you use the water from the water source for? SELECT ALL THAT APPLY	[1] For drinking [2] For cooking [3] For washing hands [4] For showering [5] For doing household chores [6] For farming [77] Other,_____
B10.	Do you think the water at this source is safe to drink?	[1] YES [2] NO [99]DON'T KNOW
B11.	What is your satisfaction with the quality of the water at this water source?	[1] Not satisfied at all [2] Not satisfied [3] Satisfied [4] Really satisfied [99] Don't know
B12.	What is your satisfaction with the quantity of the water at this water source?	[1] Not satisfied at all [2] Not satisfied [3] Satisfied [4] Really satisfied [99] Don't know
B13.	Can everyone in the community access this water source?	[1] YES → SKIP TO **B15.** [2] NO [99] DON'T KNOW
B14.	If not, what is the reason?	[1] Distance from home [2] Financial barriers [3] Quarrels/not allowed to [77] Other, _____
B15.	Is it your main source of drinking water?	[1] YES [2] NO

B16.	Do you supplement with water from any other sources for drinking or cooking purposes?	[1] YES [2] NO → SKIP TO **B19.**
B17.	If you supplement with water from other sources, what type of additional source do you use the most often?	**PIPED WATER** [1] PIPED WATER INTO DEWLLING [2] PIPED TO YARD/PLOT [3] PUBLIC TAP/STANDPIPE [4] TUBE WELL OR BOREHOLE [5] DUG WELL [6] PROTECTED WELL [7] UNPROTECTED WELL **WATER FROM SPRING** [8] PROTECTED SPRING [9] UNPROTECTED SPRING **OTHER** [10] RAINWATER [11] TANKER TRUCK [12] CART WITH SMALL TANK [13] SURFACE WATER (RIVER/DAM/LAKE/POND/STREAM/CANAL/IRRIGATION CHANNEL) [14] BOTTLED WATER [77] OTHER _____ [99] Don't know
B18.	From this other source, what do you use the water for? SELECT ALL THAT APPLY	[1] Drinking [2] Cooking [3] Laundry [4] Bathing [5] Handwashing [6] Household chores [7] Irrigating a garden or crops/agriculture [8] Watering livestock [77] Other, _____
WATER MANAGEMENT		
B19.	Is there an active water committee in your community?	[1] YES [2] NO → SKIP TO **B23.** [99] DONT KNOW → SKIP TO **B23.**

B20.	Do they have public meetings?	[1] YES [2] NO → SKIP TO **B22.** [99] DON'T KNOW → SKIP TO **B22.**
B21.	Do you ever participate in public water committee meetings?	[1] YES [2] NO [99] DON'T KNOW
B22.	How well is the water management committee (ASUFOR/WUA/CG) managing the water source?	[1] Very badly [2] Badly [3] Fair [4] Well [5] Very well [99] DON'T KNOW
B23.	What problems have there been with the functionality of the water source? SELECT ALL THAT APPLY	[1] NONE [2] STOPPAGE [3] LOW PRESSURE [4] BROKEN MACHINERY OR PARTS [5] LEAKING [77] OTHER,_____
B24.	How long on average does it take to repair this water source if it does not work?	[1] 1-3 days [2] 4-6 days [3] 2 -3 weeks [4] Longer than a month (4 weeks or more) [5] It broke but has not yet been repaired
WATER FINANCING		
B25.	Does your household pay any money to use this source?	[1] YES [2] NO -> SKIP to B30
B26.	How much money do you pay for water?	|__|__|__|__|__| CFA francs
B27.	How frequently do you pay this sum?	[1] Each use [2] Daily use [3] Weekly use [4] Monthly use [77] Other, _____
B28.	What do you think of this price?	[1] TOO EXPENSIVE [2] EXPENSIVE [3] FAIR [4] NOT ENOUGH [77] Other, specify _____
B29.	Does everyone pay the same price?	[1] YES [2] NO [99] Don't know

SANITATION AND HYGIENE		
B30.	What type of latrine do your household members most commonly use? READ DEFINITIONS Private – only members of your household use Shared – latrine shared with people who are not in your household Public latrine – a latrine that anyone can use, there may or may not be a fee, a school latrine, etc.	[1] Private [2] Shared [3] Public [99] Don't know
B31.	When the latrine has a repair or maintenance problem what does your household do? CIRCLE ALL THAT APPLY	[1] Do not fix [2] Repair / maintenance done by household/family member [3] mason to fix issue [4] Replace [77] Other, _____
B32.	Do you know of individuals in the community who go to the bathroom in the open e.g. not a latrine?	[1] Daily [2] Occasionally [3] Never [99] Don't know
B33.	Do members of your household wash their hands with soap? EXPLAIN: We are referring to when they use soap and not other times where they might rinse their hands in a communal bowl.	[1] YES [2] NO → END SURVEY
B34.	Please tell me about all of the times you wash your hands with soap or ash	YES
a.	BEFORE COOKING	[1]
b.	BEFORE EATING	[1]
c.	BEFORE FEEDING A CHILD	[1]
d.	AFTER CLEANING A CHILD'S ANUS	[1]
e.	AFTER TOILETING/DEFECATION	[1]
f.	OTHER: (SPECIFY)_____	[1]
B35.	What does your household usually use to wash their hands?	[1] A bowl of water → END SURVEY [2] A plastic kettle → END SURVEY

		[3] A water bottle → END SURVEY [4] A handwashing station that does not move (fixed) e.g. a tippy tap [77] Other (specify) _____ → END SURVEY
B36.	When there are problems with the handwashing station, what do you do?	[1] Do not fix [2] Repair / maintenance done by household/family member [3] Build a new handwashing station [77] Other, _____

TO BE COMPLETED AT TIME OF DATA ENTRY IF PAPER VERSION WAS USED IN FIELD
DE.1 Was this survey entered on netbook in field? [1] YES [2] NO **DE.2** Was this survey entered in field on netbook AND paper and partially entered on netbook in office? [1] YES [2] NO **DE.3** Was this survey entered on paper in field and then netbook in office? [1] YES [2] NO **DE.4** Data Entry PERSON 1 NAME/ID _____ /|__|__|__|__| **DE.5** Date of Data Entry PERSON 1 |__|__|/|__|__|/|__|__|__|__| **DE.6** Comments on Data Entry (Put Initials Next to Comments):

10. GROUP INTERVIEW WITH TWO TO FOUR ASUFOR/WUA/CG MEMBERS

Region: 1) Kolda 2) Sédhiou 3) Tambacounda 4) Ziguinchor
Commune: _____
Village: _____
Village ID: |__|__|__|

Water Source ID |__|__|__|__|__|__|
Type of governing body : 1) ASUFOR 2) WUA 3) CG

Name of water scheme(s): _____

Location of Interview: _____
Date of Interview [DD/MM/YY]: |__|__|/|__|__|/|__|__|
Name of Interviewer: _____
Name of Note-taker: _____
Name of Anyone Else Present: _____
Recorder Number & Folder Location: _____
Time Interview Began [HH:MM]: |__|__|:|__|__|
Time Interview Ended [HH:MM]: |__|__|:|__|__|

INTERVIEWEES **Gender Age**

1 Name(s): _____ **Member Role(s):** _____ **M / F** |__|__|
2 Name(s): _____ **Member Role(s):** _____ **M / F** |__|__|
3 Name(s): _____ **Member Role(s):** _____ **M / F** |__|__|
4 Name(s): _____ **Member Role(s):** _____ **M / F** |__|__|

RECRUITMENT NOTE: Please convene 2-4 members of the ASUFOR, WUA or CG. Where possible, please ensure female member participation. If a committee no longer exists, please seek out former members to understand why the committee no longer exists.

NOTE: There are yes/no questions and please have the group reach consensus to select an answer. If consensus cannot be reached, choose the answer that most people agree with, and mention the difference in opinion in your notes.

If there is more than one PEPAM/USAID water source in the community, ask questions for one water source and fill out the ID above.

MUST READ THE CONSENT STATEMENT AND GAIN CONSENT FROM ALL RESPONDENTS BEFORE PROCEEDING

GOVERNANCE		
A1.	When was your committee established? [YYYY]	[1] |__|__|__|__|

A2.	WAS IT DURING THE PEPAM/USAID ACTIVITY (2009-2014)?	[1] YES [2] NO
A3.	Who fills each role on your committee and what is their gender? Please tell me if there is a position that is not filled?	
	Position	Gender
		[1] Male [2] Female
		[1] Male [2] Female
		[1] Male [2] Female
		[1] Male [2] Female
		[1] Male [2] Female
		[1] Male [2] Female
		[1] Male [2] Female
		[1] Male [2] Female
		[1] Male [2] Female
		[1] Male [2] Female
A4.	How often do you meet as a committee?	[1] Twice per month [2] Once per month [3] Once per quarter [4] As needed [5] Never [77] Other, _____ [99] Don't know
A5.	Does it ever vary?	[1] YES [2] NO
A6.	If yes, why?	
A7.	Does this differ from your bylaws?	[1] YES [2] NO

A8.	Have you held at least three public meetings with the community in each quarter to discuss water use issues and decisions?	[1] YES [2] NO [3] [99] DON'T KNOW
A9.	Do you record meeting minutes at the three WUA meetings each quarter?	[1] YES [2] NO SKIP to A11
A10.	IF YES, PLEASE ASK TO SEE THE MINUTES FROM THEIR MEETINGS (PUBLIC OR NON-PUBLIC) AND NOTE HERE IF THEY HAVE MINUTES FROM THREE PER QUARTER FOR THE PAST YEAR	[1] YES [2] NO
A11.	IF NO – Why not	
A12.	Were the meeting minutes published or otherwise made publicly available?	[1] YES [2] NO [99] DON'T KNOW
A13.	How, does or does not your committee fit within the government structure for water provision? 1. PROBE: What type of interactions do you have with local government entities (e.g. community health centers, regional hygiene offices, hygiene brigades)? 2. PROBE: What are the challenges to your interactions? 3. PROBE: What works well in your interactions?	
A14.	Can you discuss women's participation in the committee's management and governance structures that were supported by PEPAM/USAID? 1. PROBE: To what extent do women participants actively engage during meetings? Why? 2. PROBE: What factors do you think influence woman's participation (less or more)?	
A15.	Are you familiar with the village level water and sanitation plans (PHLA) that were developed under PEPAM/USAID? If so, have you ever used them in your work? 1. PROBE: If yes, they've been used, what have you used them for? 2. PROBE: Why, why not, when did you stop using them?	[1] YES [2] NO
A16.	What training or support was received from the PEPAM/USAID activities? 1. PROBE: Do you still use guidance, documents, manuals that were part of the training	
FINANCING/FEES		
A17.	Do you still follow the financial practices (e.g. fee collection system) which was advocated by PEPAM/USAID the GoS and partners	[1] YES [2] NO
A18.	What sources of funding are available to the committee?	

	1. PROBE: potential sources: user fees, government, community members 2. PROBE: How much is received from different sources?	
A19.	If there are usage fees for PEPAM/USAID water source(s), please describe them. 1. PROBE: How does this compare to others in your community or communities nearby? 2. PROBE: If no fees collected why not?	[1] Annual fee: _____ [2] Monthly fee: _____ [3] Fee per use: _____ per 10L container/ 20L container / other (write in): _____ [4] Other fee (describe): _____
A20.	To what extent do people actually pay the fees they owe? 1. PROBE: If known, what is the fee recovery rate?	
A21.	To what extent do the fees collected cover the actual costs for maintaining and repairing the water scheme? 1. PROBE: If there is a gap in funding, how large is it? 2. PROBE: How do you handle that gap?	
A22.	Do you keep any records on payment? Can we see them? IF THEY AGREE, PLEASE TAKE A PICTURE OF THE RECORDS	[1] YES [2] NO [3] REFUSED [4] OTHER, _____
FUNCTION, MAINTENANCE AND REPAIR		
A23.	How would you rate the PEPAM/USAID water source's reliability?	[1] Very reliable [2] Reliable [3] Somewhat reliable [4] Not reliable [99] Does not work
	Why? 1. PROBE: does the water source provide consistent reliable water? Why? Why not?	
A24.	Who is responsible for monitoring and maintaining the function of this water source? 1. PROBE to ensure that respondent addresses maintenance issues	

	2. PROBE to ask about security and enclosures	
A25.	What, if any, role does the local government entities play in supporting the water sources? 1. PROBE: Which entities play a role and what role do they play?	
A26.	How frequently are repairs needed to water sources? What are the most frequent problems? 1. PROBE: are there differences between PEPAM and other water sources?	
A27.	Do you continue to work with the private enterprises that were established under PEPAM/USAID?	[1] YES [2] NO [3] NEVER HAD ONE [99] DON'T KNOW
A28.	1. PROBE: Why or why not? 2. PROBE: Do you have a maintenance contract with a local private service provider?	
A29.	Can we see any contracts you have with maintenance organizations/enterprises? IF THEY AGREE, PLEASE TAKE A PICTURE OF THE RECORDS	[1] YES [2] NO
A30.	IF YES, how many contracts and with what types of maintenance enterprise? IF NO, did they ever have any and why don't they have any now?	
A31.	What are the primary challenges you face in ensuring that the water source is functioning properly at all times?	
WATER SOURCE CHARACTERISTICS (FILL IN OR CIRCLE ANSWERS) Say Now let's discuss a specific PEPAM/USAID water source that you manage:		
A32.	When was the water source constructed/rehabilitated under PEPAM/USAID? [YYYY]:	|__|__|__|__| [99] DON'T KNOW
A33.	Who constructed it?	_____ [99] DON'T KNOW
A34.	Has it been rehabilitated in any major way since it was constructed/rehabilitated under PEPAM/USAID?	[1] YES [2] NO [99] DON'T KNOW SKIP to A38
A35.	Who rehabilitated it?	_____ [99] DON'T KNOW
A36.	What year was it rehabilitate? [YYYY]	|__|__|__|__|

		[99] DON'T KNOW
A37.	Why was it rehabilitated? 1. PROBE: Please discuss why this happened and the process from when the water source stopped working to when it was rehabilitated and working again?	
WATER USAGE. SAY please provide your best estimate for the following:		
A38.	How many households use this PEPAM source? (estimate if not sure):	|__|__|__|__|
A39.	How long do people typically have to wait in line in order to get their water?	|__|__||__| MINUTES
A40.	To what extent do community members use this water source compared to other water sources? 1. PROBE: For which purposes do they use this water source? Why? 2. PROBE: For which purposes do they use other water sources? Why? 3. PROBE: How does this water source compare to other water sources in your community?	
WATER QUANTITY		
A41.	Across all water sources, are people able to obtain sufficient water for their needs? 1. PROBE: Why/why not?	[1] YES [2] NO [99] DON'T KNOW
A42.	In general, is the quantity of water from this water source sufficient throughout the entire year?	[1] YES [2] NO [99] DON'T KNOW
	1. PROBE: When/under what circumstances is the amount of water insufficient? Why? 2. PROBE: When/if it is not sufficient, what do people do? i. How far do people have to travel to get water from other sources? ii. Through all sources, are people able to obtain sufficient water for their needs?	
WATER QUALITY		
A43.	Do you consider water from this PEPAM/USAID source to be consistently safe to drink?	[1] YES [2] NO
	1. PROBE: Why or why not? 2. PROBE: Does anyone in the community treat their drinking water from this source? If so, how? Do they treat their drinking water from other sources?	
A44.	How often, if at all, is water quality measured for this water source?	[1] At least 12 times per year [2] At least 4 times per year, but less than 12 times [3] More than once per year, but less than 4 [4] Once per year [5] Less than once per year

		[6] Quality is not tested -> SKIP to A48.
A45.	Who measures the water quality?	
A46.	What is measured?	[1] E.COLI [2] ARSENIC [3] FLUORIDE [4] IRON [77] OTHER, _____ [99] DON'T KNOW
A47.	What happens if the quality test shows there are values outside the norm (such as presence of fecal bacteria, high levels of fluoride or arsenic, etc.)? 1. PROBE: Who is responsible for follow up?	
A48.	How satisfied do you think the community is with this water source?	[1] Very satisfied [2] Somewhat satisfied [3] Unsatisfied [4] Very unsatisfied
A49.	Do you have records of past water quality testing I can see?	[1] YES [2] NO -> SKIP to **A50**
INTERVIEWER: TAKE A PHOTO OR A PHOTOCOPY IF POSSIBLE. DESCRIBE WHICH YEARS RECORDS ARE AVAILABLE, WHAT CHARACTERISTICS HAVE BEEN TESTED, THE FREQUENCY OF TESTING (E.G. MONTHLY, ANNUAL), ETC. IF YOU CAN'T TAKE A PHOTO FILL OUT THE FROM BELOW		
REFLECTION ON CHANGES		
A50.	To what extent have the ways in which the committee manages the water scheme changed over the last several years since the PEPAM/USAID activity was constructed/rehabilitated it? 1. PROBE: How has it changed? 2. PROBE: Has it been for the better or the worse?	
A51.	Since the water scheme was constructed/rehabilitated under PEPAM/USAID, has any other outside group come to improve OTHER water source or to do other water and sanitation work in your community? If yes, when and what did they do?	
A52.	Is there anything else you'd like to discuss with me about this water source or the organization that installed it?	[1] YES [2] NO
A53.	**A54.** Since 2009 have there been any big issues/problems in your area (e.g. major drought, violence/insecurity, natural disaster (flooding, earthquake), political instability, etc.) that have impacted your community?	

	a. PROBE: Please discuss the event or events and their impact on your community.	
A55.	Do you have any questions for us?	[1] YES [2] NO

Do not forget to record interview end time!

11. HOUSEHOLD MINI-SURVEY & STRUCTURED OBSERVATIONS

MODULE A: HOUSEHOLD LOCATION & CONSENT INFORMATION		
A1.	DATE OF OBSERVATION (DD/MM/YY)	|__|__|/|__|__|/|__|__|
A2.	**Region:**	[1] Kolda [2] Sédhiou [3] Tambacounda Ziguinchor
A3.	**Commune:**	
A4.	**Village:**	
A5.	**Village ID:**	|__|__|__|
A6.	NAME OF OBSERVER 1: /_____/ /_____/ /_____/ (NAME 1) (NAME 2) (LAST NAME)	
A7.	NAME OF OBSERVER 2: /_____/ /_____/ /_____/ (NAME 1) (NAME 2) (LAST NAME)	
A8.		
A9.	**Household/Respondent ID:**	|__|__|__|__|
A10.		[4]
A11.	READ CONSENT STATEMENT TO FEMALE HEAD OF HOUSEHOLD. WAS CONSENT GIVEN BY THE HEAD OF HH?	[1] YES → PROCEED TO CONDUCT MINI-SURVEY AND OBSERVATION [2] NO → DO NOT CONDUCT OBSERVATION AND MINI-SURVEY
A12.	Since when have you lived in this village?	|__|__| MONTHS |__|__| YEARS
A13.	NOTE: HAVE THEY MOVED TO THE VILLAGE IN THE LAST 4 YEARS? (E.G. AFTER 2014)?	[1] BEFORE 2014

		[2] LESS THAN 4 YEARS/ AFTER 2014 → DO NOT CONDUCT OBSERVATION
A14.	TAKE A NEW GPS READING BY MARKING A NEW WAYPOINT. WAIT UNTIL YOU HAVE LESS THAN 10M ACCURACY IF POSSIBLE.	WAYPOINT ID: |__|__|__| [3] N °|__|__|. |__|__|__|__|__| E °|__|__|__|. |__|__|__|__|__|

MODULE B: HH MINI-SURVEY			
B1.	WHAT IS THE GENDER OF THE PERSON YOU ARE SPEAKING TO?		[1] MALE [2] FEMALE
B2.	How old are you?		|__|__|
B3.	« are you the head of the household, if not, what is your relationship to the Head of the household		[1] Yes → SKIP to B5 [2] No
B4.	What is your relationship to the head of household? READ: A household is a person or group of persons that usually live and eat together.		[1] Spouse [2] Aunt/Uncle [3] Sister/brother [4] Child [5] No relationship [6] Parents [77] Other_____
WATER QUESTIONS			
SAY	Thank you very much. Now, I would like to ask you some questions about the water you and your family drink at home.		
	ASK THE FOLLOWING QUESTIONS ABOUT THE RESPONDENT'S PRIMARY AND SECONDARY WATER SOURCES. ASK FOR PRIMARY SOURCE (COLUMN A) UNTIL B8 THEN ASK FOR SECONDARY SOURCE (COLUMN B)		
B5.		A. PRIMARY SOURCE	B. SECONDARY SOURCE
	What is the main source of drinking water for members of your household?	**PIPED WATER** [1] PIPED WATER INTO DEWLLING [2] PIPED TO YARD/PLOT [3] PUBLIC TAP/STANDPIPE [4] TUBE WELL OR BOREHOLE **DUG WELL**	**PIPED WATER** [1] PIPED WATER INTO DEWLLING [2] PIPED TO YARD/PLOT [3] PUBLIC TAP/STANDPIPE [4] TUBE WELL OR BOREHOLE

		[5] PROTECTED WELL [6] UNPROTECTED WELL **WATER FROM SPRING** [7] PROTECTED SPRING [8] UNPROTECTED SPRING **OTHER** [9] RAINWATER [10] TANKER TRUCK [11] CART WITH SMALL TANK [12] SURFACE WATER (RIVER/DAM/LAKE/POND/ STREAM/CANAL/IRRIGATION CHANNEL [13] BOTTLED WATER [77] OTHER_____ [99] DON'T KNOW	**DUG WELL** [5] PROTECTED WELL [6] UNPROTECTED WELL **WATER FROM SPRING** [7] PROTECTED SPRING [8] UNPROTECTED SPRING **OTHER** [9] RAINWATER [10] TANKER TRUCK [11] CART WITH SMALL TANK [12] SURFACE WATER (RIVER/DAM/LAKE/POND/ STREAM/CANAL/IRRIGATION CHANNEL [13] BOTTLED WATER [77] OTHER_____ [99] DON'T KNOW
B6.	What do you use the water from this source for? CIRCLE ALL THAT APPLY	[1] Drinking [2] Cooking [3] Laundry [4] Bathing [5] Handwashing [6] Household chores [7] Irrigating a garden or crops/agriculture [8] Watering livestock [77] Other, _____	[1] Drinking → SKIP to B9 [2] Cooking → SKIP to B9 [3] Laundry → SKIP to B9 [4] Bathing→ SKIP to B9 [5] Handwashing→ SKIP to B9 [6] Household chores → SKIP to B9 [7] Irrigating a garden or crops/agriculture → SKIP to B9 [8] Watering livestock → SKIP to B9 [77] Other, _____→ SKIP to B9
B7.	How long does it take you to go, get water and come back? E.G. ROUND TRIP FROM HOME TO SOURCE TO HOME SELECT **ONE** ANSWER		[1] |__|__| MINUTES [2] |__|__| HOURS [99] DON'T KNOW
B8.	On average, how many trips per day you take to this source to meet you water needs?		[1] Once per day [2] 2-times per day [3] 3-4 times per day [4] 5 or more times per day [77] Other_____

B9.	Do you also draw water from another source even if it is only sometimes? E.G. SECONDARY SOURCE?	[1] YES → GO BACK TO B5, COLUMN B (SECONDARY SOURCE) [2] NO
B10.	Do you do anything to make your drinking water less cloudy or safer to drink?	[9] YES [10] NO → SKIP to B12 [99] DON'T KNOW → to SKIP B12
B11.	What method(s) did you use? (DO NOT READ, CIRCLE ALL THAT APPLY)	
a.	BOTTLED CHLORINE	[1]
b.	BOIL	[1]
c.	SIEVE IT THROUGH CLOTH OR OTHER MATERIAL	[1]
d.	OTHER TYPE OF WATER FILTER [CERAMIC, SAND, COMPOSITE]	[1]
e.	SOLAR DISINFECTION (SODIS)	[1]
f.	LET IT STAND AND SETTLE	[1]
g.	BIOSAND FILTER	[1]
i.	COAGULANT (I.E. ALUM)	[1]
j.	PUR (FLOCCULANT + DISINFECTANT)	[1]
k.	AQUATABS	[1]
l.	WATER SOURCE TREATED WITH CHLORINE	[1]
HYGIENE QUESTIONS		
B12.	Can you please show me where members of your household most often wash their hands?	[1] FIXED FACILITY OBSERVED (SINK/TAP) [2] IN DWELLING [3] IN YARD/PLOT [4] FIXED HANDWASHING STATION e.g. Tippy Tap [5] MOBILE OBJECT OBSERVED (BUCKET /BASIN/BOWL/JUG/KETTLE) [6] NO HANDWASHING PLACE IN DWELLING/YARD/PLOT → SKIP to B17

		[7] NO PREMISSION TO SEE [77]OTHER, _____ → SKIP to B17
B13.	OBSERVE LOCATION OF HANDWASHING PLACE 5 METERS OR 10 STEPS CIRCLE ALL THAT APPLY	[1] IN/NEAR MAIN COOKING AREA (≤5M TO ENTRANCE) [2] IN/NEAR LATRINE (≤5M TO ENTRANCE) [3] NO SPECIFIC PLACE, MULTIPLE PLACES USED
B14.	OBSERVE: MATERIALS PRESENT CIRCLE ALL THAT APPLY IF THERE IS NO SPECIFIC HW PLACE AND THE DEVICE IS A BASIN, NOTE WHICH MATERIALS ARE KEPT WITH THE BASIN/PITCHER. NOTE: SOAP MAY BE IN BAR, POWDER, OR LIQUID FORM. SHAMPOO WILL BE CONSIDERED AS LIQUID SOAP.	[1] WATER [2] BAR SOAP [3] LIQUID SOAP [4] POWDERED SOAP [5] SOAPY WATER [6] ASH [7] NONE [77] OTHER (SPECIFY): _____
B15.	IN THE CASE OF A HANDWASHING STATION, IS THERE EVIDENCE THAT HANDWASHING HAS HAPPENED TODAY E.G. GROUND OR SOAP IS WET?	[1] YES [2] NO
B16.	OBSERVE: IF THERE IS A FIXED HANDWASHING STATION IS THE HANDWASHING STATION FUNCTIONAL? TRY TO USE IT IF YOU COULD WASH YOUR HAND THEN ANSWER YES IF YOU COULD NOT WASH YOUR HANDS ANSWER NO	[1] YES [2] NO
B17.	Do members in your household was their hands with soap? (Explain that we are referring to when they use soap and not at other times where they might rinse their hands in a communal bowl)	[1] YES [2] NO → SKIP B23

B18.	Please tell me about all of the times you wash your hands? DO NOT READ	YES
a.	BEFORE COOKING	[1]
b.	BEFORE EATING	[1]
c.	BEFORE FEEDING A CHILD	[1]
d.	AFTER CLEANING A CHILD'S BACKSIDE/ANUS	[1]
e.	AFTER TOILETING/DEFECATION	[1]
f.	OTHER (SPECIFY)_____	[1]
B19.	For the handwashing station that you use the most, when was it obtained/built (if fixed in one place)? CHOOSE ONE OPTION	[1] |__|__| YEARS [2] |__|__|MONTHS [99] DON'T KNOW
B20.	Have you ever had to replace it?	[1] YES [2] NO [99] DON'T KNOW
B21.	What if any, repairs has it needed?	[1] None → SKIP TO B23 [2] Structure damaged [3] Water container damaged [77] Other, _____
B22.	When there were problems with the handwashing station, what did you do?	[1] Did not fix [2] Repaired / maintenance done by household/family member [3] Built a new handwashing station [77] Other, _____
SAY	Thank you so much for your participation so far. The next part of the survey is a bit sensitive. I would like to ask you some questions about the sanitation practices of people in your compound. I would also like to make some observations.	
SANITATION QUESTIONS		
B23.	When a member of this household (>5 years old) needs to defecate, where do they do it most often?	[1] LATRINE [2] POT/POTTY [3] DIAPER

	DO NOT READ ANSWER OPTIONS	[4] IN THE HOUSE [5] IN THE COMPOUND [6] OUTSIDE THE COMPOUND [77]OTHER, _____ [99] DO NOT KNOW
B24.	When a member of this household older than 5 needs to defecate, where do they do it most often? DO NOT READ ANSWER OPTIONS	[1] LATRINE PRIVATE [2] LATRINE PUBLIC [3] IN THE OPEN/FIELD [4] IN THE HOUSE [5] THE COMPOUND [77]OTHER, _____ [99] DO NOT KNOW
B25.	Does your household currently have a latrine that you use? IF THEY HAVE MORE THAN ONE LATRINE REFER TO THE ONE THAT THEY USE THE MOST FREQUENTLY	[1] YES [2] NO → SKIP TO B38 [99] DO NOT KNOW → SKIP TO B39
B26.	Where is the latrine located?	[1] IN OWN DWELLING [2] IN OWN COMPOUND (YARD/PLOT) [3] ELSEWHERE
B27.	Do you share this facility with others who are not members of your household?	[1] YES → SKIP TO B32 [2] NO
B28.	When did you build any type of latrine at this household for the first time?	[1] |__|__| YEAR BUILT [2] |__|__| YEARS AGO [3] THERE WAS ALREADY A LATRINE BUILT WHEN ARRIVED [99] DO NOT KNOW
B29.	How long ago was this current latrine constructed?	|__|__| YEARS |__|__|MONTHS [99] DON'T KNOW / NOT SURE
B30.	Who built your current latrine?	[1] Skilled mason [2] Family/relative [3] Combination of family and mason [77] Other, _____
B31.	Did your household receive any assistance (subsidy) from _____ [NAME OF LOCAL IMPLEMENTER FROM PEPAM/USAID)] to build a latrine?	[1] YES [2] NO

	EXPLAIN MEETINGS FOR CLTS TRIGGERING, SUBSIDY OR BOTH	
B32.	How many people (including children) use this latrine?	|__|__| PEOPLE
B33.	Have you encountered any of the following maintenance or repair issues with your latrine in the last four years? READ ALOUD	YES: NO
a.	Pit was full	[1] [2]
b.	Slab was damaged	[1] [2]
c.	Lid was damaged	[1] [2]
d.	Vent pipe was damaged	[1] [2]
e.	Wall repair	[1] [2]
f.	Roof repair	[1] [2]
g.	Other,	_____ __
B34.	Which problem was the most severe?	[1] Pit was full [2] Slab was damaged [3] Lid was damaged [4] Vent pipe was damaged [5] Wall repair [6] Roof repair [77] Other, _____
B35.	When the _____ (answer to B33, most severe problem) happened what did you do?	[1] DID NOT FIX → SKIP TO B38 [2] REPAIRED / MAINTENANCE DONE BY HOUSEHOLD/FAMILY MEMBER → SKIP TO B38 [3] USED A MASON TO FIX ISSUE [4] REPLACED LATRINE [5] [77] OTHER, _____
B36.	How did you hear about this person?	[1] THROUGH PEPAM/USAID [2] THROUGH WORD OF MOUTH

		[3] FROM COMMUNITY LEADERS [4] FROM THE SANITATION MANAGEMENT COMMITTEE [77] OTHER, _____
B37.	Did the repair person fix the issue?	[1] YES [2] NO [77] OTHER, _____
B38.	Why do you not currently have a latrine? CIRCLE ALL THAT APPLY	[1] OLD LATRINE NO LONGER FUNCTIONAL [2] LACK OF MONEY [3] LACK OF MATERIALS [77] OTHER, _____
ODF		
B39.	Do you know of other individuals in the community who go to the bathroom in the open e.g. not a latrine?	[1] Daily [2] Occasionally [3] Never [99] Don't know
B40.	What are the main reasons that members of the community go to the bathroom in the open (practice open defecation)? CIRCLE ALL THAT APPLY – DO NOT READ OUT	
a.	NO CHOICE (NOTHING ELSE AVAILABLE)	[1]
b.	CANNOT CONTROL WHERE YOUNG CHILDREN DEFECATE	[1]
c.	HABIT/ROUTINE	[1]
d.	PREFER TO USE BUSH RATHER THAN TOILET	[1]
e.	DO NOT SHARE TOILETS WITH IN-LAWS	[1]
f.	CONVENIENCE	[1]
g.	SICKNESS - DIARRHEA	[1]
h.	LATRINE FULL	[1]
i.	LATRINE BROKEN (WALLS AND/OR FLOOR)	[1]

j.	FEAR OF LATRINE	[1]
k.	DON'T KNOW HOW TO USE THE LATRINE	[1]
l.	TOO YOUNG TO USE LATRINE	[1]
m.	OTHER 1	[77](SPECIFY): _____
n.	OTHER 2	[77] (SPECIFY): _____

MODULE C: STRUCTURED LATRINE OBSERVATIONS				
LATRINE OBSERVATION (DO NOT OBSERVE PUBLIC LATRINES)				
C1.	Does your household have access to a latrine that is in use? Can I see it? IF THERE IS MORE THAN ONE LATRINE OBSERVE THE ONE USED MOST FREQUENTLY	[1] YES, HAVE A LATRINE, CAN OBSERVE [2] YES, HAVE A LATRINE, REFUSED OBSERVATION → END OBSERVATION [3] YES, HAVE A LATRINE, OBSERVATION NOT POSSIBLE → END OBSERVATION [4] NO LATRINE IN USE → END OBSERVATION		
C2.	Where is the latrine located?	[1] INSIDE COMPOUND [2] IMMEDIATELY OUTSIDE COMPOUND (< 5 M AWAY) [3] OUTSIDE COMPOUND (> 5 M AWAY)		
C3. OBSERVATION: NOTE THE TYPE, CONDITION AND APPARENT USE OF THE TOILET/LATRINE. IF YOU CANNOT OBSERVE/CANNOT TELL, MARK "99"				
	EXTERIOR OBSERVATIONS:	**YES**	**NO**	**DK**
a.	AT LEAST THREE WALLS AROUND THE TOILET	[1]	[2]	[99]
b.	DOOR/CURTAIN OR WALLS GUARANTEEING PRIVACY	[1]	[2]	[99]
c.	DOES THE LATRINE HAVE A ROOF?	[1]	[2]	[99]
d.	VENTILATION PIPE	[1]	[2]	[99]

e.	PATH TO TOILET SUGGESTS REGULAR USE (IS CLEAR, WELL-WORN, ETC.)	[1]	[2]	[99]
	INTERIOR OBSERVATIONS:	**YES**	**NO**	**DK**
f.	DOOR LOCKS FROM INSIDE	[1]	[2]	[99]
g.	TOILET HAS A SLAB (PLASTIC OR CEMENT)	[1]	[2]	[99]
h.	RAISED FOOTINGS AROUND THE HOLE	[1]	[2]	[99]
i.	LATRINE APPEARS TO BE IN USE (BY YOUR BEST JUDGEMENT)	[1]	[2]	[99]
j.	ODOR OF FECES OR URINE IN THE LATRINE	[1]	[2]	[99]
k.	STOOL IS VISIBLE ON THE SLAB OR FLOOR	[1]	[2]	[99]
l.	DROP HOLE IS COVERED	[1]	[2]	[99]
m.	ARE MATERIALS FOR ANAL CLEANSING (PAPER OR WATER CONTAINER) AVAILABLE?	[1]	[2]	[99]
n.	MORE THAN 3 FLIES PRESENT	[1]	[2]	[99]
C4.	OBSERVE: DO THE FOLLOWING EXIST IN THE LATRINE FOR SANPLAT CIRCLE ALL THAT APPLY	[1] CONCRETE SLAB WITH ELEVATED FOOTRESTS [2] SLAB PLACED OVER EXISTING PLATFORM [3] KEYHOLE SHAPED DROP HOLE [4] TIGHT-FITTING LID [5] NONE		
C5.	OBSERVE FOR VENTILATED DOUBLE LATRINE (DLV) CIRCLE ALL THAT APPLY	[1] DOUBLE PITS [2] CIRCULAR PITS [3] CLOSED TOP OF VENTILATION PIPE [4] FIXED FLAGSTONE [5] NONE		
C6.	OBSERVE: IS THERE A HANDWASHING STATION WITHIN 5 METERS OF THE LATRINE (10 STEPS)	[1] YES [2] NO		
C7.	OBSERVE: IS THERE VISIBLE FECES IN THE COMPOUND?	[1] YES [2] NO		
TAKE PHOTOS OF THE LATRINE				

TO BE COMPLETED AT TIME OF DATA ENTRY IF PAPER VERSION WAS USED IN FIELD
DE.1 Was this survey entered on netbook in field? [1] YES [2] NO DE.2 Was this survey entered in field on netbook AND paper and partially entered on netbook in office? [1] YES [2] NO DE.3 Was this survey entered on paper in field and then netbook in office? [1] YES [2] NO DE.4 Data Entry PERSON 1 NAME/ID _____ /|__|__|__|__| DE.5 Date of Data Entry PERSON 1 |__|__|/|__|__|/|__|__|__|__| DE.6 Comments on Data Entry (Put Initials Next to Comments):

12. GROUP INTERVIEW WITH COMMUNITY MEMBERS REGARDING WASH OUTCOMES AND PRACTICES

Region: 1) Kolda 2) Sédhiou 3) Tambacounda 4) Ziguinchor 5) National

Commune: _____

Village: _____

Village ID: |__|__|__|

Location of Interview: _____

Date of Interview [DD/MM/YY]: |__|__|/|__|__|/|__|__|
Name of Interviewer: _____
Name of Note-taker: _____
Name of Anyone Else Present: _____
Recorder Number & Folder Location: _____
Time Interview Began [HH:MM]: |__|__|:|__|__|
Time Interview Ended [HH:MM]: |__|__|:|__|__|

RECRUITMENT NOTE: Please convene 2-4 members of the community. Where possible, please ensure female member participation

Reason for selection as KII respondent:

a. **Owner of a project-supported latrine**
b. **Observed collecting water at the project water source**
c. **Directed by a village chief**
d. **Other:** _____

NOTE: if in a village with a water component hold the meeting near the water source if possible so you can reference it.

INTERVIEWEES **Gender Age**

1 Name(s): _____**Member Role(s):** _____ **M / F** |__|__|
Reason for selection as KII respondent:

a. **Owner of a project-supported latrine**
b. **Observed collecting water at the project water source**
c. **Directed by a village chief**
d. **Other:** _____

2 Name(s): _____**Member Role(s):** _____ **M / F** |__|__|
Reason for selection as KII respondent:

a. **Owner of a project-supported latrine**
b. **Observed collecting water at the project water source**
c. **Directed by a village chief**
d. **Other:** _____

3 Name(s): _____**Member Role(s):** _____ **M / F** |__|__|
Reason for selection as KII respondent:

a. **Owner of a project-supported latrine**

b. Observed collecting water at the project water source
c. Directed by a local health worker or other person
d. Other: _____

4 Name(s): _____Member Role(s): _____ M / F |__|__|

Reason for selection as KII respondent:

a. Owner of a project-supported latrine
b. Observed collecting water at the project water source
c. Directed by a local health worker or other person
d. Other: _____

MUST READ THE CONSENT STATEMENT AND GAIN CONSENT FROM ALL RESPONDENTS BEFORE PROCEEDING

Water

1. To what extent do you think this community has adequate access to drinking water sources?
    a. PROBE: What water sources do people have available to them?

2. Are you aware of any water sources provided by the PEPAM/USAID activity _____local partner? 1) Yes 2) No
    a. If yes, how does their use by community members compare to other water sources in your community?

3. How common is it for people in your community to use multiple sources to meet all of their water needs?
    a. PROBE: If they do or do not use multiple sources, why?
    b. PROBE: If they use multiple sources, what do they use the different sources for?
    c. PROBE: community members use of PEPAM water sources (if they exist) to other water sources

4. From your perspective, do any of the sources provide clean drinking water?
    a. PROBE: If yes, which ones? Is the PEPAM source included?

5. In your opinion, how effective have the ASUFORS,/WUA/CGs at managing water (especially drinking water) needs in their communities/catchment areas?
    a. PROBE: Why have or haven't they been effective?
    b. PROBE: Infrastructure functionality, operations and maintenance, responsiveness to community, etc. What should they do differently?

6. To what extent to do women participate in the ASUFORS/WUA, CG?
    a. PROBE: management, governance, leadership roles

7. Does the availability of water from the water source vary throughout the year?
    a. PROBE: If so, when and why?
    b. PROBE: If so, how much does it vary?

c. PROBE: If so, how do you meet your water needs?

8. Have there been any problems with the functionality of the water source?
    a. PROBE: If so, what problems?
    b. PROBE: How were those problems dealt with, and by whom?

9. How much do you pay to use this water or other water sources?
    a. PROBE: To what extent is this price affordable for you and your family?
    b. PROBE: Do all people pay the same? If not, why not?

10. Is there anything else you'd like to tell me about this water source or how it is managed?

Sanitation

11. Did you or anyone you know construct a latrine with the support (either technical or financial) from the PEPAM/USAID project implemented at the same time as this water source (2009-2014)?
    a. If so, can you talk about the process, e.g. who constructed them (the latrine owners, a local artisan, other)?
    b. If no, SKIP to Question 15.

12. What support was provided by the project for building latrines (subsidy, technical assistance, etc.)?

13. About how many people in the community built latrines with the support of the project? Why did they/did they not build them?
    a. PROBE: What types of the four offered were preferred and why?

14. From what you remember, what did you like about how the implementer supported (if at all) the community in building latrines? What could have been improved?

15. Thinking about your community, how many households have their own latrine?
    a. Most
    b. About Half
    c. Less than Half
    d. Very Few or None

16. What are the biggest challenges to getting people to use a latrine every time?
    a. PROBE: What, if anything, can be done to overcome these challenges?
    b. PROBE: What if anything (positive or negative), from the PEPAM/USAID activity impacted these challenges

17. What are the biggest challenges to convincing people to build, maintain and replace their own latrine?
    a. PROBE: Have any latrines built as part of the PEPAM/USAID activities been sustainable/lasting in your community?
    b. PROBE: What, if anything, can be done to overcome these challenges?

18. Why might a household not have their own latrine? What challenges are there?

19. Thinking about other people in your community, how often do you think other people use a latrine vs going in the fields or somewhere else? Why?
    a. If people aren't using a latrine always, where else are they going to the bathroom?

20. What are some of the reasons someone in the community might not always use a latrine?
    a. PROBE: What does the community do about those reasons/issues?

Hygiene/Handwashing

21. Were there any handwashing stations built at the same time as the latrines under the PEPAM/USAID project?
    a. If so, what do you/did you think about them? Were they useful?

22. Please talk about the PEPAM/USAID handwashing stations?
    a. PROBE: How did the community receive them? E.g. did they build?
    b. PROBE: Do community members use the PEPAM model still today? Why?
    c. PROBE: Discuss replacement and other models
    d. PROBE: Soap

23. Thinking about other members of the community, how frequently do you think people wash their hands with soap/ash and water after going to the bathroom, before eating a meal or other critical/key times?
    a. PROBE: Why?
    b. (in addition to asking why, also check one option for each category)
       After using the bathroom
       i. Most of the time
       ii. Some of the time
       iii. Rarely/Never
       Before eating a meal
       iv. Most of the time
       v. Some of the time
       vi. Rarely/Never

24. What PEPAM/USAID activity components (e.g. behavior change poster, the presents handwashing station) do you think did or did not influence the sustainability of the handwashing with soap behaviors?

General/Closing

25. Since 2009 have there been any big issues/problems in your area (e.g. major drought, violence/insecurity, natural disaster (flooding), political instability, etc.) that have impacted your community?
    a. PROBE: Please discuss the event or events and their impact on your community.

26. Do you have any questions for us?

Do not forget to record interview end time!

VERSION DEFINITIVE QUESTIONNAIRES

MILLENNIUM WATER AND SANITATION PROGAM (PEPAM/USAID) EX-POST EVALUATION

QUESTIONNAIRES

1. DÉCLARATION DE CONSENTEMENT LIBRE ET ÉCLAIRÉ À UTILISER POUR TOUTE ACTIVITÉ DE COLLECTE DE DONNÉES (INTERVIEWS, DISCUSSIONS DE GROUPE)

Bonjour, je m'appelle _____ et je suis ici au nom de Social Impact, un cabinet d'évaluation basé aux États-Unis. Nous sommes des évaluateurs indépendants travaillant pour le compte du Projet de communication et de gestion des connaissances sur l'eau de l'USAID. Nous évaluons la durabilité à long terme d'un projet de l'USAID appelé Programme pour l'eau et l'assainissement pour le millénaire, plus connu sous le nom de PEPAM/USAID. Il a été mis en œuvre par RTI International dans les régions de Kolda, Sédhiou, Ziguinchor et Tambacounda, de 2009 à 2014. De manière plus spécifique, nous menons des recherches sur l'évolution de l'accès des populations rurales à l'eau et à l'assainissement depuis l'achèvement du PEPAM/USAID, mais également sur les défis et succès actuels en matière de maintien de l'accès des communautés à l'eau et à l'assainissement. Dans l'avenir, cette évaluation permettra à l'USAID d'améliorer davantage la conception de ses activités.

Nous voudrions que vous participiez à notre étude car votre situation vous permet d'avoir une bonne connaissance du sujet, notamment dans la zone de [lieu]. Nous vous prions de bien vouloir nous consacrer environ 1 heure de votre temps de manière à partager avec nous votre expérience et vos opinions personnelles. Nous vous demanderons de nous fournir des détails sur des initiatives de planification et des projets récents, ainsi que sur des changements qui ont eu lieu en matière d'accès à l'eau et à l'assainissement. Nous vous demanderons également votre avis sur certaines questions liées à votre travail. Participer à cette interview ne présente aucun risque, ni aucun avantage direct, votre participation peut cependant largement contribuer à améliorer les futurs programmes d'approvisionnement en eau et d'assainissement. Nous ne vous poserons aucune question sur des sujets sensibles, mais vous êtes libre de choisir de ne pas répondre à certaines questions précises. Votre participation à cette étude est strictement volontaire et vous n'êtes pas obligé d'y participer. Si vous commencez l'entretien et souhaitez arrêter à tout moment pour une raison quelconque, veuillez simplement nous en informer.

Nous prévoyons de mener jusqu'à ## entretiens dans les régions de Casamance et de Tambacounda, avec d'autres personnes comme vous qui ont une bonne connaissance de la question de l'accès à l'eau et à l'assainissement dans cette zone. Nous ferons ensuite un résumé de ce que nous avons recueilli chez vous et chez d'autres personnes interrogées, en fonction du lieu et parfois du type d'organisation que vous représentez. Cela signifie que les informations que vous nous apporterez ne seront pas confidentielles. Notre rapport final sera remis à l'USAID et sera éventuellement mis en ligne.

Je tiens à vous assurer que toutes les réponses que vous fournirez au cours de cet entretien resteront confidentielles dans la mesure du possible, conformément à la politique gouvernementale sénégalaise et américaine en vigueur. Seule une poignée de chercheurs directement impliqués dans cette étude auront accès à vos informations personnelles. Vos nom, adresse, coordonnées et autres identifiants ne seront partagés avec aucune personne extérieure à l'équipe de recherche. Vos informations personnelles seront enregistrées sur une feuille de papier séparée du reste du sondage et seront conservées séparément, afin qu'aucune de vos réponses ne puisse servir à remonter à votre personne. Bien que tous les renseignements signalétiques restent strictement confidentiels, les données anonymisées peuvent être combinées aux données d'autres participants à l'étude et rendues publiques à des fins de recherche future.

Avez-vous des questions concernant l'entrevue ? Si vous acceptez d'être interviewé, veuillez le faire savoir en donnant votre consentement verbal. Si vous avez la moindre inquiétude, vous pouvez contacter [A EDITER: INCLURE LES COORDONNEES DU CABINET EN CHARGE DE LA COLLECTE DES DONNEES, UNE FOIS

QUE CE DERNIER A ETE CHOISI] ou le comité d'examen institutionnel de Social Impact à l'adresse électronique suivante : irb@socialimpact.com ou au numéro de téléphone suivant : +1 703 465 1884. Ils pourront répondre à toute question relative à l'étude ou aux résultats obtenus. Je vous ici laisse une copie de la déclaration de consentement.

Acceptez-vous de participer à l'entrevue? Oui/Non

Pour que tout soit fidèlement enregistré dans nos notes, nous souhaiterions enregistrer cette conversation? Nous ne partagerons ni les enregistrements, ni les transcriptions d'entrevue avec des personnes extérieures à l'équipe d'évaluation. Etes-vous d'accord ? Oui ou Non ?

2. ENTREVUE AUPRÈS D'INFORMATEURS CLÉS–AVEC DES LEADERS NATURELS ET/OU DES AGENTS DE VULGARISATION SANITAIRE

Nom de la Région: 1) Kolda 2) Sédhiou 3) Tambacounda 4) Ziguinchor 5) Niveau national
Nom de la Commune: _____

Nom du Village: _____

ID du village: |__|__|__|

Lieu de l'Interview: _____
Date de l'Interview [JJ/MM/AA]: |__|__|/|__|__|/|__|__|
Nom de l'Interviewer: _____
Nom du preneur de notes: _____
Nom de toute autre personne présente lors de l'interview:
_____
Numéro de l'enregistreur & Emplacement du dossier:
_____
Heure du début de l'interview [HH:MM]: |__|__|:|__|__|
Heure de la fin de l'Interview [HH:MM]: |__|__|:|__|__|

PERSONNES INTERVIEWEES		**Sexe, Age**
1 Nom(s): _____	**Rôle(s):** _____	**M / F** |__|__|
2 Nom(s): _____	**Rôle(s):** _____	**M / F** |__|__|
3 Nom(s): _____	**Rôle(s):** _____	**M / F** |__|__|
4 Nom(s): _____	**Rôle(s):** _____	**M / F** |__|_

NOTE DE RECRUTEMENT: Veuillez convier 1 à 4 membres de la communauté qui occupent ou ont occupé le rôle de leader naturel, d'agents de vulgarisation sanitaire. Dans la mesure du possible, veuillez-vous assurer de la participation de femmes membres de la communauté.

VOUS DEVEZ LIRE LA DECLARATION DE CONSENTEMENT A TOUTES LES PERSONNES INTERVIEWEES ET AVOIR LEUR ACCORD AVANT DE COMMENCER L'INTERVIEW

Questions spécifiques au projet

21. Si tel est le cas, quel rôle avez-vous joué dans la mise en œuvre du PEPAM/USAID qui a eu lieu entre 2009 et 2014?
    a. QUESTION DE SUIVI: Quelles étaient les responsabilités qui vous étaient assignées ?

22. Veuillez penser aux activités qui ont été menées dans votre village et parlez-nous de ce qui a bien marché et ce qui aurait pu être amélioré dans le cadre du projet.
    a. QUESTION DE SUIVI: Comment le projet a-t-il réussi à créer une demande WASH?
    b. Qu'est ce qui aurait pu être fait pour améliorer le projet ?

23. Si tel est le cas, quel soutien le projet a-t-il fourni aux membres de votre communauté pour la construction de latrines et, si tel est le cas, de point d'eau?
    a. QUESTION DE SUIVI sur le soutien financier, par exemple la subvention pour l'eau et l'assainissement, l'approche hybride (ATPC suivie de la subvention).
    b. QUESTION DE SUIVI sur la formation, l'ATPC.

24. Selon vous, quelle a été l'importance de ce soutien dans la décision des populations de construire des latrines et des stations de lavage de mains ?
    a. QUESTION DE SUIVI: Si ce soutien touche à l'ATPC au niveau communautaire (approches ATPC/CLTS PURE et HYBRIDE) qu'en est-il de l'obtention et du maintien du statut de communauté sans défécation en plein air ?
    b. QUESTION DE SUIVI: Si ce soutien touche à l'EAU, a-t-il connu un succès ?

25. Si tel est le cas, quel soutien le projet a-t-il fourni aux membres de votre communauté pour améliorer le lavage des mains ?
    a. QUESTION DE SUIVI: Selon vous, ce soutien a-t-il été décisif dans l'adoption par les populations du lavage des mains avec du savon?
    b. QUESTION DE SUIVI sur les stations de lavage des mains de manière générale, et en particulier sur les stations fixes (par exemple, le procédé Tippy Tap).
    c. QUESTION SUIVI sur les messages de sensibilisation sur l'importance des changements de comportements, des cartes illustrées par exemple.

26. Si tel est le cas, quel soutien (financier ou technique/sous forme de formation) le projet a-t-il fourni aux membres de votre communauté pour la construction d'un point d'eau ?
    a. QUESTION DE SUIVI: Selon vous, ce soutien a-t-il été décisif dans la construction par les populations d'un point d'eau ?
    b. QUESTION DE SUIVI sur les approches ATPC/CLTS Pure, subventionnée, et hybride (ACHIEA) : l'ATPC suivie de l'approche subventionnée.

Questions liées à l'assainissement et à l'hygiène

27. Si tel est le cas, quels rôles jouez-vous dans la promotion dans cette zone de pratiques WASH sûres?
    a. QUESTION DE SUIVI: Si vous jouez un rôle dans la promotion d'activités WASH, quelles sont de manière concrète les activités que vous menez ?

28. Faites-vous un suivi du nombre de latrines dans le village ou la communauté ?

a. Si oui, quel est dans la zone que vous couvrez le pourcentage des ménages dotés d'une latrine?
b. Si non, quelle est selon vous la proportion des ménages dotés d'une latrine ?
    i. La majorité (>50%)
    ii. La moitié (50% approximativement)
    iii. Quelques-uns (<50%, mais >10%)
    iv. Un tout petit nombre ou aucun ménage (<10%)

29. Quel est le plus grand défi auquel vous êtes confrontés si vous voulez convaincre les populations à construire, entretenir, et remplacer leurs propres latrines ?
    a. QUESTION DE SUIVI: Au sein de votre communauté, des latrines construites dans le cadre des activités du PEPAM/USAID ont-elles été maintenues ou ont–elles perduré?
    b. QUESTION DE SUIVI: Que peut-on faire, si possible, pour relever ces défis?

30. Selon vous, dans quelle mesure les membres de cette communauté utilisent-ils réellement les latrines, et de manière systématique (à chaque fois, par exemple)
    a. Tout le temps
    b. La plupart du temps
    c. Une partie du temps
    d. Très rarement/jamais

31. Quels sont les plus grands défis à vouloir convaincre les gens à utiliser les latrines de manière systématique ?
    a. QUESTION DE SUIVI: Que peut-on faire, si possible, pour relever ces défis ?
    b. QUESTION DE SUIVI: Si tel a été le cas, quelle stratégie du PEPAM/USAID a eu un impact (positif ou négatif) sur ces défis ?

32. Si tel a été le cas, quel rôle le projet PEPAM/USAID a-t-il joué dans l'éradication ou la réduction de la défécation en plein air dans votre communauté ?
    a. QUESTION DE SUIVI: A-t-il perduré?

33. Veuillez parler des stations de lavage des mains PEPAM/USAID?
    a. QUESTION DE SUIVI: Comment ont-elles été accueillies par la communauté ? Par exemple, qui les a construites ?
    b. QUESTION DE SUIVI: A ce jour, les membres de la communauté utilisent-ils toujours le modèle PEPAM? Pourquoi?
    c. QUESTION DE SUIVI sur le remplacement des installations et sur les autres modèles qui existent.

34. Selon vous, quelles composantes d'activités PEPAM/USAID ont, oui ou non, eu un impact sur la durabilité des comportements en matière de lavage des mains ?

35. Combien de fois selon vous, les membres de la communauté se lavent-ils les mains dans des moments critiques/importants (par exemple, après avoir utilisé les toilettes ? avant de manger ?). Pourquoi, et pourquoi pas ?
    a. Apres avoir utilisé les toilettes:

i. La plupart du temps
ii. Une partie du temps
iii. Rarement/jamais

b. Avant de prendre un repas:
i. La plupart du temps
ii. Une partie du temps
iii. Rarement /Jamais

Questions liées à l'eau

36. Selon vous, dans quelle mesure cette communauté a-t-il un accès adéquat à des sources d'eau potable ?
    a. QUESTION DE SUIVI: Quelles sont les sources d'eau dont disposent les populations ?

37. Connaissez-vous des points d'eau qui ont été mis à la disposition des populations dans le cadre d'une activité PEPAM/USAID _____partenaire local? 1) Oui 2) Non
    a. Si oui, comment sont-ils, en termes d'utilisation, par rapport à d'autres points d'eau dans votre communauté ?

38. Est-il fréquent de voir des gens dans votre communauté utiliser plusieurs points d'eau pour pouvoir subvenir à tous leurs besoins en eau ?

    a. QUESTION DE SUIVI: S'ils utilisent ou non plusieurs points d'eau. Demandez pourquoi.
    b. QUESTION DE SUIVI: S'ils utilisent plusieurs points d'eau, Quelle utilisation font-ils de cette multitude de points d'eau ?
    c. QUESTION DE SUIVI: l'utilisation par les membres de la communauté de points d'eau PEPAM (si tel est le cas) par rapport à d'autres.

39. De votre point de vue, y a-t-il des points d'eau fournissant de l'eau potable ?
    a. QUESTION DE SUIVI: Si oui, lesquels. Le point d'eau PEPAM en fait-il partie ?

40. Savez-vous si l'un des points d'eau dans la communauté a subi une analyse de la qualité de l'eau (l'eau est-il potable) ?
    a. QUESTION DE SUIVI: Si oui, à quelle fréquence, et sur quoi a porté l'analyse de l'eau en particulier
    b. QUESTION DE SUIVI: Qu'arrivera-t-il si l'analyse de la qualité de l'eau révèle que cette dernière est contaminée ?
    c. QUESTION DE SUIVI: Si oui, avez-vous gardé la trace de ces tests sur la qualité de l'eau. Si oui, pouvez-vous les mettre à notre disposition ?

41. Selon vous, dans quelle mesure les ASUFOR, AUE/CG ont-elles bien géré les besoins en eau (en particulier l'eau potable) de leurs communautés ou circonscriptions ?
    c. QUESTION DE SUIVI: Pourquoi ont-elles été efficaces ou non?
    d. QUESTION DE SUIVI sur le fonctionnement, l'exploitation et l'entretien des infrastructures, la bonne marche du système de collecte des frais d'utilisation, une plus grande sensibilité aux besoins de la communauté.

42. Dans quelle mesure, les femmes participent-elles dans les activités des ASUFOR, AUE, et CG?
    b. QUESTION DE SUIVI sur la gestion, la gouvernance, les rôles de leadership et les responsabilités des femmes ?

43. A-t-on relevé des problèmes liés au fonctionnement des points d'eau de la communauté ou à la disponibilité de l'eau qu'ils fournissent ?
    d. QUESTION DE SUIVI: S'IL Y A UNE COMMUNAUTE DANS LAQUELLE IL Y A EU DES ACTIVITES LIEES A L'EAU. PRECISEZ LA DIFFERENCE ENTRE LES COMMUNAUTES PEPAM ET LES AUTRES.
    e. QUESTION DE SUIVI: Si oui, quelques sont les problèmes relevés et pourquoi ces problèmes ?
    f. QUESTION DE SUIVI: Si oui, qu'est ce qui a été fait pour résoudre ces problèmes (si tel a été le cas) ? Combien de temps le problème a-t-il persisté ?

Questions finales

44. Depuis 2009, votre région a-t-elle connu de graves évènements ou problèmes qui ont eu un impact sur votre communauté (par exemple, la violence ou l'insécurité, des catastrophes naturels— inondations, tremblements de terre—, une instabilité politique, etc.?
    a. QUESTIONN DE SUIVI: veuillez parler de cet (ces) évènement(s) et leur impact sur votre communauté.
45. Avez-vous des questions que vous voudriez nous posez ?

N'oubliez pas de noter l'heure de la fin de l'interview!

3. INTERVIEW AUPRÈS D'INFORMATEURS CLÉS/ INTERVIEW DE GROUPE–AVEC LE SECTEUR PRIVÉ

Nom de la Région: 1) Kolda 2) Sédhiou 3) Tambacounda 4) Ziguinchor 5)
Nom de la Commune: _____

Nom du Village: _____

ID du village: |__|__|__|

Lieu de l'Interview: _____
Date de l'Interview [JJ/MM/AA]: |__|__|/|__|__|/|__|__|
Nom de l'Interviewer:

_____
Nom du preneur de notes:

_____
Nom de toute autre personne présente lors de l'interview:

_____
Numéro de l'enregistreur & Emplacement du dossier:

_____
Heure du début de l'interview [HH:MM]: |__|__|:|__|__|
Heure de la fin de l'Interview [HH:MM]: |__|__|:|__|__|

PERSONNES INTERVIEWEES		**Sexe, Age**
1 Nom(s): _____	**Rôle(s):** _____	**M / F** |__|__|
2 Nom(s): _____	**Rôle(s):** _____	**M / F** |__|__|
3 Nom(s): _____	**Rôle(s):** _____	**M / F** |__|__|
4 Nom(s): _____	**Rôle(s):** _____	**M / F** |__|__|

NOTE DE RECRUTEMENT: Veuillez convier 2 à 4 acteurs du secteur privé qui ont participé aux activités suivantes du PEPAM : (Il est indispensable d'avoir parmi les interviewés un foreur, un métallurgiste, un artisan réparateur).

- 14 Entreprises locales de forages formées et outillées pour les réalisations de forages
- 5 ateliers de métallurgie (les propriétaires) formés en fabrication locale de pompe manuelle
- 60 Artisans réparateurs locaux identifiés, formés et outillés pour l'exploitation et la maintenance des systèmes hydrauliques.
- A Tambacounda et Ziguinchor, 2 entreprises ont été créées pour la fourniture de matériels et l'importation de pièces de rechange pour les forages.
- A Tambacounda et à Kolda, des appareils de forage profond ont été rétrocédés à des groupements d'intérêt économique (GIE) de foreurs.

Dans la mesure du possible, veuillez-vous assurer de la participation de femmes membres.

VOUS DEVEZ LIRE LA DECLARATION DE CONSENTEMENT A TOUTES LES PERSONNES INTERVIEWEES ET AVOIR LEUR ACCORD AVANT DE COMMENCER L'INTERVIEW

12. En tant qu'entrepreneur du secteur privé ou membre d'une entreprise du secteur privé, quelle était la nature de votre implication dans les activités du PEPAM/USAID (dans la période 2009-2014)
    c. QUESTION DE SUIVI: Avez-vous travaillé avec d'autres entrepreneurs ou entreprises du secteur privé dans le cadre de votre travail avec le PEPAM/USAID? Si tel est le cas, qui sont ces entrepreneurs ou entreprises du secteur privé ? Et dans quel contexte avez-vous travaillé avec eux ?
    d. Quel est le type de rapport (s'il y en a eu) et de changements avez-vous eu avec eux ? Comment ses changements sont-ils intervenus ?

13. Quel genre de formation avez-vous reçue dans le cadre de l'activité PEPAM/USAID?
    c. QUESTION DE SUIVI: Cette formation vous a-t-elle aidé à améliorer vos connaissances, compétences, techniques ou autres pratiques commerciales en entreprise.
    d. QUESTION DE SUIVI: A quelles fins vous ont servi cette formation et ce soutien ?
14. Si tel a été le cas, comment l'activité PEPAM/USAID a-t-elle eu un impact sur les produits ou services que vous offrez ? Ces derniers sont-ils différents des produits ou services que vous proposiez avant le projet PEPAM/USAID ?
    c. QUESTION DE SUIVI: Quels produits et/ou services offrez-vous au secteur de l'eau ?
    d. QUESTION DE SUIVI: Quelle est la fréquence de vos offres, et à qui proposez-vous ces produits et/ou services ?

15. Veuillez parler du processus initial de sécurisation de contrats de maintenance avec les ASUFOR, AUE et CG, et à terme, du processus de gestion et de maintien de ces contrats?
    a. QUESTION DE SUIVI: Quels sont les défis auxquels vous avez été confrontés dans le maintien de ces contrats ?
    b. QUESTION DE SUIVI sur la différence entre la période d'activités PEPAM/USAID et la période post-activités PEPAM/USAID ?

16. Pendant ces 4 à 5 dernières années, quel a été l'ampleur de la demande de vos produits et services ?
    a. QUESTION DE SUIVI: Cette demande, est-ce le résultat d'une relation ou de contrats que vous avez eu dans le cadre de l'activité PEPAM/USAID? Veuillez faire une description de comment cela s'est produit.
    b. QUESTION DE SUIVI: Avez-vous plus de clients dans les zones urbaines, périurbaines ou rurales ?
    c. QUESTION DE SUIVI: dans quelle mesure pouvez-vous couvrir cette demande ?
    d. Les ASUFOR, AUE et CG ont-ils fait partie de cette demande ? Si tel a été le cas, de quelle manière ?
17. Que pensez-vous du modèle que PEPAM a utilisé, et selon lequel une subvention a servi d'incitation aux communautés pour qu'elles construisent ou réhabilitent des points d'eau ?
    a. QUESTION DE SUIVI: Qu'est ce qui a bien marché dans ce modèle ?
    b. QUESTION DE SUIVI: Qu'est ce qui aurait pu être amélioré ?
    c. QUESTION DE SUIVI: Connaissent-ils d'autres modèles qui ont bien marché ou qui sont beaucoup plus durables ? Pourquoi ?

18. Si tel a été le cas, de votre point de vue, dans quelle mesure le PEPAM/USAID a-t-il facilité l'établissement de liens entre les communautés usagers d'eau (ASUFOR/AUE/CG) et vous, notamment le secteur privé ?
    a. QUESTION DE SUIVI: De quelle manière?
    b. QUESTION DE SUIVI: Si tel a été le cas, quel a été par conséquent le côté positif?
    c. QUESTION DE SUIVI: Quels sont les points à améliorer ?

19. Selon vous, quel rôle peuvent jouer les entrepreneurs ou membres d'entreprises du secteur privé tels que vous dans la fourniture d'un accès durable à l'eau potable dans les communautés?
    a. QUESTION DE SUIVI: Qu'en est-il des autres entreprises du secteur ?

20. Votre entreprise existe-elle toujours ?
    a. QUESTION DE SUIVI: Comment avez-vous fait pour maintenir la viabilité de votre propre entreprise ?
    b. La demande pour ces entreprises existe-t-elle toujours
    c. Ces entreprises ont- elles pu diversifier leurs produits ou leurs services ?
    d. Si non, qu'est ce qui s'est passé ?

21. De quels avantages avez-vous bénéficié ou quelles contraintes avez-vous eues dans la promotion et l'offre de vos produits et/ou services? Par exemple, avantages ou contraintes politiques et institutionnels, financiers, commerciaux, en matière d'infrastructures ou de capacité.
    a. QUESTION DE SUIVI: Le PEPAM vous a-t-il aidé à relever les défis auxquels vous étiez confrontés, ou les a-t-il amplifiés ?

22. Voudriez-vous parler aujourd'hui de quelque chose d'autre relatif à votre travail et au projet PEPAM?

N'oubliez pas de noter l'heure de la fin de l'interview!

4. OBSERVATIONS STRUCTUREES AUX POINTS D'EAU

MODULE A: EMPLACEMENT DES POINTS D'EAU		
A13.	DATE D'OBSERVATION (JJ/MM/AA)	 |__|__|/|__|__|/|__|__|
A14.	UN POINT GPS A-T-IL ETE ENREGISTRE POUR LA COLLECTE DE DONNEES SUR LA QUALITE DE L'EAU?	[3] OUI → PASSEZ A LA RUBRIQUE A4. [4] NON
A15.	RELEVEZ DE NOUVELLES COORDONNEES GPS **EN CREANT UN NOUVEAU POINT DE CHEMINEMENT (WAYPOINT)**. ATTENDEZ, SI POSSIBLE, D'AVOIR UNE PRECISION D'AU MOINS 10 METRES.	ID DU WAYPOINT: |__|__|__| N ° |__|__|. |__|__|__|__|__| E ° |__|__|__| |__|__|__|__|__|
A16.	NOM DE L'ENQUETEUR N°1: /_____/ /_____/ /_____/ (1er PRENOM) (2eme PRENOM) (NOM DE FAMILLE)	
A17.	NOM DE L'ENQUETEUR N°2 /_____/ /_____/ /_____/ (1er PRENOM) (2eme PRENOM) (NOM DE FAMILLE)	
A18.	**Nom de la Région:**	[5] Kolda [6] Sédhiou [7] Tambacounda [8] Ziguinchor
A19.	**Nom de la Commune:**	/_____/
A20.	**Nom du Village:**	/_____/
A21.	**ID du Village ID:**	|__|__|__|

A22.	**ID du Point d'Eau:**	|__|__|__|__|__|__|

MODULE B: AUTORISATION POUR l 'OBSERVATION DE POINTS D'EAU & PERSONNES CONTACTS		
B13.	Quel est votre nom? NUMERO DE TELEPHONE LOCAL: /_____/ /_____/ /_____/ (1er PRENOM) (2eme PRENOM) (NOM DE FAMILLEF)	
B14.	Quel est votre rôle au sein de cette communauté?	[5] Chef [6] Représentant du poste de santé ou de la case de santé [7] Agent de santé communautaire (ASC) [8] Représentant de l'association des usagers d'eau [77] Autres, Précisez:_____
B15.	Quel est votre numéro de telephone ? NUMERO DE TELEPHONE LOCAL:	|__|__| |__|__|__| |__|__| |__|__|
B16.	De quel type de réseau d'adduction d'eau disposez-vous? AEP ou AEMV? REMARQUE: AEP/ADDUCTION D'EAU POTABLE (PETIT SYSTEME D'APPROVISIONNEMENT EN EAU COURANTE ALIMENTANT UN SEUL VILLAGE); AEMV (ADDUCTION D'EAU POTABLE MULTIVILLAGES) QUI CONSISTE EN UN RESEAU DE CHATEAUX D'EAU ET DE FORAGES SPECIFIQUES, ALIMENTANT PLUSIEURS VILLAGES.	[3] OUI [4] NON → PASSEZ A LA RUBRIQUE B6.
B17.	Quel est le nombre de points d'eau connectés à ce réseau?	[2] |__|__| POINTS D'EAU

B18.	Quand est-ce que ce point d'eau a été construit ou réhabilité pour la dernière fois? Format année : (AAAA)	[3] ANNEE: |__|__|__|__| [4] NE SAIS PAS
B19.	Ce point d'eau a-t-il été construit ou réhabilité dans le cadre du projet PEPAM/USAID (Notamment ENTRE 2009 ET 2014)?	[3] OUI [4] NON → METTEZ FIN A LA COLLECTE DE DONNEES (demander s'il y'a un autre point d'eau USAID/PEPAM dans le village et aller y faire l'observation) [99] NE SAIS PAS
B20.	Existe-il une plaque commémorative soulignant le soutien de l'USAID?	[3] OUI [4] NON
B21.	Ai-je votre autorisation pour observer le point d'eau? L'AUTORISATION D'OBSERVER LE POINT D'EAU VIENT-ELLE D'UNE AUTORITE VILLAGEOISE OU D'UNE PERSONNE CONTACT AU NIVEAU LOCAL?	[3] OUI → COMMENCER L'OBSERVATION [4] NON → METTEZ FIN A LA COLLECTE DE DONNEES, NE FAITES PAS D'OBSERVATION.
B22.	Qui gère le point d'eau? SELECTIONNEZ TOUTES LES REPONSES QUI S'APPLIQUENT SI LES POINTS D'EAU SONT Gérés SEPAREMENT, ENUMEREZ, POUR CHAQUE POINT D'EAU, LES DIFFERENTES STRUCTURES DE GESTION EXISTANTES.	[4] Associations des usagers de l'eau [5] Comité de gestion (CG) [6] ASUFOR [77] Autres, PRECISEZ: _____ [99] NE SAIS PAS
B23.	Quelle est la <u>principale personne contact</u> au sein de la structure de gestion? NOM DE LA PERSONNE CONTACT AU SEIN DE LA STRUCTURE DE GESTION: /_____/ /_____/ /_____/ (1ER PRENOM) (2EME PRENOM) (NOM DE FAMILLE)	
B24.	Quel est son numéro de téléphone?	+221 |__|__|__| |__|__|__|__|

MODULE C: OBSERVATION DES POINTS D'EAU REMARQUE: A L'AIDE D'UNE FEUILLE ET D'UN CRAYON, NOTER LE NOMBRE DE NOUVELLES PERSONNES QUI VIENNENT CHERCHER DE L'EAU PENDANT TOUTE LA DUREE DE L'OBSERVATION, QUI EST D'UNE HEURE. VEUILLEZ NOTER LEUR SEXE ET LEUR AGE (ENVIRON 15 ANS ET PLUS, OU 15 ANS ET MOINS). A LA FIN DU TEMPS D'OBSERVATION, ENREGISTREZ LE NOMBRE TOTAL DANS LA RUBRIQUE C13.		
C18.	HEURE DE DEMARRAGE DE L'OBSERVATION: (FORMAT 24 HEURES, par exemple, 13:30)	|__|__|:|__|__|
C19.	Le point d'eau est-il opérationnel ? Par exemple, est ce qu'on peut y tirer de l'eau ?	[3] FONCTIONNE PARFAITEMENT [4] NE FONCTIONNE PAS → PASSER A LA RUBRIQUE **C4.**
C20.	Au début de l'observation, combien de récipients vides avez-vous observé dans la file? INSCRIVEZ LE NOMBRE DANS LES CAGES VIERGES. SI VOUS N'AVEZ Observé AUCUN RECIPIENT VIDE, METTEZ 00	[5] |__|__| JERRICANS DE 20 LITRES [6] |__|__| JERRICANS DE 10 LITRES [7] |__|__| PETITS SEAUX (10 LITRES OU MOINS) [8] |__|__| GRANDS SEAUX (20 LITRES ET PLUS) [77] |__|__| AUTRES (PRECISEZ): _____
C21.	S'agit-il d'une pompe à eau manuelle?	[3] OUI [4] NON → PASSEZ A LA RUBRIQUE Error! Reference source not found..
C22.	S'IL S'AGIT D'UNE POMPE MANUELLE, NOTEZ LE NOMBRE DE COUPS DE POMPE NECESSAIRE POUR AVOIR UN DEBIT INITIAL.	[2] |__|__| COUPS DE POMPE
C23.	VEUILLEZ INDIQUER LE VOLUME DU RECIPIENT QUE VOUS VOUDREZ UTILISER POUR PUISER DE L'EAU. DE PREFERENCE, UN RECIPIENT DE 20 LITRES OU UN AUTRE D'EGAL VOLUME.	[2] |__|__| LITRES
C24.	REMPLISSEZ UN RECIPIENT D'EAU ET SERVEZ-VOUS D'UN CHRONOMETRE POUR MESURER LE TEMPS NECESSAIRE POUR LE REMPLIR. S'IL S'AGIT D'UNE POMPE MANUELLE, VEUILLEZ EGALEMENT NOTER LE	[3] |__|__|__| SECONDS [4] |__|__| COUPS DE POMPE

	NOMBRE DE COUPS DE POMPE QU'IL FAUT POUR REMPLIR LE RECIPIENT.	
C25.	VEUILLEZ NOTER LA GRAVITE DE TOUTE FUITE D'EAU APPARENTE, QU'ELLE PROVIENNE DE TUYAUX OU DE TOUTE AUTRE INSTALLATION HYDRAULIQUE. REMARQUE: UNE FUITE MINEURE EST DEFNIE COMME_____ UNE FUITE MODEREE EST DEFINIE COMME_____ UNE FUITE GRAVE EST DEFINIE COMME _____	[5] AUCUNE FUITE D'EAU [6] FUITE MINEURE [7] FUITE MOYENNE [8] FUITE GRAVE
C26.	VEUILLEZ NOTER TOUT BESOIN APPARENT DE REPARATION OU D'ENTRETIEN: ENCERCLEZ TOUTES LES REPONSES QUI S'APPLIQUENT	[7] MANCHE Cassé [8] MOTEUR EN PANNE [9] TUYAU Cassé [10] CORDE CASSÉE OU MANQUANTE [11] INDICATIONS QUE DES REPARATIONS N'ONT PAS ETE FAITES SELON LES NORMES STANDARDS. [12] CIMENT Fissuré [77] AUTRES PROBLEMES STRUCTURELS PRECISEZ:_____
C27.	Les installations suivantes existent-ils au point d'eau? ENCERCLEZ TOUTES LES REPONSES QUI S'APPLIQUENT	[6] CLOTURE [7] DALLE DE DRAINAGE [8] PUITS PERDUS [9] ABREUVOIRS UNIQUEMENT DESTINES AUX ANIMAUX [10] ABREUVOIRS UNIQUEMENT REMPLIS D'EAUX MENAGERES [77] AUTRES, _____
C28.	Pendant toute l'heure (1 heure) d'observation, combien de personnes ont attendu au point d'eau ?	|__|__| Personnes
C29.	A LA FIN DE L'OBSERVATION, COMBIEN DE RECIPIENTS VIDES RESTAIT-IL AU POINT D'EAU. INSCRIVEZ LE NOMBRE DANS LES CAGES VIERGES. SI VOUS	[5] |__|__| Jerricans de 20 litres [6] |__|__| Jerricans de 10 litres [7] |__|__| Petits seaux (10 litres ou moins) [8] |__|__| Grands seaux (20 litres ou plus) [77] |__|__| Autres (PRECISEZ): _____

	N'AVEZ Observé AUCUN RECIPIENT VIDE METTEZ 00	
C30.	DURANT LES 1 heure DE L'OBSERVATION, QUELS ETAIENT LE SEXE ET L'AGE DES PERSONNES QUI S'ETAIENT RASSEMBLEES AU POINT D'EAU, SPECIALEMENT POUR PUISER DE L'EAU ? REMARQUE : UTILISEZ VOTRE BON JUGEMENT POUR BIEN ESTIMER CE QUI SUIT.	|__|__| FEMMES ADULTES (AGE : 15 ANS ET PLUS) |__|__| HOMMES ADULTES (AGE : 15 ANS ET PLUS) |__|__| PETITE FILLE (MOINS DE 15 ANS D'AGE) |__|__| PETIT GARCON (MOINS DE 15 ANS D'AGE)
C31.	DES PERSONNES ONT-ELLES ATTENDU PLUS DE 30 MINUTES DANS LA FILE?	[3] OUI [4] NON
C32.	Y a-t-il une source potentielle de contamination (latrines par ex) dans les 15 mètres autour du point d'eau ?	[3] YES [4] NO
C33.	HEURE DE LA FIN DE L'OBSERVATION: (FORMAT 24 HEURES, par exemple 13:30)	|__|__|:|__|__|
PRENEZ DES PHOTOS DU POINT D'EAU		
C34.	FAITES UN COMMENTAIRE SUR LES DEFIS ET LES MENACES QUI PLANENT DE MANIERE GENERALE SUR LE BON FONCTIONNEMENT DU POINT D'EAU :	

DE.1 Cette enquête a-t-elle été saisie sur ordinateur sur le terrain? [1] OUI [2] NON

DE.2 Cette enquête a-t-elle été saisie sur ordinateur sur le terrain ET sur papier et partiellement sur ordinateur au bureau? [1] OUI [2] NON

DE.3 Cette enquête a-t-elle été saisie sur papier sur le terrain et ensuite sur ordinateur au bureau? [1] OUI [2] NON

DE.4 PERSONNE 1 ayant effectué la SAISIE DES DONNEES

NOM/ID _____ /|__|__|__|__|

DE.5 Date de SAISIE DES DONNEES par la PERSONNE I |__|__|/|__|__|/|__|__|__|_

DE.6 Commentaires sur la Saisie des données (Mettez vos initiales à côté des commentaires):

À REMPLIR AU MOMENT DE LA SAISIE DES DONNÉES SI LA VERSION PAPIER A ETE UTILISÉE SUR LE TERRAIN

5. EVALUATION EX-POST DU PROGRAMME PEPAM/USAID: FICHE D'ANALYSE DE LA QUALITÉ DE L'EAU – MODULE A

MODULE A: ECHANTILLONNAGE DES POINTS D'EAU NOTE: REMPLIR UN NOUVEAU FORMULAIRE POUR CHAQUE POINT D'EAU PEPAM/USAID DANS UN VILLAGE		
A21.	UTILISER LES MEMES COORDONNEES GPS RELEVEES LORS DE L'OBSERVATION STRUCTUREE ATTENDEZ, SI POSSIBLE, D'AVOIR UNE PRECISION DE MOINS DE 10 METRES.	ID DU WAYPOINT: |__|__|__| N° |__|__|. |__|__|__|__|__| E ° |__|__|__| |__|__|__|__|__|
A22.	NOM DE LA PERSONNE RECUEILLANT L'ECHANTILLON: /_____/ /_____/ /_____/ (1ER PRENOM) (2EME PRENOM) (NOM DE FAMILLE)	
A23.	DATE DE LA COLLECTE DE L'ECHANTILLON: **(JJ/MM/AA)**	|__|__|/|__|__|/|__|__|
A24.	REGION:	[4] KOLDA [5] SÉDHIOU [6] TAMBACOUNDA [7] ZIGUINCHOR
A25.	COMMUNE:	/_____
A26.	**NOM DU VILLAGE:**	/_____
A27.	**ID DU VILLAGE:**	|__|__|__|
A28.	**NOMBRE DE POINTS D'EAU CONNECTES A CE RESEAU:**	|__|__| **POINTS D'EAU**
A29.	**ID DU POINT D'EAU**	|__|__|__|__|__|
A30.	**ID DU POINT D'EAU**	|__|__|__|__|__|
A31.	**ETES-VOUS EN MESURE DE RECUEILLIR DES ECHANTILLONS?**	[1] OUI [2] SI NON →PASSEZ AU MODULE A.1 : TEST FER
A32.	**SI NON, POURQUOI?**	[3] Permission non accordée [4] Point d'eau ne fonctionne pas [77] Autre, _____
MODULE A.1: TEST FER		

RAPPEL: Souvenez-vous de sortir votre chronomètre, Plongez la bandelette-test dans l'eau pendant 2 secondes. Enlevez-la en ayant la compresse tournée vers le haut. Secouez la bandelette une seule fois pour se débarrasser du trop-plein d'eau. Utiliser le chronomètre. Attendez 60 secondes et vérifiez le résultat à l'aide du tableau des couleurs (color chart)		
PRELEVEMENT ET ANALYSE DES ECHANTILLONS		
A33.	HEURE A LAQUELLE L'ECHANTILLON A ETE PLACE DANS LE CONTENANT A ECHANTILLON (FORMAT: 24 HEURES, par exemple 13:30)	|__|__|:|__|__|
A34.	DANS LE TABLEAU DES COULEURS, QUEL EST LE RESULTAT LE PLUS PROCHE DE CELUI OBTENU SUR LA BANDELETTE-TEST INSTA ? CONSULTEZ LE TABLEAU DES COULEURS DU KIT QUICK ECONO II ET IDENTIFIER LA VALEUR CORRESPONDANTE.	[5] 0 PPM [6] 0.3 PPM [7] 0.5 PPM [8] 1 PPM [9] 3 PPM [10] 5 PPM
A35.	Veuillez noter tout problème susceptible d'influencer l'exactitude des résultats du test. SELECTIONNER TOUTES LES REPONSES QUI S'APPLIQUENT	[2] L'intérieur du contenant à échantillon a pu être contaminé [77] Autres, PRECISEZ: _____
MODULE A.2: TEST FLUORURE 1ERE PARTIE		
PRELEVEMENT DES ECHANTILLONS–au point d'eau. **NOTE: RINCEZ 3 FOIS LA BOUTEILLE D'ECHANTILLONNAGE AVEC DE L'EAU DE LA SOURCE EN QUESTION ET ENSUITE** PRELEVEZ AU MOINS 60 ML D'EAU DANS LE CONTENANT A ECHANTILLON (BOUTEILLE D'ECHANTILLONNAGE)		
Etiquetez comme suit le sac d'échantillonnage à compartiments multiples: - ID du point d'eau - Date: JJ/MM/AA - Initiales du Préleveur d'échantillon - Heure de prélèvement de l'échantillon: HH:MM		
A36.	HEURE A LAQUELLE L'ECHANTILLON A ETE PLACE DANS LA BOUTEILLE D'ECHANTILLONNAGE	|__|__|:|__|__|

	(FORMAT 24 HEURES, par exemple13:30)	
A37.	ID DE L'ECHANTILLON	|__|__|__|__|__|__|
MODULE A.3: COMPARTMENT BAG TEST (CBT) POUR E. COLI, 1ERE PARTIE		
PRELEVEMENT DES ECHANTILLONS : Étapes 1 à 6 au point d'eau		
A38.	Date à laquelle l'échantillon a été collecté (placé dans le sac d'échantillonnage): (JJ/MM/AA)	|__|__|/|__|__|/|__|__|
A39.	Température extérieure au moment du prélèvement de l'échantillon: Rappel: Pour une température de 35 à 44.5°C: période d'incubation de 20 à 24 heures Pour une Température de 31 à 34°C: période d'incubation de 24 à 30 heures Pour une Température de 25 à 30°C: période d'incubation de 40 à 48 heures. En cas de stockage dans une chambre d'hôtel, maintenez l'échantillon à une température d'incubation constante!	|__|__|°C
Etiquetez comme suit le sac d'échantillonnage: - ID du point d'eau - Date: JJ/MM/AA - Initiales du Préleveur d'échantillon - Heure de prélèvement de l'échantillon: HH:MM		
A40.	Heure à laquelle l'échantillon a été placé dans le contenant à échantillon (FORMAT 24 HEURES, par exemple13:30)	|__|__|:|__|__|

6. EVALUATION EX-POST DU PROGRAMME PEPAM/USAID: FICHE D'ANALYSE DE LA QUALITÉ DE L'EAU – MODULE B

MODULE B: COMPARTMENT BAG TEST (CBT) POUR E. COLI, 2eme PARTIE		
TRAITEMENT DES ECHANTILLONS : Étapes 7 à 8 au point		
B12.	NOM DE LA PERSONNE EN CHARGE DU TRAITEMENT DE L'ECHANTILLON: /_____/ /_____/ /_____/ (1er PRENOM) (2EME PRENOM) (NOM DE FAMILLE)	
B13.	ID DU POINT D'EAU:	|__|__|__|__|__|
B14.	ID DE L'ECHANTILLON :	|__|__|__|__|__|__|
B15.	DATE A LAQUELLE L'ECHANTILLON A ETE Traité: (JJ/MM/AA)	|__|__|/|__|__|/|__|__|
B16.	HEURE A LAQUELLE L'ECHANTILLON A ETE Traité (FORMAT 24 HEURES, par exemple, 13:30)	|__|__|:|__|__|
B17.	DUREE TOTALE DE L'INCUBATION:	|__|__| HEURES
B18.	NOTEZ LA PLAGE APPROXIMATIVE DES TEMPERATURES BASSE ET ELEVEE DURANT L'INCUBATION	Température BASSE: |__|__|◦C Température ELEVEE: |__|__|◦C
B19.	VEUILLEZ NOTER TOUT PROBLEME RELATIF A LA PREPARATION DES ECHANTILLONS, AU STOCKAGE, A L'INCUBATION, AU CONTROLE DE LA TEMPERATURE, A DE POSSIBLES FUITES ETC., SUSCEPTIBLE D'INFLUENCER L'EXACTITUDE DES RESULTATS DU TEST. SELECTIONNEZ TOUTES LES REPONSES QUI S'APPLIQUENT	[6] L'INTERIEUR DU CONTENANT A ECHANTILLON OU DU THIO BAG A PU ETRE Contaminé [7] L'ECHANTILLON D'EAU Prélevé FAIT MOINS DE 100 ML [8] LA COULEUR DU MILIEU DE CROISSANCE DU TEST E COLI N'A PAS VIREE AU BLANC OU PRESQUE PAS. [4] LA TEMPERATURE D'INCUBATION A CONNU D'EXTREMES VARIATIONS, PAR EXEMPLE +/-5° C [9] SAC D'ECHANTILLONNAGE A CONNU UNE FUITE [77] AUTRES, PRECISEZ: _____

NOTE	DISPOSEZ VOTRE SAC D'ECHANTILLONNAGE A COMPARTIMENTS MULTIPLES DE TELLE SORTE QUE LE COMPARTIMENT N ° 1 SOIT A GAUCHE ET LE COMPARTIMENT N ° 5 A DROITE VOIR LA FIGURE CI-CONTRE					
B20.	**ENREGISTREZ LES RESULTATS (1= JAUNE; 2 = VERT):**					
		1	2	3	4	5
		10ML	30ML	56ML	3ML	1ML
	ENREGISTREZ LE RESULTAT:					
NOTE	ASSOCIEZ LA SEQUENCE DES COULEURS DE VOS CINQ COMPARTIMENTS A UNE DES 32 RANGEES DU TABLEAU DE REFERENCE.					
B21.	NOMBRE LE PLUS PROBABLE (NPP/100ML) DANS LE TABLEAU	|__|__|__| . |__| NPP/100ML				
B22.	SAISISSEZ A NOUVEAU LE NOMBRE LE PLUS PROBABLE (NPP/100ML)	|__|__|__| . |__| NPP/100ML				

7. EVALUATION EX-POST DU PROGRAMME PEPAM/USAID: FICHE D'ANALYSE DE LA QUALITÉ DE L'EAU – MODULE C

MODULE C: TEST FLUORURE 2EME PARTIE		
NOTE: CALIBREZ LE COMPTEUR FLUORURE SI PLUS DE 12 HEURES SE SONT ECOULEES DEPUIS LA DERNIÈRE UTILISATION.		
TRAITEMENT/ANALYSE DES ECHANTILLONS		
C14.	NOM DE LA PERSONNE EN CHARGE DU TRAITEMENT DES ECHANTILLONS: /_____/ /_____/ /_____/ (1ER PRENOM) (2EME PRENOM) (NOM DE FAMILLE)	
C15.	ID POINT D'EAU:	|__|__|__|
C16.	ID DE L'ECHANTILLON	|__|__|__|__|__|__|
C17.	DATE A LAQUELLE L'ECHANTILLON A ETE Traité: (JJ/MM/AA)	|__|__|/|__|__|/|__|__|
C18.	HEURE A LAQUELLE L'ECHANTILLON A ETE Traité (FORMAT 24 HEURES, par exemple, 13:30)	|__|__|:|__|__|
C19.	Veuillez confirmer que vous avez bien calibré le compteur fluorure selon une plage de concentrations n'excédant pas 1.0ppm Note: Si le compteur a été entreposé à sec, plongez le pendant 15 minutes dans une solution fluorure.	[3] OUI [4] NON
C20.	RELEVEZ LA TEMPERATURE	|__|__|°C
C21.	ENREGISTREZ LES RESULTATS DU TEST	|__|__|__|__|ppm:
C22.	ENREGISTREZ LES RESULTATS DU TEST	|__|__|__|__|ppm:
C23. I	LE RESULTAT DU TEST EST-IL SUPERIEUR A 10 PPM?	[3] OUI [4] SI NON →PASSEZ A LA RUBRIQUE C13
Si le résultat du test est supérieur à 10 ppm re-calibrer le fluor- mètre avec le réactif à 10 ppm et tester à nouveau.		
C24.	ENREGISTREZ LES RESULTATS DU TEST	|__|__|__|__|ppm:
C25.	ENREGISTREZ LES RESULTATS DU TEST	|__|__|__|__|ppm:
C26. x	NOTEZ TOUT PROBLEME SUSCEPTIBLE D'INFLUENCER L'EXACTITUDE DES RESULTATS. SELECTIONNEZ TOUTES LES REPONSES QUI S'APPLIQUENT	[5] L'INTERIEUR DU CONTENANT A ECHANTILLON A PU ETRE Contaminé [6] LA TEMPERATURE D'INCUBATION A CONNU D'EXTREMES VARIATIONS [7] L'ECHANTILLON A CONNU UNE FUITE [77] AUTRES, SPECIFY: _____ _____

8. ENQUêTE AUPRÈS DES USAGERS D'EAU

INSTRUCTIONS: IDENTIFIER UN USAGER D'UN POINT D'EAU, PRESENTEZ-VOUS, ET EXPLIQUEZ BRIEVEMENT QUE VOUS COLLECTEZ DES DONNEES ET QUE VOUS SOUHAITERIEZ LUI POSER QUELQUES QUESTIONS RELATIVES A L'EAU, L'ASSAINISSEMENT ET LE LAVAGE DES MAINS. SI LA PERSONNE ACCEPTE DE REPONDRE À VOS QUESTIONS, LISEZ-LUI EN ENTIER LA DECLARATION DE CONSENTEMENT AVANT DE COMMENCER L'INTERVIEW.		
MODULE A: INFORMATION SUR L'EMPLACEMENT DES USAGERS ET LA COLLECTE DES DONNEES		
A15.	DATE DE L'ENQUETE (JJ/MM/AA)	|__|__|/|__|__|/|__|__|
A16.	HEURE DE L'ENQUETE: (format 24 heures, par exemple13:30)	|__|__|:|__|__|
A17.	NOM DE L'ENQUETEUR N°1: /_____/ /_____/ /_____/ (1er PRENOM) (2eme PRENOM) (NOM DE FAMILLE)	
A18.	NOM DE L'ENQUETEUR N°2: /_____/ /_____/ /_____/ (1er PRENOM) (2eme PRENOM) (NOM DE FAMILLE)	
A19.	**Nom de la Région:**	[5] Kolda [6] Sédhiou [7] Tambacounda [8] Ziguinchor
A20.	**Nom de la Commune:**	
A21.	**Nom du Village:**	
A22.	**ID du Village**	|__|__|__|
A23.	**ID du Point d'Eau**	|__|__|__|__|
A24.	ID de L'enquêté(e)	|__|__|__|__|
A25.	LIRE LA DECLARATION DE CONSENTEMENT A L'enquêté(e) L'enquêté(e) A-T-IL/ELLE Donné SON CONSENTEMENT?	[3] Si OUI → COMMENCER L'ENQUETE [4] Si NON → NE FAITES PAS D'OBSERVATION
MODULE B: DONNEES DEMOGRAPHIQUES ET ENQUÊTE SUR L'EAU		
B37.	DE QUEL SEXE EST LA PERSONNE AVEC LAQUELLE VOUS VOUS	[3] MASCULIN [4] FEMININ

	ENTRETENEZ?	
B38.	Quel âge avez-vous ?	[2] |__|__|
UTILISATION DE L'EAU		
B39.	Quelle est la fréquence à laquelle vous venez à ce point d'eau?	[6] Plus d'une fois par jour [7] Une fois par jour [8] 2 à 3 fois par semaine [9] 4 à 7 fois par semaine [10] Moins que ca [77] Autres, _____
B40.	Ou se trouve le point d'eau?	[4] DANS LE LOGEMENT MEME [5] DANS LA COUR MEME DE LA MAISON OU DE LA PARCELLE [6] POINT D'EAU PUBLIC [99] NE SAIS PAS
B41.	Il vous faut combien de temps pour aller chercher de l'eau et revenir? PAR EXEMPLE, ALLER-RETOUR ENTRE LA MAISON ET LE POINT D'EAU CHOISISSEZ UNE SEULE REPONSE	[3] |__|__| MINUTES [4] |__|__| HEURES [99] NE SAIS PAS
B42.	Il vous faut en moyenne aller combien de fois au point d'eau pour avoir assez d'eau pour tous vos besoins?	[5] Une fois par jour [6] 2 fois par jour [7] 3 à 4 fois par jour [8] 5 fois ou plus par jour [77] Autres, _____
B43.	Ce point d'eau a-t-il toujours de l'eau ? EXPLIQUEZ que Toujours/Systématiquement veut dire tout au long de l'année, sans rationnement de l'eau ou ruptures saisonnières.	[5] Oui, toujours→ PASSEZ à la rubrique **B9**. [6] Non, la plupart du temps [7] Non, des fois [8] Non, il a très rarement de l'eau [9] [99] Ne sais → PASSEZ à la rubrique **B9**.

B44.	Si la réponse est non, Pourquoi le point d'eau n'a-t-il pas d'eau durant toute l'année? ENCERCLER TOUTES LES REPONSES QUI S'APPLIQUENT	[4] Rationnement de l'eau [5] Ruptures saisonnières/ne fonctionne pas de façon saisonnière [6] Il tombe en panne/ a besoin d'un entretien /d'être réparé [77] Autres, _____
B45.	Quelle utilisation faites-vous de l'eau que vous tirez du point d'eau ? SELECTIONNEZ TOUTES LES REPONSES QUI S'APPLIQUENT	[7] Boire [8] Faire la cuisine [9] Se laver les mains [10] Se laver [11] Faire les tâches ménagères [12] Cultiver la terre [77] Autres, _____
B46.	Pensez-vous que l'eau de ce point d'eau est potable ?	[3] OUI [4] NON [5] NE SAIS PAS
B47.	Quel est votre degré de satisfaction par rapport à la qualité de l'eau provenant de ce point ?	[5] Pas du tout satisfait [6] Pas satisfait [7] Satisfait [8] Vraiment satisfait [99] Ne sais pas
B48.	Quel est votre degré de satisfaction par rapport à la quantité de l'eau provenant de ce point d'eau ?	[5] Pas du tout satisfait [6] Pas satisfait [7] Satisfait [8] Vraiment satisfait [99] Ne sais pas
B49.	Ce point d'eau est-il accessible à tous les membres de la communauté?	[1] OUI → PASSEZ A LA RUBRIQUE **B15.** [2] NON [99] NE SAIS PAS
B50.	Si la réponse est non, quelle en est la raison ?	[4] Distance par rapport à la maison [5] Obstacles financiers [6] Querelles/interdiction d'accès [77] Autres, _____

B51.	Est-ce votre principale source d'eau potable ?	[3] OUI [4] NON
B52.	En plus de cette eau, est-ce que vous puisez de l'eau d'autres sources et qui vous sert à boire ou à faire la cuisine?	[3] OUI [4] NON → PASSEZ A LA RUBRIQUE **B19.**
B53. .	Si en plus de cette eau, vous tirez de l'eau d'autres sources, quelles sont le plus souvent ces types de sources d'eau?	**EAU COURANTE** [15] EAU COURANTE A DOMICILE [16] EAU COURANTE ALIMENTANT LA COUR OU LA PARCELLE [17] FONTAINE PUBLIQUE/BORNE FONTAINE [18] PUITS Tubé ou PUITS Foré (FORAGE) [19] PUITS Creusé [20] PUITS Protégé [21] PUITS non Protégé **EEAU PROVENANT D'UNE SOURCE** [22] SOURCE PROTEGEE [23] SOURCE NON PROTEGEE **AUTRES** [24] EAU DE PLUIE [25] EAU LIVREE PAR CAMION CITERNE [26] CHARRETTES SURMONTEES D'UN PETIT RESERVOIR [27] EAU DE SURFACE (FLEUVE, RESERVOIR, LAC, ETANG, RUISSEAU, CANAL, CANAL D'IRRIGATION) [28] EAU EN BOUTEILLE [77] AUTRES _____ [99] Ne sais pas
B54. .	Quelle utilisation faites-vous de l'eau tirée de cette autre source ? SELECTIONNEZ TOUTES LES REPONSES QUI S'APPLIQUENT	[9] Boire [10] Faire la cuisine [11] Faire le linge [12] Se laver [13] Se laver les mains [14] Faire les tâches ménagères [15] Arroser un jardin ou s'adonner à diverses activités agricoles [16] Abreuver le bétail

		[77] Autres, _____
GESTION DE L'EAU		
B55.	Existe-il dans votre communauté un comité de l'eau actif	[3] OUI [4] NON → PASSEZ A LA RUBRIQUE **B23.** [99] NE SAIS PAS→ PASSEZ A LA RUBRIQUE **B23.**
B56.	Est-ce que ce comité organise des réunions publiques?	[3] OUI [4] NON → PASSEZ A LA RUBRIQUE **B22.** [99] NE SAIS PAS→ PASSEZ A LA RUBRIQUE **B22.**
B57.	Avez-vous déjà participé à une réunion publique du comité de l'eau?	[3] OUI [4] NON [99] NE SAIS PAS
B58.	Comment le comité de gestion de l'eau (ASUFOR/AUE/CG) gère-t-il le point d'eau ?	[6] Très mal [7] Mal [8] Assez bien [9] Bien [10] Très bien [99] NE SAIS PAS
B59.	Quels sont les problèmes jusqu'ici liés au fonctionnement du point d'eau ? SELECTIONNEZ TOUTES LES REPONSES QUI S'APPLIQUENT	[6] AUCUN [7] COUPURES [8] BASSE PRESSION [9] PANNE DE MACHINES OU DE PIECES [10] FUITES D'EAU [77]AUTRES, _____
B60.	Combien de jours en moyenne faut-il pour réparer ce point d'eau quand il ne fonctionne pas?	[6] 1 à 3 jours [7] 4 à 6 jours [8] 2 à 3 semaines [9] Plus d'un mois (4 semaines ou plus) [10] Il est en panne mais n'a toujours pas été réparé
FINANCEMENT DE L'EAU		
B61.	Votre ménage paye-t-il une certaine somme d'argent pour l'accès à ce d'eau?	[3] OUI [4] NON → PASSEZ A B30
B62.	Combien payez-vous en eau ?	|__|__|__|__|__| francs CFA

B63.	Quelle est la fréquence à laquelle vous payez cette somme ?	[5] A chaque usage [6] A chaque usage quotidien [7] A chaque usage hebdomadaire [8] A chaque usage mensuel [77] Autres _____
B64.	Que pensez-vous de ce PRIX	[5] TROP CHER [6] CHER [7] RAISONNABLE [8] PAS ASSEZ CHER [77] Autres, précisez _____
B65.	Tout le monde paye-t-il la même chose ?	[3] OUI [4] NON [99] Ne sais pas
ASSAINISSEMENT ET HYGIENE		
B66.	Quel type de latrines les membres de votre ménage utilisent-ils le plus? LISEZ-LEUR LES DEFINITIONS SUIVANTES : Latrine privée–utilisée uniquement par les personnes faisant partie de votre ménage. Latrine partagée–latrine dont vous partagez l'utilisation avec d'autres personnes ne faisant pas partie de votre ménage. Latrine publique–une latrine dont l'utilisation est ouverte à tout le monde. Elle peut être payante ou non. C'est le cas par exemple des latrines scolaires.	[4] Latrine privée [5] Latrine partagée [6] Latrine publique [99] Ne sais pas
B67.	Que faites-vous au niveau de votre ménage quand la latrine a un problème et doit être réparée ou nécessite un entretien. SELECTIONNEZ TOUTES LES REPONSES QUI S'APPLIQUENT	[5] Ne faisons pas de réparation [6] Réparation ou entretien par un membre de la famille ou une personne faisant partie du ménage. [7] Sollicitons les services d'un maçon pour régler le problème. [8] Remplaçons la latrine [77]Autres, _____

B68.	Connaissez-vous des membres de la communauté qui font leurs besoins en plein air, qui par exemple n'utilisent pas de latrines ?	[4] J'en vois tous les jours [5] Occasionnellement [6] jamais [99] Ne sais pas
B69.	Les personnes faisant partie de votre ménage se lavent-ils les mains avec du savon ? Veuillez expliquer que nous faisons ici référence au lavage des mains avec utilisation du savon et non à d'autres cas où ces personnes pourraient se rincer les mains dans un bol commun.	[3] OUI [4] NON → METTEZ FIN A L'ENQUETE
B70.	Pourriez-vous s'il-vous-plait me dire quand est-ce que vous vous lavé les mains avec du savon ou de la cendre?	OUI
a.	AVANT DE FAIRE LA CUISINE	[1]
b.	AVANT DE MANGER	[1]
c.	AVANT DE NOURRIR UN ENFANT	[1]
d.	APRES AVOIR Nettoyé L'ANUS D'UN ENFANT	[1]
e.	APRES AVOIR Utilisé LES TOILETTES OU APRES DEFECATION	[1]
f.	AUTRES: (PRECISEZ) _____	[1]
B71.	Qu'est-ce que vous utilisez en général dans votre ménage pour vous laver les mains ?	[5] Un bol d'eau→ METTEZ FIN A L'ENQUETE [6] Une bouilloire en plastique → METTEZ FIN A L'ENQUETE [7] Une bouteille d'eau → METTEZ FIN A L'ENQUETE [8] Une station fixe de lavage des mains, par exemple le dispositif Tippy Tap [9] [77] Autres (précisez) _____ → METTEZ FIN A L'ENQUETE
B72.	Que faites-vous quand vous avez un problème avec la station de lavage des mains?	[4] Ne faisons pas de réparation [5] Réparation ou entretien par un membre de la famille ou une personne faisant partie du ménage.

		[6] Construisons une nouvelle station de lavage des mains [77] Autres, _____

À REMPLIR AU MOMENT DE LA SAISIE DES DONNÉES SI LA VERSION PAPIER A ETE UTILISÉE SUR LE TERRAIN
DE.1 Cette enquête a-t-elle été saisie sur ordinateur sur le terrain? [1] OUI [2] NON DE.2 Cette enquête a-t-elle été saisie sur ordinateur sur le terrain ET sur papier et partiellement sur ordinateur au bureau? [1] OUI [2] NON DE.3 Cette enquête a-t-elle été saisie sur papier sur le terrain et ensuite sur ordinateur au bureau? [1] OUI [2] NON DE.4 PERSONNE I ayant effectué la SAISIE DES DONNEES NOM/ID _____ /|__|__|__|__| DE.5 Date de SAISIE DES DONNEES par la PERSONNE I |__|__|/|__|__|/|__|__|__|_ DE.6 Commentaires sur la Saisie des données (Mettez vos initiales à côté des commentaires):

9. INTERVIEW DE GROUPE AVEC DEUX À QUATRE MEMBRES DES ASUFOR, AUA OU CG

Nom de la Région: 1) Kolda 2) Sédhiou 3) Tambacounda 4) Ziguinchor
Nom de la Commune: _____
Nom du Village: _____
ID du Village: |__|__|__|

ID du point d'eau |__|__|__|__|__|
Type de structure en charge du point d'eau: 1) ASUFOR 2) AUA 3) CG

Nom du (es) système(s) hydraulique(s) d'approvisionnement en eau:
_____

Lieu de l'Interview: _____
Date de l'Interview [JJ/MM/AA]: |__|__|/|__|__|/|__|__|
Nom de l'Interviewer:
_____
Nom du preneur de notes:
_____
Nom de toute autre personne présente lors de l'interview:
_____
Numéro de l'enregistreur & Emplacement du dossier:
_____
Heure du début de l'interview [HH:MM]: |__|__|:|__|__|
Heure de la fin de l'Interview [HH:MM]: |__|__|:|__|__|

PERSONNES INTERVIEWEES **Sexe, Age**

1 Nom(s): _____ **Rôle(s):** _____ **M / F** |__|__|
2 Nom(s): _____ **Rôle(s):** _____ **M / F** |__|__|
3 Nom(s): _____ **Rôle(s):** _____ **M / F** |__|__|
4 Nom(s): _____ **Rôle(s):** _____ **M / F** |__|__|

NOTE SUR LE CHOIX DES PERSONNES INTERVIEWEES: Veuillez convier à l'interview 2 à 4 membres des ASUFOR, AUA ou CG. Faites tout votre possible pour qu'il y ait une femme parmi les participants. Au cas où un comité n'existerait plus, veuillez-vous mettre en relation avec les anciens membres pour connaitre les raisons qui ont conduit à sa disparition.

NOTE: Le questionnaire consiste en une série de questions oui/non. Pour les réponses, veuillez trouver le consensus parmi le groupe. Si ce dernier ne parvient pas à un consensus pour répondre à une question précise, retenez la réponse qui a recueilli le plus d'avis favorables au sein du groupe, et faites mention dans vos notes de l'opinion divergente.

S'il existe au moins deux points d'eau PEPAM/USAID au sein de la communauté, axez vos questions sur un seul point d'eau et précisez le ID du point d'eau en question dans la rubrique concernée susmentionnée.

VOUS DEVEZ LIRE LA DECLARATION DE CONSENTEMENT A TOUTES LES PERSONNES INTERVIEWEES ET AVOIR LEUR ACCORD AVANT DE COMMENCER L'INTERVIEW

GOUVERNANCE		
A56.	Quand votre comité a-t-il été mis en place ? [AAAA]	[2] |__|__|__|__|
A57.	Est-ce pendant la période d'activité du PEPAM/USAID, notamment entre 2009 et 2014?	[3] OUI [4] NON
A58.	Quelles sont les attributions de chaque membre de votre comité, et de quel sexe sont-ils? Dites-moi s'il-vous-plaît s'il y a un poste qui n'a pas été pourvu?	
	Poste	Sexe
		[3] Masculin [4] Féminin
		[3] Masculin [4] Féminin
		[3] Masculin [4] Féminin
		[3] Masculin [4] Féminin
		[3] Masculin [4] Féminin
		[3] Masculin [4] Féminin
		[3] Masculin [4] Féminin
		[3] Masculin [4] Féminin
		[3] Masculin [4] Féminin
		[3] Masculin [4] Féminin
A59.	À quelle fréquence vous réunissez-vous en comité?	[6] Deux fois par mois [7] Une fois par mois [8] Une fois par trimestre [9] Au besoin [10] Jamais [77] Autres, _____ [99] Ne sais pas
A60.	La fréquence des réunions varie-t-elle?	[3] OUI [4] NON

	Si oui, pourquoi ?	
A61.	Est-ce en accordance avec votre règlement intérieur?	[3] OUI [4] NON
A62.	Avez-vous déjà tenu, chaque trimestre, au moins trois réunions publiques avec les membres de la communauté pour aborder les questions liées à l'usage de l'eau et prendre des décisions?	[4] OUI [5] NON [6] [99] NE SAIS PAS
A63.	Détenez-vous des procès-verbaux pour ces trois réunions trimestrielles?	[3] OUI [4] NON
A64.	SI OUI, DEMANDEZ A VOIR LES PROCES-VERBAUX EN QUESTION (QU'ILS SOIENT PUBLICS OU CONFIDENTIELS), ET S'ILS CEUX DE L'ANNEE PASSEE, FAITES EN MENTION ICI.	[3] OUI [4] NON
A65.	SI NON, POURQUOI PAS?	
A66.	Les procès-verbaux ont-ils été publiés, ou ont-ils d'une certaine manière été mis à la disposition du public ?	[3] OUI [4] NON [99] NE SAIS PAS
A67.	Comment, si tel est le cas, votre comité s'intègre-t-il dans la structure gouvernementale d'approvisionnement en eau? 4. QUESTION DE SUIVI: quelles sortes d'interactions existent-il entre vous et les différentes structures des collectivités locales (par exemple, les centres de santé communautaire, les services d'hygiène régionaux, les brigades d'hygiène? 5. QUESTION DE SUIVI: Quels sont les défis auxquels vous êtes confrontés et qui sont liés aux interactions avec les différentes structures des collectivités locales? 6. QUESTION DE SUIVI: Qu'est ce qui marche le mieux dans ces interactions ?	
A68.	Pouvez-vous parler de la participation des femmes aux structures de gestion et de gouvernance du comité auxquelles le PEPAM/USAID a apporté son soutien? 3. QUESTION DE SUIVI: Dans quelle mesure les femmes concernées participent-elles activement au débat pendant les réunions? 4. QUESTION DE SUIVI: Quels sont à votre avis les facteurs qui affectent la participation des femmes (positivement ou négativement?	

A69.	Connaissez-vous les Plans locaux d'hydraulique et d'assainissement (PLHA) qui ont été mis en place sous le PEPAM/USAID? Si oui, est ce que vous vous en êtes déjà servis dans votre travail. 1. QUESTION DE SUIVI: Si oui, nous les avons utilisés, à quoi ont-ils servi ? 2. QUESTION DE SUIVI: Pourquoi, Si non, pourquoi pas, Quand avez-vous arrêté de les utiliser ?	[3] OUI [4] NON
A70.	Quelle formation ou soutien avez-vous reçu(e) dans le cadre des activités du PEPAM/USAID? 2. QUESTION DE SUIVI: Est-ce que vous continuez d'utiliser les conseils, documents, manuels que vous avez reçus dans le cadre de cette formation ?	
FINANCEMENT/FRAIS D'UTILISATION		
A71.	Est que vous suivez toujours les pratiques financières (le système de collecte des frais d'utilisation, par exemple) préconisées par le PEPAM/USAID, le Gouvernement du Sénégal et ses partenaires?	[3] OUI [4] NON
A72.	Quelles sont les sources de financement dont dispose le comité? 3. QUESTION DE SUIVI sur les potentielles sources de financement: frais d'utilisation, gouvernement, membres de la communauté. 4. QUESTION DE SUIVI: Combien recevez-vous des différentes sources de financement ?	
A73.	S'il existe des frais d'utilisation du (es) point (s) d'eau PEPAM/USAID, veuillez en faire une description. 3. QUESTION DE SUIVI: Comment sont ces frais comparer à d'autres pratiqués au sein de la communauté ou dans d'autres communautés environnantes? 4. QUESTION DE SUIVI: Si les frais d'utilisation ne sont pas collectés, pourquoi en est-il ainsi ?	[5] Frais annuels: _____ [6] Frais mensuels: _____ [7] Frais par utilisation: _____ par récipient de 10 litres, de 20L/autres (les inscrire ici): _____ [8] Autre type de frais (en faire une description): _____
A74.	Dans quelle mesure les gens s'acquittent-ils réellement des frais qu'ils sont tenus de payer? 2. QUESTION DE SUIVI: Si vous en avez connaissance, quel est le taux de recouvrement des frais ?	
A75.	Dans quelle mesure les frais perçus couvrent-ils les coûts réels d'entretien et de réparation du système d'approvisionnement en eau? 1. QUESTION DE SUIVI: S'il y a un déficit de financement, quel est son ampleur?	

	2. QUESTION DE SUIVI: Comment faites-vous pour combler ce déficit?	
A76.	Avez-vous gardé les traces des factures de paiement de ces frais? Pouvons-nous les consulter? S'ILS SONT D'ACCORD, VEUILLEZ PRENDRE UNE PHOTO DE CES FACTURES.	[5] OUI [6] NON [7] REFUS [8] AUTRES, _____
FONCTIONNEMENT, ENTRETIEN ET RÉPARATIONS		
A77.	Quelle évaluation faites-vous de la fiabilité du point d'eau?	[5] Très fiable [6] Fiable [7] Assez fiable [8] Pas fiable [99] Ne fonctionne pas
	Pourquoi? 1. QUESTION DE SUIVI: le point d'eau fournit-il de manière régulière une eau potable? Pourquoi? Si non Pourquoi pas?	
A78.	Qui est responsable du suivi et de l'entretien pour le bon fonctionnement de ce point d'eau? 3. QUESTION DE SUIVI : demandez aux interviewés de se prononcer sur les difficultés liées à l'entretien du point d'eau. 4. QUESTIONS DE SUIVI liées à la sécurité et à la clôture du point d'eau.	
A79.	Quel rôle, s'il y en a un, les différentes structures des collectivités locales jouent-elles dans les initiatives d'appui aux points d'eau? 1. QUESTION DE SUIVI: Quelles structures jouent ce rôle, et quel est-il exactement?	
A80.	Quelle est la fréquence des réparations nécessaires au bon fonctionnement des points d'eau? Quels sont les problèmes les plus récurrents? 1. QUESTION DE SUIVI: Existe-t-il des différences entre les points d'eau PEPAM et les autres?	
A81.	Continuez-vous à travailler avec les entreprises privées qui ont été mises en place sous le PEPAM/USAID?	[4] OUI [5] NON [6] N'EN AVONS JAMAIS EU [99] NE SAIS PAS
A82.	1. QUESTION DE SUIVI: Pourquoi, Si non, pourquoi pas? 2. QUESTION DE SUIVI: Avez-vous un contrat de maintenance avec un prestataire de services privé local?	

A83.	Est-ce que l'on peut voir les contrats que vous avez avec des structures ou entreprises privées de maintenance? S'ILS ACCEPTENT, VEUILLEZ EN PRENDRE UNE PHOTO.	[3] OUI [4] NON
A84.	SI OUI, combien de contrats existe-il, et avec quelles structures de maintenance? SI NON, en avaient-ils déjà eu, et pourquoi ils n'en ont pas à l'heure actuelle.	
A85.	Quels sont les principaux défis auxquels vous êtes confrontés en voulant assurer à tout moment le bon fonctionnement du point d'eau?	
CARACTÉRISTIQUES DU POINT D'EAU (REMPLIR LES ESPACES VIDES OU ENCERCLER LES REPONSES) Dites : parlons maintenant d'un point d'eau spécifique PEPAM/USAID que vous gérez :		
A86.	A quelle période, sous PEPAM/USAID, le point d'eau a-t-il été construit ou réhabilité? [AAAA]:	|__|__|__|__| [99] NE SAIS PAS
A87.	Qui l'a construit?	_____ [99] NE SAIS PAS
A88.	Le point d'eau a-t-il été entièrement réhabilité depuis sa construction ou réhabilitation sous PEPAM/USAID?	[3] OUI [4] NON [99] NE SAIS PAS
A89.	Qui l'a réhabilité?	_____ [99] NE SAIS PAS
A90.	En quelle année le point d'eau a-t-il été réhabilité? [AAAA]	|__|__|__|__| [99] NE SAIS PAS
A91.	Pourquoi a-t-il été réhabilité? 1. QUESTION DE SUIVI: veuillez parler du pourquoi de la réhabilitation du point d'eau, et du processus de réhabilitation, depuis moment où il a cessé de fonctionner au moment où il a été réhabilité et a recommencé à fonctionner à nouveau.	
UTILISATION DE L'EAU. **DITES : veuillez donner votre meilleure estimation pour ce qui suit:**		
A92.	Combien de ménages utilisent ce point d'eau? (donnez une estimation si vous n'est pas sûr d'avoir un chiffre exact):	|__|__|__|__|
A93.	Quel est en général le temps d'attente des personnes qui viennent chercher de l'eau?	|__|__| MINUTES
A94.	Dans quelle mesure les membres de la communauté utilisent-ils ce point d'eau par rapport à d'autres?	

	1. QUESTION DE SUIVI: Quelle utilisation font-il de cette eau ? Pourquoi ? 2. QUESTION DE SUIVI: Quelle utilisation font-il de l'eau tirée d'autres sources? Pourquoi ? 3. QUESTION DE SUIVI: comment trouvez-vous ce point d'eau comparé à d'autres que l'on retrouve dans votre communauté?	
QUANTITE DE L'EAU		
A95.	Quels que soient les points d'eau qu'ils utilisent, les gens sont-ils en mesure de satisfaire pleinement leurs besoins en eau? 1. QUESTION DE SUIVI: Pourquoi; Si non, pourquoi pas ?	[3] OUI [4] NON [99] NE SAIS PAS
A96.	De manière générale, la quantité d'eau que génère ce point d'eau est-elle suffisante toute l'année?	[3] OUI [4] NON [99] NE SAIS PAS
	1. QUESTION DE SUIVI: Dans quelles circonstances ou quand est-ce que la quantité d'eau générée est-elle insuffisante? Pourquoi? 2. QUESTION DE SUIVI: Quand, ou si cette quantité n'est pas suffisante, que font les gens? iii. Quelle distance les gens doivent-ils faire pour puiser de l'eau d'autres points d'eau? iv. Quels que soient les points d'eau qu'ils utilisent, les gens peuvent-ils obtenir suffisamment d'eau pour couvrir tous leurs besoins?	
QUALITE DE L'EAU		
A97.	Pensez-vous que l'eau de cette source est toujours potable?	[3] OUI [4] NON
	1. QUESTION DE SUIVI: Pourquoi ou Si non, pourquoi pas? 2. QUESTION DE SUIVI: Quelqu'un dans la communauté traite-t-il/elle l'eau qu'il/elle boit tirée de ce point d'eau? Si tel est le cas, comment? Traitent-ils l'eau qu'ils boivent tirée d'autres sources?	
A98.	À quelle fréquence, si tel est le cas, la qualité de l'eau de cette source est-elle mesurée?	[7] Au moins 12 fois par an [8] Au moins 4 fois par an [9] Plus d'une fois par an, mais moins de 4 fois. [10] Une fois par an [11] Moins d'une fois par an [12] La qualité de l'eau n'est pas analysée-> PASSEZ A LA RUBRIQUE A48.
A99.	Qui mesure la qualité de l'eau ?	
A100	Qu'est-ce que l'on mesure?	[5] E. COLI [6] ARSENIC [7] FLUORURE [8] FER

		[77] AUTRES, _____ [99] NE SAIS PAS
A101	Que se passe-t-il si le l'analyse de la qualité de l'eau révèle l'existence de valeurs hors normes (telles que la présence de bactéries fécales, des taux élevés de fluorure ou d'arsenic, etc.)? 1. QUESTION DE SUIVI: Qui est responsable du suivi?	
A102	Quel est selon vous le degré de satisfaction de la communauté par rapport à ce point d'eau?	[5] Très satisfait [6] Assez satisfait [7] Pas satisfait [8] Pas du tout satisfait
A103	Avez-vous gardé des traces de mesures de la qualité de l'eau qui ont déjà été réalisées.	[3] OUI [4] NON -> PASSEZ A LA RUBRIQUE **Q14**
INTERVIEWER: SI POSSIBLE, VEUILLEZ EN PRENDRE UNE PHOTO OU FAIRE UNE PHOTOCOPIE. FAITES UNE DESCRIPTION DES DOCUMENTS DISPONIBLES ET LES ANNEES POUR LESQUELLES CES DOCUMENTS SONT DISPONIBLES, LES CARACTERISTIQUES TESTEES, LA FREQUENCE DES TESTS (PAR EXEMPLE, PAR MOIS, PAR ANNEE), ETC. SI VOUS NE POUVEZ PAS PRENDRE DE PHOTO, REMPLISSEZ LE FORMULAIRE CI-DESSOUS.		
RÉFLEXION SUR LES CHANGEMENTS SURVENUS		
A104	Dans quelle mesure y a-t-il eu, au cours des dernières années, notamment depuis la construction/réhabilitation du point d'eau PEPAM/USAID, des changements dans la manière dont le comité gère le système d'approvisionnement en eau? 1. QUESTION DE SUIVI: Comment cela a-t-il changé? 2. QUESTION DE SUIVI: cela a-t-il changé en bien ou en mal?	
A105	Depuis que le système d'approvisionnement en eau a été construit/réhabilité sous PEPAM/USAID, un autre groupe extérieur est-il venu améliorer un AUTRE point d'eau ou effectuer un autre travail dans le domaine de l'eau et de l'assainissement au sein de votre communauté? Si oui, quand cela a-t-il eu lieu et qu'ont-ils fait de manière concrète?	
A106	Y aurait-il autre chose dont vous aimeriez parler avec moi par rapport au point d'eau ou l'organisation qui l'a mis en place?	[3] OUI [4] NON
A107	**A108.** Depuis 2009, y a-t-il eu de graves évènements/problèmes dans votre région (par exemple, grande sécheresse, violence/insécurité, catastrophe naturelle (inondations, tremblement de terre), instabilité politique, etc.) qui ont eu un impact négatif sur votre communauté? a. POUR PLUS DE PRECISION: veuillez parler de ces évènements ou problèmes et leur impact sur votre communauté.	
A109	Auriez-vous des questions à nous poser?	[3] OUI [4] NON

N'oubliez pas de noter l'heure de la fin de l'interview !

10. MINI-enquête auprès des ménages et observations structurées

MODULE A: INFORMATIONS SUR L'EMPLACEMENT ET LE CONSENTEMENT DES MÉNAGES		
A15.	DATE DE L'OBSERVATION (JJ/MM/AA)	|__|__|/|__|__|/|__|__|
A16.	**Nom de la Région:**	[5] Kolda [6] Sédhiou [7] Tambacounda [8] Ziguinchor
A17.	**Nom de la Commune:**	
A18.	**Nom du Village:**	
A19.	**ID du Village:**	|__|__|__|
A20.	NOM DE L'ENQUETEUR N°1 : /_____/ /_____/ /_____/ (1er PRENOM) (2eme PRENOM) (NOM DE FAMILLE)	
A21.	NOM DE L'ENQUETEUR N°2 : /_____/ /_____/ /_____/ (1er PRENOM) (2eme PRENOM) (NOM DE FAMILLE)	
A22.	**Identité du ménage /de l'enquêté(e):**	|__|__|__|__|__|
A23.	LISEZ LA DECLARATION DE CONSENTEMENT A LA FEMME CHEF DE MENAGE. LE CHEF DE MENAGE A-T-IL Donné SON CONSENTEMENT?	[3] SI LA REPONSE EST OUI→ PROCEDEZ A LA MINI-ENQUETE ET A L'OBSERVATION [4] SI LA REPONSE EST NON → NE FAITES NI D'ENQUETE, NI D'OBSERVATION
A24.	Depuis combien de temps vivez-vous dans ce village?	|__|__| MOIS |__|__| ANNEES
A25.	NOTE: LES PERSONNES INTERESSEES, SE SONT-ELLES INSTALLEES DANS LE VILLAGE AU COURS DES QUATRE DERNIERES ANNEES?	[4] AVANT 2014 [5] SI ELLES SONT LA DEPUIS MOINS DE 4 ANS OU APRES 2014 → NE FAITES PAS D'OBSERVATION
A26.		ID DU WAYPOINT: |__|__|__|

	RELEVEZ DE NOUVELLES COORDONNEES GPS EN CREANT UN NOUVEAU POINT DE CHEMINEMENT (WAYPOINT). ATTENDEZ, SI POSSIBLE, D'AVOIR UNE PRECISION D'AU MOINS 10 METRES.	[6] N °|__|__|. |__|__|__|__|__| E °|__|__|__|. |__|__|__|__|__|

MODULE B: MINI-ENQUETE AUPRES DES MENAGES			
B41.	DE QUEL SEXE EST LA PERSONNE AVEC LAQUELLE VOUS VOUS ENTRETENEZ?		[3] MASCULIN [4] FEMININ
B42.	Quel âge avez-vous?		|__|__|
B43.	Etes-vous le chef de ménage? Si non, quel est votre lien avec le chef de ménage		[1] Oui → Passer à la rubrique B5 [3] Non
B44.	Quelle est votre lien avec le chef de ménage? A LIRE A L'ENQUETE (E): Un ménage est défini comme étant un individu ou un groupe d'individus qui, en général, vivent et mangent ensemble.		[1] Epoux (se) [2] Tante/Oncle [3] Sœur/Frère [4] Enfant [5] Aucun lien [6] Parents [77] Autres_____
QUESTIONS LIEES A L'EAU UTILISEE PAR LE MENAGE			
DIRE	Merci beaucoup. J'aimerais maintenant vous poser quelques questions sur l'eau que vous et votre famille buvez à la maison.		
	POSEZ A L'ENQUETE(E) LES QUESTIONS SUIVANTES RELATIVES A SES SOURCES PRIMAIRES ET SECONDAIRES D'APPROVISIONNEMENT EN EAU. DEMANDEZ-LUI D'ABORD QUELLES SONT LES SOURCES PRIMAIRES (COLONNE A, JUSQU'A LA RUBRIQUE B8), ET ENSUITE LES SOURCES SECONDAIRES (COLONNE B).		
B45.		C. SOURCE PRIMAIRE	D. SOURCE SECONDAIRE
	Quelle est la principale source d'approvisionnement en eau potable des personnes faisant partie	**<u>EAU COURANTE</u>** [14] EAU COURANTE A DOMICILE [15] EAU COURANTE ALIMENTANT LA COUR OU LA PARCELLE	**<u>EAU COURANTE</u>** [1] EAU COURANTE A DOMICILE [2] EAU COURANTE ALIMENTANT LA COUR OU LA PARCELLE [3] FONTAINE PUBLIQUE/BORNE-FONTAINE [4] PUITS Tubé ou PUITS Foré (FORAGE)

	de votre ménage?	[16] FONTAINE PUBLIQUE/BORNE-FONTAINE [17] PUITS Tubé ou PUITS Foré (FORAGE) **PUITS Creusé** [18] PUITS Protégé [19] PUITS Non Protégé ***EAU PROVENANT D'UNE SOURCE*** [20] SOURCE PROTEGEE [21] SOURCE NON PROTEGEE **AUTRES** [22] EAU DE PLUIE [23] EAU LIVREE PAR CAMION-CITERNE [24] CHARRETTES SURMONTEES D'UN PETIT RESERVOIR [25] EAU DE SURFACE (FLEUVE, RESERVOIR, LAC, ETANG, RUISSEAU, CANAL, CANAL D'IRRIGATION) [26] EAU EN BOUTEILLE [77] AUTRES_____ [99] NE SAIS PAS	**PUITS Creusé** [5] PUITS Protégé [6] PUITS Non Protégé ***EAU PROVENANT D'UNE SOURCE*** [7] SOURCE PROTEGEE [8] SOURCE NON PROTEGEE **AUTRES** [9] EAU DE PLUIE [10] EAU LIVREE PAR CAMION-CITERNE [11] CHARRETTES SURMONTEES D'UN PETIT RESERVOIR [12] EAU DE SURFACE (FLEUVE, RESERVOIR, LAC, ETANG, RUISSEAU, CANAL, CANAL D'IRRIGATION) [13] EAU EN BOUTEILLE [77] AUTRES_____ [99] NE SAIS PAS
B46.	Quelle utilisation faites-vous de l'eau tirée de cette source ? ENCERCLER TOUTES LES REPONSES QUI S'APPLIQUENT	[9] Pour boire [10] Pour faire la cuisine [11] Pour faire le linge [12] Pour se laver [13] Pour se laver les mains [14] Pour les tâches ménagères [15] Pour irriguer un jardin ou s'adonner à diverses activités agricoles [16] Pour abreuver le bétail [77]Autres, _____	[2] Boire→ Passer à la rubrique B9 [3] Faire la cuisine→ Passer à la rubrique B9 [4] Faire le linge→ Passer à la rubrique B9 [5] Se laver→ Passer à la rubrique B9 [6] Se laver les mains→ Passer à la rubrique B9 [7] Faire les tâches ménagères→ Passer à la rubrique B9 [8] Arroser un jardin ou s'adonner à diverses activités agricoles→ Passer à la rubrique B9 [9] Abreuver le bétail→ Passer à la rubrique B9

			[10] [77]Autres, _____→ Passer à la rubrique B9
B47.	Combien e temps vous faut-il pour aller puiser de l'eau et revenir ? PAR EXEMPLE, UN ALLEZ-RETOUR ENTRE LA MAISON ET LE POINT D'EAU. CHOISISSEZ **UNE SEULE** REPONSE		[3] |__|__| MINUTES [4] |__|__| HEURES [99] NE SAIS PAS
B48.	Combien de fois par jour vous faut-il aller au point d'eau pour avoir assez d'eau pour tous vos besoins ?		[5] Une fois par jour [6] 2 fois par jour [7] 3 à 4 fois par jour [8] 5 fois par jour [77] Autres_____
B49.	Vous arrive-t-il de temps à autre de tirer de l'eau d'autres points d'eau? D'UNE SOURCE D'EAU SECONDAIRE, PAR EXEMPLE ?		[3] SI OUI → RETOURNEZ A LA RUBRIQUE B5, A LA COLONNE B (SOURCE SECONDAIRE) [4] NON
B50.	Faites-vous quelque chose pour rendre l'eau que vous buvez moins trouble ou plus sûre à la consommation?		[11] OUI [12] NON → PASSEZ A LA RUBRIQUE B12 [99] NE SAIS PAS→ PASSEZ A LA RUBRIQUE B12
B51.	Quelles sont la (les) méthode(s) que vous avez utilisée(s) (NE LES ENUMEREZ PAS, ENCERCLER TOUTES CELLES QUI S'APPLIQUENT)		
a.	CHLORATION (CHLORE EN BOUTEILLE)		[1]
b.	TRAITEMENT DE L'EAU PAR EBULLITION		[1]
c.	FILTRAGE PAR TISSU OU AUTRE MATERIAU		[1]
d.	UTILISATION D'AUTRES TYPES DE FILTRE (FILTRE EN CERAMIQUE, FILTRE A SABLE, FILTRE COMPOSITE)		[1]
e.	DESINFECTION SOLAIRE (Méthode SODIS)		[1]
f.	DECANTATION DE L'EAU EN LA LAISSANT AU REPOS		[1]
g.	FILTRATION BIO-SABLE		[1]
h.	UTILISATION D'UN COAGULANT (par exemple, LE SULFATE D'ALUMINE)		[1]

i.	UTILISATION DE PRODUITS CHIMIQUES DE FLOCULATION ET DE DESINFECTION (TECHNOLOGIE PUR)	[1]
j.	UTILISATION D'AQUATABS	[1]
k.	CHLORATION DE L'EAU PROVENANT D'UNE SOURCE	[1]
QUESTIONS LIEES A L'HYGIENE		
B52.	Pouvez-vous s'il-vous-plaît me montrer l'endroit où les personnes faisant partie de votre ménage se lavent le plus souvent les mains?	[8] INSTALLATION FIXE OBSERVEE (LAVABO, ROBINET) [9] DANS LE LOGEMENT [10] DANS LA COUR OU DANS LA PARCELLE [11] STATION FIXE DE LAVAGE DES MAINS, par exemple, dispositif lave-mains Tippy Tap [12] OBJETS MOBILES Observés (SEAU SERVANT DE CUVETTE DE TOILETTES/BOCAL/CRUCHE/ BOUILLOIRE) [13] ABSENCE D'INSTALLATION DE LAVAGE DES MAINS A L'INTERIEUR DE LA MAISON, DANS LA COUR OU DANS LA PARCELLE → PASSEZ A LA RUBRIQUE B17 [14] AUTORISATION DE VISITER LES LIEUX NON ACCORDEE [77]AUTRES, _____ → PASSEZ A LA RUBRIQUE B17
B53.	OBSERVEZ L'INSTALLATION DE LAVAGE DES MAINS 5 METRES OU 10 PAS ENCERCLER TOUTES LES REPONSES QUI S'APPLIQUENT	[4] A L'INTERIEUR OU PRES DU PRINCIPAL ESPACE CUISINE (MOINS DE 5 METRES DE L'ENTREE) [5] A L'INTERIEUR OU PRES DES LATRINES (MOINS DE 5 METRES DE L'ENTREE) [6] ABSENCE D'INSTALLATION SPECIFIQUE DE LAVAGE DES

		MAINS, PLUSIEURS SITES Utilisés A CET EFFET
B54.	OBSERVER LES MATERIAUX ET LES PRODUITS SUR PLACE ENCERCLER TOUTES LES REPONSES QUI S'APPLIQUENT S'IL N'Y A PAS D'INSTALLATION DE LAVAGE DES MAINS, ET QUE LE DISPOSITIF PRESENT CONSISTE EN UNE CUVETTE, RELEVER LES MATERIAUX ET LES PRODUITS QUE L'ON RETROUVE DANS LA CUVETTE OU DANS LA CRUCHE. REMARQUE: LE SAVON PEUT ÊTRE SOUS FORME DE BARRE, DE POUDRE OU LIQUIDE. LE SHAMPOOING SERA CONSIDÉRÉ COMME SAVON LIQUIDE.	[8] EAU [9] BARRE DE SAVON [10] SAVON LIQUIDE [11] SAVON EN POUDRE [12] EAU SAVONNEE [13] CENDRE [14] AUCUN MATERIAU OU PRODUIT [77] AUTRES (VEUILLEZ PRECISER): _____
B55. .	S'IL Y A BEL ET BIEN UN DISPOSITIF DE LAVAGE DES MAINS, EXISTE-IL DES INDICES QUI LAISSENT PENSER QUE DES PERSONNES S'Y SONT Lavé LES MAINS AUJOURD'HUI. PAR EXEMPLE, LE SOL DE L'INSTALLATION EST ENCORE Mouillé OU BIEN LE SAVON Utilisé EST AUSSI Mouillé.	[3] OUI [4] NON
B56.	OBSERVEZ S'IL EXISTE UNE STATION FIXE DE LAVAGE DES MAINS. LE DISPOSITIF DE LAVAGE DES MAINS FONCTIONNE-T-ELLE TOUJOURS? ESSAYEZ DE L'UTILISER REPONDEZ OUI SI VOUS PARVENEZ A VOUS Y LAVER LES MAINS. REPONDEZ NON SI VOUS N'Y PARVENEZ PAS	[3] OUI [4] NON
B57.	Les personnes faisant partie de votre ménage, se lavent-elles les mains avec du savon? (Veuillez expliquer que nous faisons référence au lavage des mains avec utilisation du savon et non à	[3] OUI [4] NON → PASSEZ A LA RUBRIQUE B23

	d'autres cas où ces personnes pourraient se rincer les mains dans un bol commun).	
B58.	Pourriez-vous s'il-vous-plait me dire quand est-ce que vous vous lavé les mains ? NE PAS ENUMERER LES REPONSES	OUI
a.	AVANT DE FAIRE LA CUISINE	[1]
b.	AVANT DE MANGER	[1]
c.	AVANT DE NOURRIR UN ENFANT	[1]
d.	APRES AVOIR Nettoyé LES FESSES D'UN ENFANT, OU SON ANUS	[1]
e.	APRES AVOIR Utilisé LES TOILETTES OU APRES AVOIR Déféqué	[1]
f.	AUTRES (PRECISEZ) _____	[1]
B59.	En ce qui concerne dispositif de lavage des mains que vous utilisez le plus, elle est là depuis quand ? Quand est-ce qu'elle a été construite (s'il s'agit d'une installation fixe) ? CHOISIR UNE SEULE OPTION	[3] |__|__| ANNEES [4] |__|__|MOIS [99] NE SAIS PAS
B60.	Avez-vous eu besoin de la changer ?	[3] OUI [4] NON [99] NE SAIS PAS
B61.	Si tel a été le cas, quelles étaient les réparations nécessaires ?	[4] Aucune → Passer à la rubrique B23 [5] Réparation de la structure endommagée [6] Réparation du réservoir d'eau endommagé [77] Autres, _____
B62.	Qu'avez-vous fait quand vous avez eu des problèmes avec le dispositif de lavage des mains ?	[4] Nous ne l'avons pas réparée [5] Entretien ou Réparation effectué(e) par des personnes faisant partie du ménage ou de la famille [6] Construction d'une nouvelle station de lavage des mains [77] Autres, _____
DIRE	Je vous remercie d'avoir jusqu'ici participé à cette enquête. Je dois cependant vous avouer que la partie de l'enquête que nous allons maintenant aborder est un peu sensible. Je voudrais en fait	

	vous poser quelques questions sur les pratiques en matière d'assainissement des personnes vivant dans l'enceinte de votre maison. J'aimerais également faire quelques observations.	
QUESTIONS LIEES A L'ASSAINISSEMENT		
B63.	Quand une personne (de moins de 5 ans) faisant partie de ce ménage exprime le besoin de déféquer, ou est-ce qu'elle le fait le plus souvent ? NE PAS ENUMERER LES OPTIONS DE REPONSES	[7] LATRINE [8] POT DE CHAMBRE/PETIT POT [9] COUCHE [10] DANS LA MAISON [11] DANS L'ENCEINTE DE LA MAISON [12] EN DEHORS DE L'ENCEINTE DE LA MAISON [77]AUTRES, _____ [99] NE SAIS PAS
B64.	Quand une personne (de plus de 5 ans) faisant partie de ce ménage exprime le besoin de déféquer, ou est-ce qu'elle le fait le plus souvent ? NE PAS ENUMERER LES OPTIONS DE REPONSES	[6] LATRINE Privée [7] LATRINE PUBLIQUE [8] EN PLEIN AIR OU DANS LES CHAMPS [9] DANS LA MAISON [10] DANS L'ENCEINTE DE LA MAISON [77]AUTRES, _____ [99] NE SAIS PAS
B65.	Votre ménage, dispose-t-il d'une latrine en cours d'utilisation ? S'ILS DISPOSENT D'AU MOINS DEUX LATRINES, REFEREZ-VOUS A CELLE QU'ILS UTILISENT LE PLUS SOUVENT.	[3] OUI [4] NON → PASSER A LA RUBRIQUE B38 [99] NE SAIS PAS → PASSER A LA RUBRIQUE B39
B66.	Ou se trouve la latrine en question ?	[4] DANS LA MAISON MEME [5] DANS L'ENCEINTE MEME DE LA MAISON (DANS LA COUR OU DANS LA PARCELLE) [6] AILLEURS
B67.	Partagez-vous cette installation avec d'autres personnes ne faisant pas partie de votre ménage?	[3] OUI → PASSER A LA RUBRIQUE B32 [4] NON
B68.	Quand est-ce que vous avez construit votre toute première latrine dans ce ménage ?	[4] |__|__| ANNEE DE CONSTRUCTION [5] IL Y A |__|__| ANS [6] IL Y AVAIT DEJA UNE LATRINE DANS LA MAISON QUAND NOUS SOMMES Arrivés [99] NE SAIS PAS
B69.	Combien d'années se sont écoulées depuis la construction de la présente latrine ?	|__|__| ANNEES |__|__|MOIS

		[99] NE SAIS PAS/ PAS CERTAIN
B70.	Qui a construit la latrine dont vous disposez actuellement ?	[4] Maçon qualifié [5] Famille/parent [6] Collaboration entre la famille et un maçon. [77] Autres, _____
B71.	Votre ménage, a-t-il reçu une aide quelconque (subvention) de la part de _____ [Nom de l'agence d'exécution locale du PEPAM ou de l'USAID) pour construire une latrine? Veuillez fournir une explication sur les réunions visant à mettre sur pied des initiatives de déclenchement de L'ATPC, sur les subventions, ou les deux à la fois.	[3] OUI [4] NON
B72.	Combien de personnes (y compris les enfants) utilisent cette latrine ?	|__|__| PERSONNES
B73.	Au cours des quatre dernières années, avez-vous eu les problèmes suivants relatifs à l'entretien ou à la réparation de votre latrine ? ENUMEREZ LES PROBLEMES SUIVANTS A HAUTE VOIX	YES: NO
a.	La fosse était pleine	[1] [2]
b.	La dalle était endommagée	[1] [2]
c.	Le couvercle était endommagé	[1] [2]
d.	Le tuyau de ventilation était endommagé	[1] [2]
e.	Réparation du mur	[1] [2]
f.	Réparation du toit	[1] [2]
g.	Autres,	_____
B74.	Parmi ces problèmes auxquels vous avez pu être confrontés, lequel a été le plus grave?	[7] Fosse pleine [8] Dalle endommagée [9] Couvercle endommagé [10] Tuyau de ventilation endommagé [11] Réparation du mur [12] Réparation du toit [77] Autres, _____

B75.	Quand ce grave problème est survenu, notamment_____ (il s'agit de la réponse à la question posée à la rubrique B33), comment avez-vous réagi ?	[6] N'AVONS PAS PU REGLER LE PROBLEME→ PASSEZ A LA RUBRIQUE B38 [7] ENTRETIEN /REPARATION EFFECTUE(E) PAR LE MENAGE OU UN MEMBRE DE LA FAMILLE→ PASSEZ A LA RUBRIQUE B38 [8] AVONS EU RECOURS A UN MAÇON POUR REGLER LE PROBLEME [9] AVONS DU REMPLACER LA LATRINE [10] [77] AUTRES, _____
B76.	Comment avez-vous eu connaissance de cette personne ?	[5] A TRAVERS LE PEPAM OU L'USAID [6] DE BOUCHE EN OREILLE [7] A TRAVERS LES RESPONSABLES COMMUNAUTAIRES [8] A TRAVERS LE COMITE DE GESTION DE L'ASSAINISSEMENT [77] AUTRES, _____
B77.	La personne qui a effectué la réparation a-t-elle réglé le problème ?	[3] OUI [4] NON [77] AUTRES, _____
B78.	Pourquoi n'avez-vous pas de latrine en ce moment ? ENCERCLER TOUTES LES REPONSES QUI S'APPLIQUENT	[4] L'ANCIENNE LATRINE NE FONCTIONNE PLUS [5] MANQUE DE MOYENS FINANCIERS [6] MANQUE DE MATERIAUX [77] AUTRES, _____
DEFECATION EN PLEIN AIR/A L'AIR LIBRE (ODF)		
B79.	Connaissez-vous d'autres membres de la communauté qui font leurs besoins en plein air, qui par exemple n'utilisent pas de latrines ?	[4] J'en vois tous les jours [5] J'en vois de temps à autre [6] Je n'en ai jamais vu [99] Je ne sais pas
B80.	Quelles sont les raisons principales pour lesquelles certains membres de la communauté font leurs besoins en plein air (s'adonnent à la défécation en plein air)?	

	ENCERCLER TOUTES LES REPONSES QUI S'APPLIQUENT. NE PAS LES EMUNERER	
a.	N'ONT PAS LE CHOIX (N'ONT RIEN D'AUTRE A LEUR DISPOSITION)	[1]
b.	NE PEUVENT PAS SURVEILLER LES JEUNES ENFANTS QUAND ILS DEFEQUENT	[1]
c.	QUESTION D'HABITUDE OU DE ROUTINE	[1]
d.	PREFERENT FAIRE LEURS BESOINS DANS LA NATURE PLUTOT QUE D'UTILISER DES TOILETTES	[1]
e.	NE PARTAGENT PAS LES TOILETTES AVEC LES BEAUX-PARENTS	[1]
f.	QUESTION DE CONVENANCE	[1]
g.	POUR CAUSE DE MALADIE, DE DIARRHEE PAR EXEMPLE	[1]
h.	PARCE QUE LA LATRINE EST PLEINE	[1]
i.	PARCE QUE LA LATRINE NE FONCTIONNE PAS (MURS ET/OU PLANCHER Endommagés	[1]
j.	PAR PEUR DES LATRINES	[1]
k.	NE SAVENT PAS COMMENT UTILISER LES LATRINES	[1]
l.	TROP JEUNE POUR UTILISER LES LATRINES	[1]
m.	AUTRES 1	[77](PRECISEZ): _____
n.	AUTRES 2	[77] (PRECISEZ): _____

MODULE C: OBSERVATIONS STRUCTUREES DES LATRINES		
OBSERVATION DES LATRINES (NE PAS OBSERVER DE LATRINES PUBLIQUES)		
C8.	Votre ménage dispose-t-il d'une latrine en cours d'utilisation? Pourrais-je la voir? SI LE MENAGE DISPOSE D'AU MOINS DEUX LATRINES, VEUILLEZ OBSERVER CELLE QUI EST LE PLUS FREQUEMMENT UTILISEE	[5] OUI ILS DISPOSENT D'UNE LATRINE, POUVONS LA VOIR. [6] OUI ILS DISPOSENT D'UNE LATRINE, OBSERVATION NON AUTORISEE→ METTEZ FIN A L'OBSERVATION [7] OUI ILS DISPOSENT D'UNE LATRINE, MAIS PAS POSSIBLE DE

		L'OBSERVER→ METTEZ FIN A L'OBSERVATION [8] ILS NE DISPOSENT PAS DE LATRINE EN COURS D'UTILISATION→ METTEZ FIN A L'OBSERVATION
C9.	Ou se trouve la latrine ?	[4] DANS L'ENCEINTE DE LA MAISON [5] JUSTE EN DEHORS DE L'ENCEINTE DE LA MAISON (à moins de 5 Mètres) [6] EN DEHORS DE L'ENCEINTE DE LA MAISON (à plus de 5 mètres)

C10. OBSERVATION: NOTEZ LE TYPE, L'ETAT ACTUEL ET L'UTILISATION APPARENTE DES TOILETTES OU DES LATRINES. SI VOUS N'ETES PAS EN MESURE DE LES OBSERVER OU D'EN PARLER, COCHEZ LA CAGE «99».

	OBSERVATIONS A L'EXTERIEUR:	**OUI**	**NON**	**NSP**
a.	TROIS MURS AU MOINS ENTOURENT LES TOILETTES	[1]	[2]	[99]
b.	PORTE OU RIDEAU GARANTISSANT UNE INTIMITE AUX UTILISATEURS	[1]	[2]	[99]
c.	LA LATRINE A-T-ELLE UN TOIT?	[1]	[2]	[99]
d.	A-T-ELLE UN TUYAU DE VENTILATION	[1]	[2]	[99]
e.	LE CHEMIN QUI MENE AUX TOILETTES INDIQUE T-IL UNE UTILISATION REGULIERE (CHEMIN Dégagé, Usé, ETC.)	[1]	[2]	[99]
	OBSERVATIONS A L'INTERIEUR:	**OUI**	**NON**	**NSP**
f.	LA PORTE SE FERME-T-ELLE DE L'INTERIEUR	[1]	[2]	[99]
g.	LA TOILETTE DISPOSE-T-ELLE D'UNE DALLE (EN PLASTIQUE OU EN CIMENT)	[1]	[2]	[99]
h.	SEMELLES SURELEVEES AUTOUR DU TROU	[1]	[2]	[99]
i.	LA LATRINE SEMBLE-T-ELLE ETRE EN COURS D'UTILISATION (SELON VOTRE BON JUGEMENT)	[1]	[2]	[99]
j.	PRESENCE D'ODEUR DE MATIERES FECALES OU D'URINE DANS LA LATRINE	[1]	[2]	[99]

k.	DES SELLES SONT-ELLES VISIBLES SUR LA DALLE OU LE SOL ?	[1]	[2]	[99]
l.	LE TROU DE LA LATRINE EST-IL COUVERT ?	[1]	[2]	[99]
m.	DES MATÉRIAUX/PRODUITS POUR LE NETTOYAGE ANAL (PAPIER TOILETTE OU RECIPIENT D'EAU) SONT-ILS DISPONIBLES?	[1]	[2]	[99]
n.	PRESENCE DE PLUS DE TROIS MOUCHES	[1]	[2]	[99]
C11.	POUR OBSERVATION: LES ELEMENTS SUIVANTS EXISTENT-ILS DANS LA LATRINE POUR UNE LATRINE TYPE SANPLAT ENCERCLER TOUTES LES REPONSES QUI S'APPLIQUENT	[6] DALLE EN BETON AVEC REPOSE-PIEDS Surélevés [7] DALLE PLACEE SUR UNE PLATEFORME EXISTANTE [8] TROU EN FORME DE TROU DE SERRURE [9] COUVERCLE HERMETIQUE [10] AUCUN		
C12.	OBSERVATION D'UNE DOUBLE LATRINE VENTILEE (DLV) ENCERCLER TOUTES LES REPONSES QUI S'APPLIQUENT	[6] DOUBLE FOSSE [7] FOSSE CIRCULAIRE [8] HAUT DU TUYAU DE VENTILATION Fermé [9] DALLE FIXE [10] AUCUN		
C13.	POUR OBSERVATION : EXISTE-IL UNE STATION DE LAVAGE DES MAINS À 5 MÈTRES DE LA LATRINE (10 PAS)	[3] OUI [4] NON		
C14.	POUR OBSERVATION: DES MATIERES FECALES SONT-ELLES VISIBLES DANS L'ENCEINTE DE LA MAISON?	[3] OUI [4] NON		
PRENEZ DES PHOTOS DE LA LATRINE				

À REMPLIR AU MOMENT DE LA SAISIE DES DONNÉES SI LA VERSION PAPIER A ETE UTILISÉE SUR LE TERRAIN

DE.1 Cette enquête a-t-elle été saisie sur ordinateur sur le terrain? [1] OUI [2] NON

DE.2 Cette enquête a-t-elle été saisie sur ordinateur sur le terrain ET sur papier et partiellement sur ordinateur au bureau? [1] OUI [2] NON

DE.3 Cette enquête a-t-elle été saisie sur papier sur le terrain et ensuite sur ordinateur au bureau? [1] OUI [2] NON

DE.4 PERSONNE 1 ayant effectué la SAISIE DES DONNEES

NOM/ID _____ /|__|__|__|__|

DE.5 Date de SAISIE DES DONNEES par la PERSONNE 1 |__|__|/|__|__|/|__|__|__|_

DE.6 Commentaires sur la Saisie des données (Mettez vos initiales à côté des commentaires):

11. INTERVIEW DE GROUPE AVEC DES MEMBRES DE LA COMMUNAUTÉ SUR LES RÉSULTATS ET LES PRATIQUES WASH

Nom de la Région: 1) Kolda 2) Sédhiou 3) Tambacounda 4) Ziguinchor
Nom de la Commune: _____

Nom du Village: _____

ID du village: |__|__|__|

Lieu de l'Interview: _____
Date de l'Interview [JJ/MM/AA]: |__|__|/|__|__|/|__|__|
Nom de l'Interviewer:

_____
Nom du preneur de notes:

_____
Nom de toute autre personne présente lors de l'interview:

_____
Numéro de l'enregistreur & Emplacement du dossier:

_____
Heure du début de l'interview [HH:MM]: |__|__|:|__|__|
Heure de la fin de l'Interview [HH:MM]: |__|__|:|__|__|

NOTE DE RECRUTEMENT: Veuillez convier 2 à 4 membres de la communauté. Dans la mesure du possible, veuillez-vous assurer de la participation de femmes membres de la communauté.

NOTE: Si vous êtes dans un village avec une composante eau, tenez, si possible, l'entrevue près du point d'eau de manière à pouvoir le référencer.

PERSONNES INTERVIEWEES **Sexe, Age**

1 Nom(s): _____Rôle(s): _____ M / F |__|__|
Motif de sélection comme répondant d'une interview auprès d'informateurs clés (KII):

a. **Propriétaire d'une latrine soutenue par le projet**
b. **Personne ayant observé la collecte de l'eau à un point d'eau du projet**
c. **Personne ayant été orienté par le chef du village**
d. **Autres: _____**

2 Nom(s): _____Rôle(s): _____ M / F |__|__|
Motif de sélection comme répondant d'une interview auprès d'informateurs clés (KII):

a. **Propriétaire d'une latrine soutenue par le projet**
b. **Personne ayant observé la collecte de l'eau à un point d'eau du projet**
c. **Personne ayant été orienté par le chef du village**
d. **Autres: _____**

3 Nom(s): _____Rôle(s): _____ M / F |__|__|
Motif de sélection comme répondant d'une interview auprès d'informateurs clés (KII):

a. **Propriétaire d'une latrine soutenue par le projet**
b. **Personne ayant observé la collecte de l'eau à un point d'eau du projet**
c. **Personne ayant été orienté par le chef du village**
d. **Autres: _____**

4 Nom(s): _____Rôle(s): _____ M / F |__|__|

Motif de sélection comme répondant d'une interview auprès d'informateurs clés (KII):

a. **Propriétaire d'une latrine soutenue par le projet**
b. **Personne ayant observé la collecte de l'eau à un point d'eau du projet**
c. **Personne ayant été orienté par le chef du village**
d. **Autres: _____**

VOUS DEVEZ LIRE LA DECLARATION DE CONSENTEMENT A TOUTES LES PERSONNES INTERVIEWEES ET AVOIR LEUR ACCORD AVANT DE COMMENCER L'INTERVIEW

Questions liées à l'eau

27. Selon vous, dans quelle mesure cette communauté a-t-elle un accès adéquat à des sources d'eau potable ?
    a. QUESTION DE SUIVI: Quels sont les points d'eau auxquels la communauté a accès ?

28. Avez-vous connaissance de points d'eau qui ont été réalisés dans le cadre de l'activité PEPAM/USAID_____partenaire local? 1) Oui 2) Non
    a. Si oui, comment sont-ils, en termes d'utilisation, par rapport à d'autres points d'eau dans votre communauté ?

29. Est-il fréquent de voir des gens dans votre communauté utiliser plusieurs points d'eau pour pouvoir subvenir à tous leurs besoins en eau ?
    a. QUESTION DE SUIVI: S'ils utilisent ou non plusieurs points d'eau. Demandez pourquoi.
    b. QUESTION DE SUIVI: S'ils utilisent plusieurs points d'eau, Quelle utilisation font-ils de cette multitude de points d'eau ?
    c. QUESTION DE SUIVI sur l'utilisation par les membres de la communauté de points d'eau PEPAM (si tel est le cas) par rapport à d'autres.

30. De votre point de vue, y a-t-il des points d'eau fournissant de l'eau potable ?
    a. QUESTION DE SUIVI: Si oui, lesquels. Le point d'eau PEPAM en fait-il partie ?

31. Selon vous, dans quelle mesure les ASUFOR, AUA/CG ont-elles bien géré les besoins en eau (en particulier l'eau potable) de leurs communautés ou circonscriptions ?
    e. QUESTION DE SUIVI: Pourquoi ont-elles été efficaces ou non?

f. QUESTION DE SUIVI sur le fonctionnement, l'exploitation et l'entretien des infrastructures, la bonne marche du système de collecte des frais d'utilisation, une plus grande sensibilité aux besoins de la communauté.

32. Dans quelle mesure, les femmes participent-elles dans les activités des ASUFOR, AUE, et CG?
    a. QUESTION DE SUIVI sur la gestion, la gouvernance, les rôles de leadership ?

33. La disponibilité de l'eau provenant du point d'eau varie-t-elle durant toute l'année ?
    a. QUESTION DE SUIVI: Si oui, pourquoi ?
    b. QUESTION DE SUIVI: Si oui, quel est l'ampleur des variations ?
    c. QUESTION DE SUIVI: Si Oui, comment vous parvenez à satisfaire vos besoins en eau ?

34. A-t-on relevé des problèmes liés au fonctionnement du point d'eau?
    a. QUESTION DE SUIVI: Si tel a été le cas, quels étaient ces problèmes?
    b. QUESTION DE SUIVI: comment c'est problèmes ont-ils été réglés et par qui ?

35. Combien payez-vous pour l'utilisation de ce point d'eau ou d'autres ?
    a. QUESTION DE SUIVI: dans quelle mesure ces frais d'utilisation sont-ils abordables pour vous et votre famille ?
    b. QUESTION DE SUIVI: tout le monde paye-t-il les mêmes frais ? Si non, pourquoi en est-il ainsi ?
36. Avez-vous autre chose sur ce point d'eau dont vous voudriez nous parler, ou quelque chose sur la manière dont il est géré ?

Questions liées à l'assainissement

37. Vous ou quelqu'un que vous connaissez, avez-vous construit une latrine avec l'aide (technique or financier) du projet PEPAM/USAID dont la mise en œuvre a coïncidé avec la construction de ce point d'eau.
    a. Si oui, pouvez-vous nous parler du processus, par exemple de la personne qui a construit la latrine (les propriétaires de la latrine, un ouvrier au niveau local, autres)?
    b. Si non, PASSEZ à la Question 15.

38. Quel soutien le projet a-t-il fourni pour la construction de latrines (subvention, assistance technique, etc.)?

39. De manière approximative, combien de personnes dans la communauté ont construit des latrines avec le soutien du projet ? Pourquoi les ont-ils construites ou non ?
    a. QUESTION DE SUIVI: Parmi les quatre approches proposées, lesquelles ont eu la préférence des populations et pourquoi ?

40. D'après vos souvenirs, quels aspects du soutien apporté à la communauté par le réalisateur du projet (si tel a été le cas) dans la construction de latrines avez-vous le plus aimés? Qu'est ce qui aurait pu être amélioré ?

41. Pensez à votre propre communauté, et dites-nous combien de ménages ont leurs propres latrines.
    a. La plupart
    b. Près de la moitié
    c. Moins de la moitié
    d. Très peu ou aucun ménage.

42. Quels sont les plus grands défis à vouloir convaincre les gens à utiliser les latrines de manière systématique ?
    a. QUESTION DE SUIVI: Que peut-on faire, si possible, pour relever ces défis ?
    b. QUESTION DE SUIVI: Si tel a été le cas, quelle stratégie du PEPAM/USAID a eu un impact (positif ou négatif) sur ces défis ?

43. Quel est le plus grand défi auquel vous êtes confronté si vous voulez convaincre les populations à construire, entretenir, et remplacer leurs propres latrines ?
    a. QUESTION DE SUIVI: Au sein de votre communauté, des latrines construites dans le cadre des activités du PEPAM/USAID ont-elles été maintenues ou ont–elles perduré?
    b. QUESTION DE SUIVI: Que peut-on faire, si possible, pour relever ces défis?

44. Pourquoi un ménage n'aurait pas sa propre latrine ? Quels sont les défis existants ?

45. Quand vous pensez à votre propre communauté, combien de fois selon vous d'autres personnes utilisent des latrines plutôt que d'aller dans les champs ou quelque part ailleurs ? Pourquoi ?
    a. Si les gens n'utilisent pas de latrines systématiquement, où d'autre vont-ils faire leurs besoins ?

46. Pour quelles raisons un membre de la communauté n'utiliserait-il toujours pas de latrines ?
    a. QUESTION DE SUIVI : Qu'est-ce que la communauté fait dans ce cas pour palier à cette situation ?

Questions liées à l'hygiène/au lavage des mains

47. Des stations de lavage des mains ont-elles été construites en même temps que les latrines dans le cadre des activités du projet PEPAM/USAID?
    a. Si oui, qu'en pensez-vous (pensiez-vous) ? Se sont-elles révélées utiles ?

48. Veuillez parler des stations de lavage des mains PEPAM/USAID?
    a. QUESTION DE SUIVI: Comment ont-elles été accueillies par la communauté ? Par exemple, les ont-elles construites ?
    b. QUESTION DE SUIVI: Les membres de la communauté utilisent-ils toujours le modèle PEPAM ? Et pourquoi ?
    c. QUESTION DE SUIVI: Parlez du remplacement des latrines et d'autres modèles.
    d. QUESTION DE SUIVI sur l'utilisation de détergent.

49. Quand vous pensez aux autres membres de la communauté, combien de fois selon vous les gens se lavent-ils les mains avec de l'eau et du savon ou de la cendre après avoir utilisé les

toilettes, avant de prendre un repas ou à d'autres moments critiques ou importants de la journée ?

a. QUESTION DE SUIVI: Pourquoi?
b. (en plus du pourquoi, demandez-leur aussi de choisir une réponse pour chaque catégorie)

   Apres avoir utilisé les toilettes
   i. La plupart du temps
   ii. Une partie du temps
   iii. Rarement/Jamais

   Avant de prendre un repas
   iv. La plupart du temps
   v. Une partie du temps
   vi. Rarement/Jamais

50. Selon vous, quelles composantes d'activités PEPAM/USAID (Changement de comportements, la réalisation des dispositifs de lavage des mains) ont eu un impact sur la durabilité des comportements en matière de lavage des mains avec du savon?

Questions d'ordre général/Questions finales

51. Depuis 2009, votre région a-t-elle connu de graves évènements ou problèmes qui ont eu un impact sur votre communauté (par exemple, la violence ou l'insécurité, des catastrophes naturels— inondations, tremblements de terre—, une instabilité politique, etc.?
    a. QUESTION DE SUIVI: veuillez parler de cet (ces) évènement(s) et leur impact sur votre communauté.

52. Avez-vous des questions que vous voudriez nous poser ?

N'oubliez pas de noter l'heure de la fin de l'interview!

12. CONTRÔLE QUALITÉ ENQUÊTE AUPRÈS DES USAGERS D'EAU

INSTRUCTIONS: PRÉSENTEZ-VOUS ET EXPLIQUEZ BRIÈVEMENT QUE VOUS RECUEILLEZ DES DONNÉES SUR LE CONTRÔLE DE LA QUALITÉ ET QUE VOUS VOULEZ LEUR POSER DES QUESTIONS SUR LA PERSONNE QUI EST VENUE LEUR PARLER ET QUELQUES QUESTIONS SUR L'EAU, L'ASSAINISSEMENT ET LE LAVAGE DES MAINS. S'ILS SONT D'ACCORD, LISEZ LE CONSENTEMENT COMPLET AVANT DE POURSUIVRE.		
MODULE A: CONTROLE QUALITE INFORMATION SUR L'EMPLACEMENT DES USAGERS ET LA COLLECTE DES DONNEES		
A26.	DATE DE L'ENQUETE (JJ/MM/AA)	|__|__|/|__|__|/|__|__|
A27.	HEURE DE L'ENQUETE: (format 24 heures, par exemple13:30)	|__|__|:|__|__|
A28.	NOM DU SUPERVISEUR: /_____/ /_____/ /_____/ (1er PRENOM) (2eme PRENOM) (NOM DE FAMILLE)	
A29.	**Nom de la Région:**	[9] Kolda [10] Sédhiou [11] Tambacounda [12] Ziguinchor
A30.	**Nom de la Commune:**	
A31.	**Nom du Village:**	
A32.	**ID du Village**	|__|__|__|
A33.	**ID du Point d'Eau**	|__|__|__|__|
A34.	EXPLIQUER LE PROCESSUS DE CONTRÔLE QUALITÉ LIRE LA DECLARATION DE CONSENTEMENT A L'enquêté(e) L'enquêté(e) A-T-IL/ELLE Donné SON CONSENTEMENT?	[5] Si OUI → COMMENCER L'ENQUETE [6] Si NON → NE FAITES PAS D'OBSERVATION
A35.	ID DE L'enquêté(e)	|__|__|__|__|

MODULE B: DONNEES DEMOGRAPHIQUES ET ENQUÊTE SUR L'EAU		
B73.	DE QUEL SEXE EST LA PERSONNE AVEC LAQUELLE VOUS VOUS ENTRETENEZ?	[5] MASCULIN [6] FEMININ

B74.	Quel âge avez-vous ?	[3] |__|__|
B75.	Quelqu'un est-il venu dans votre village pour vous parler du projet PEPAM/USAID (d'Atraxis) ?	[1] OUI [2] NON -> Sauter à **FIN DE L'ENQUETE**
B76.	Vous souvenez-vous du nom de la personne qui est venue dans votre village pour poser des questions sur le projet PEPAM/USAID?	1] OUI 2] NON -> Sauter à B6 [99] NE SAIT PAS -> Sauter à B6
B77.	Quel était leur nom?	/_____/ /_____/ (NOM 1) (NOM DE FAMILLE) [99] NE SAIT PAS
B78.	Leur avez-vous donné la permission de vous parler ?	[1] OUT SAUTER à B8 [2] NON
B79.	Si non, pourquoi pas?	[1] _____ [2] **FIN DE L'ENQUETE**
B80.	Combien de temps sont-ils restés et vous ont-ils parlé?	[1] 0-30 minutes [2] 31-60 minutes [3] Plus d'une heure 77] Autre_____ [99] Ne sait pas
B81.	Pendant combien de temps environ sont-ils restés dans votre village?	1] 1 heure 2] 2 heures 3] 3 heures 4] 4 heures 5] 5 heures ou plus [3] [99] Ne sais pas
UTILISATION DE L'EAU		
B82.	Où se trouve la source d'eau dont vous avez parlé avec la personne d'Atraxis ?	1] DANS SON PROPRE LOGEMENT 2] DANS SA PROPRE COUR/ PARCELLE DE TERRAIN 3] PUBLIC [99] NE SAIT PAS

B83.	Ce point d'eau est-il accessible à tous les membres de la communauté?	[1] OUI → PASSEZ A LA RUBRIQUE **B13** [2] NON [99] NE SAIS PAS
B84.	Est-ce votre principale source d'eau potable?	[5] OUI [6] NON
GESTION DE L'EAU		
B85.	Existe-il dans votre communauté un comité de l'eau actif	[5] OUI [6] NON → PASSEZ A LA RUBRIQUE **B15** [99] NE SAIS PAS→ PASSEZ A LA RUBRIQUE **B15**
B86.	Est-ce que ce comité organise des réunions publiques?	[5] OUI [6] NON [99] NE SAIS PAS
FINANCEMENT DE L'EAU		
B87.	Votre ménage paye-t-il une certaine somme d'argent pour l'accès à ce d'eau?	[5] OUI [6] NON
ASSAINISSEMENT ET HYGIENE		
B88.	Quel type de latrines les membres de votre ménage utilisent-ils le plus? LISEZ-LEUR LES DEFINITIONS SUIVANTES : Latrine privée–utilisée uniquement par les personnes faisant partie de votre ménage. Latrine partagée–latrine dont vous partagez l'utilisation avec d'autres personnes ne faisant pas partie de votre ménage. Latrine publique–une latrine dont l'utilisation est ouverte à tout le monde. Elle peut être payante ou non. C'est le cas par exemple des latrines scolaires.	[7] Latrine privée [8] Latrine partagée [9] Latrine publique [99] Ne sais pas
B89.	Connaissez-vous des membres de la communauté qui font leurs besoins en plein air, qui par exemple n'utilisent pas de latrines ?	[7] J'en vois tous les jours [8] Occasionnellement [9] jamais [99] Ne sais pas
B90.	Les personnes faisant partie de votre ménage se lavent-ils les mains avec du savon ?	[5] OUI [6] NON

	Veuillez expliquer que nous faisons ici référence au lavage des mains avec utilisation du savon et non à d'autres cas où ces personnes pourraient se rincer les mains dans un bol commun.	

À REMPLIR AU MOMENT DE LA SAISIE DES DONNÉES SI LA VERSION PAPIER A ETE UTILISÉE SUR LE TERRAIN
DE.1 Cette enquête a-t-elle été saisie sur ordinateur sur le terrain? [1] OUI [2] NON DE.2 Cette enquête a-t-elle été saisie sur ordinateur sur le terrain ET sur papier et partiellement sur ordinateur au bureau? [1] OUI [2] NON DE.3 Cette enquête a-t-elle été saisie sur papier sur le terrain et ensuite sur ordinateur au bureau? [1] OUI [2] NON DE.4 PERSONNE 1 ayant effectué la SAISIE DES DONNEES NOM/ID _____ /|__|__|__|__| DE.5 Date de SAISIE DES DONNEES par la PERSONNE 1 |__|__|/|__|__|/|__|__|__|_ DE.6 Commentaires sur la Saisie des données (Mettez vos initiales à côté des commentaires):

13. CONTRÔLE QUALITÉ MINI-ENQUÊTE AUPRÈS DES MÉNAGES ET OBSERVATIONS STRUCTURÉES

MODULE A: CONTROLE QUALITE INFORMATIONS SUR L'EMPLACEMENT ET LE CONSENTEMENT DES MÉNAGES		
A27.	DATE DE L'OBSERVATION (JJ/MM/AA)	|__|__|/|__|__|/|__|__|
A28.	**Nom de la Région:**	[9] Kolda [10] Sédhiou [11] Tambacounda Ziguinchor
A29.	**Nom de la Commune:**	
A30.	**Nom du Village:**	
A31.	**ID du Village:**	|__|__|__|
A32.	NOM DU SUPERVISEUR : /_____/ /_____/ /_____/ (1er PRENOM) (2eme PRENOM) (NOM DE FAMILLE)	
A33.	**Identité du ménage /de l'enquêté(e):**	|__|__|__|__|
A34.	EXPLIQUER LE PROCESSUS DE CONTRÔLE QUALITÉ LISEZ LA DECLARATION DE CONSENTEMENT A LA FEMME CHEF DE MENAGE. LE CHEF DE MENAGE A-T-IL Donné SON CONSENTEMENT?	[5] SI LA REPONSE EST OUI→ PROCEDEZ A LA MINI-ENQUETE ET A L'OBSERVATION [6] SI LA REPONSE EST NON → NE FAITES NI D'ENQUETE, NI D'OBSERVATION
A35.	Depuis combien de temps vivez-vous dans ce village?	|__|__| MOIS |__|__| ANNEES
A36.	NOTE: LES PERSONNES INTERESSEES, SE SONT-ELLES INSTALLEES DANS LE VILLAGE AU COURS DES QUATRE DERNIERES ANNEES?	[7] AVANT 2014 [8] SI ELLES SONT LA DEPUIS MOINS DE 4 ANS OU APRES 2014 → NE FAITES PAS D'OBSERVATION

MODULE B: CONTROLE QUALITE MINI-ENQUETE AUPRES DES MENAGES		
B81.	DE QUEL SEXE EST LA PERSONNE AVEC LAQUELLE VOUS VOUS ENTRETENEZ?	[5] MASCULIN [6] FEMININ
B82.	Quel âge avez-vous?	|__|__|
B83.	Etes-vous le chef de ménage? Si non, quel est votre lien avec le chef de ménage	[11] Oui → Passer à la rubrique B5 [4] Non
B84.	Quelle est votre lien avec le chef de ménage? A LIRE A L'ENQUETE(E): Un ménage est défini comme étant un individu ou un groupe d'individus qui, en général, vivent et mangent ensemble.	[7] Epoux (se) [8] Tante/Oncle [9] Sœur/Frère [10] Enfant [11] Aucun lien [12] Parents [77] Autres_____
B85.	Quelqu'un est-il venu dans votre village pour vous parler du projet PEPAM/USAID (d'Atraxis)?	1] OUI 2] NON -> Sauter à **FIN DE L'ENQUETE** [13] [99] NE SAIT PAS
B86.	Vous souvenez-vous du nom de la personne qui est venue dans votre village pour poser des questions sur le projet PEPAM/USAID?	1] OUI 2] NON -> Sauter à XX [14] [99] NE SAIT PAS
B87.	Quel était leur nom?	/_____/ /_____/ (NOM 1) (NOM DE FAMILLE) [15] [99] NE SAIT PAS
B88.	Leur avez-vous donné la permission de vous parler?	1] OUI 2] NON -> Sauter à B10 [16]
B89.	Si non, pourquoi pas?	[7] _____ _____ [17] **FIN DE L'ENQUETE**
B90.	Combien de temps sont-ils restés et vous ont-ils parlé?	1] 0-30 minutes 2] 31-60 minutes 3] Plus d'une heure 77] Autre_____ [18] [99] Ne sait pas

B91.	Pendant combien de temps environ sont-ils restés dans votre village?	1] 1 heure 2] 2 heures 3] 3 heures 4] 4 heures 5] 5 heures ou plus 1] [99] Ne sais pas
QUESTIONS LIEES A L'EAU UTILISEE PAR LE MENAGE		
SAY	Merci beaucoup. J'aimerais maintenant vous poser quelques questions sur l'eau que vous et votre famille buvez à la maison.	
	POSEZ A L'ENQUETE (E) LES QUESTIONS SUIVANTES RELATIVES A SES SOURCES PRIMAIRES D'APPROVISIONNEMENT EN EAU.	
B92.		SOURCE PRIMAIRE
	Quelle est la principale source d'approvisionnement en eau potable des personnes faisant partie de votre ménage?	**EAU COURANTE** [27] EAU COURANTE A DOMICILE [28] EAU COURANTE ALIMENTANT LA COUR OU LA PARCELLE [29] FONTAINE PUBLIQUE/BORNE-FONTAINE [30] PUITS Tubé ou PUITS Foré (FORAGE) **PUITS Creusé** [31] PUITS Protégé [32] PUITS Non Protégé ***EAU PROVENANT D'UNE SOURCE*** [33] SOURCE PROTEGEE [34] SOURCE NON PROTEGEE **AUTRES** [35] EAU DE PLUIE [36] EAU LIVREE PAR CAMION-CITERNE [37] CHARRETTES SURMONTEES D'UN PETIT RESERVOIR [38] EAU DE SURFACE (FLEUVE, RESERVOIR, LAC, ETANG, RUISSEAU, CANAL, CANAL D'IRRIGATION) [39] EAU EN BOUTEILLE [77] AUTRES_____ [99] NE SAIS PAS
B93.	Quelle utilisation faites-vous de l'eau tirée de cette source ? ENCERCLER TOUTES LES	[17] Pour boire [18] Pour faire la cuisine [19] Pour faire le linge [20] Pour se laver [21] Pour se laver les mains [22] Pour les tâches ménagères [23] Pour irriguer un jardin ou s'adonner à diverses activités agricoles

	REPONSES QUI S'APPLIQUENT	[24] Pour abreuver le bétail [77]Autres, _____
QUESTIONS LIEES A L'HYGIENE		
B94.	Pouvez-vous s'il-vous-plaît me montrer l'endroit où les personnes faisant partie de votre ménage se lavent le plus souvent les mains?	[15] INSTALLATION FIXE OBSERVEE (LAVABO, ROBINET) [16] DANS LE LOGEMENT [17] DANS LA COUR OU DANS LA PARCELLE [18] STATION FIXE DE LAVAGE DES MAINS, par exemple, dispositif lave-mains Tippy Tap [19] OBJETS MOBILES Observés (SEAU SERVANT DE CUVETTE DE TOILETTES/BOCAL/CRUCHE/ BOUILLOIRE) [20] ABSENCE D'INSTALLATION DE LAVAGE DES MAINS A L'INTERIEUR DE LA MAISON, DANS LA COUR OU DANS LA PARCELLE → PASSEZ A LA RUBRIQUE **B17** [21] AUTORISATION DE VISITER LES LIEUX NON ACCORDEE [77]AUTRES, _____ → PASSEZ A LA RUBRIQUE **B17**
B95.	OBSERVEZ S'IL EXISTE UNE STATION FIXE DE LAVAGE DES MAINS. LA STATION DE LAVAGE DES MAINS FONCTIONNE-T-ELLE TOUJOURS? ESSAYEZ DE L'UTILISER	[5] OUI [6] NON

	REPONDEZ OUI SI VOUS PARVENEZ A VOUS Y LAVER LES MAINS. REPONDEZ NON SI VOUS N'Y PARVENEZ PAS	
DIRE	Je vous remercie d'avoir jusqu'ici participé à cette enquête. Je dois cependant vous avouer que la partie de l'enquête que nous allons maintenant aborder est un peu sensible. Je voudrais en fait vous poser quelques questions sur les pratiques en matière d'assainissement des personnes vivant dans l'enceinte de votre maison. J'aimerais également faire quelques observations.	

MODULE C: CONTROLE QUALITE OBSERVATIONS STRUCTUREES DES LATRINES				
OBSERVATION DES LATRINES (NE PAS OBSERVER DE LATRINES PUBLIQUES)				
C15.	Votre ménage dispose-t-il d'une latrine en cours d'utilisation? Pourrais-je la voir? SI LE MENAGE DISPOSE D'AU MOINS DEUX LATRINES, VEUILLEZ OBSERVER CELLE QUI EST LE PLUS FREQUEMMENT UUTILISEE	[9] OUI ILS DISPOSENT D'UNE LATRINE, POUVONS LA VOIR. [10] OUI ILS DISPOSENT D'UNE LATRINE, OBSERVATION NON AUTORISEE→ METTEZ FIN A L'OBSERVATION [11] OUI ILS DISPOSENT D'UNE LATRINE, MAIS PAS POSSIBLE DE L'OBSERVER→ METTEZ FIN A L'OBSERVATION [12] ILS NE DISPOSENT PAS DE LATRINE EN COURS D'UTILISATION→ METTEZ FIN A L'OBSERVATION		
C16.	Ou se trouve la latrine ?	[7] DANS L'ENCEINTE DE LA MAISON [8] JUSTE EN DEHORS DE L'ENCEINTE DE LA MAISON (à moins de 5 Mètres) [9] EN DEHORS DE L'ENCEINTE DE LA MAISON (à plus de 5 mètres)		
C17.	OBSERVATION: NOTEZ LE TYPE, L'ETAT ACTUEL ET L'UTILISATION APPARENTE DES TOILETTES OU DES LATRINES. SI VOUS N'ETES PAS EN MESURE DE LES OBSERVER OU D'EN PARLER, COCHEZ LA CAGE «99».			
	OBSERVATIONS A L'EXTERIEUR:	**OUI**	**NON**	**NSP**

a.	TOIS MURS AU MOINS ENTOURENT LES TOILETTES	[1]	[2]	[99]
b.	PORTE OU RIDEAU GARANTISSANT UNE INTIMITE AUX UTILISATEURS	[1]	[2]	[99]
c.	LA LATRINE A-T-ELLE UN TOIT?	[1]	[2]	[99]
d.	A-T-ELLE UN TUYAU DE VENTILATION	[1]	[2]	[99]
e.	LE CHEMIN QUI MENE AUX TOILETTES INDITE-IL UNE UTILISATION REGULIERE (CHEMIN Dégagé, Usé, ETC.)	[1]	[2]	[99]
	OBSERVATIONS A L'INTERIEUR:	**OUI**	**NON**	**NSP**
f.	LA PORTE SE FERME-T-ELLE DE L'INTERIEUR	[1]	[2]	[99]
g.	LA TOILETTE DISPOSE-T-ELLE D'UNE DALLE (EN PLASTIQUE OU EN CIMENT)	[1]	[2]	[99]
h.	SEMELLES SURELEVEES AUTOUR DU TROU	[1]	[2]	[99]
i.	LA LATRINE SEMBLE-T-ELLE ETRE EN COURS D'UTILISATION (SELON VOTRE BON JUGEMENT)	[1]	[2]	[99]
j.	PRESENCE D'ODEUR DE MATIERES FECALES OU D'URINE DANS LA LATRINE	[1]	[2]	[99]
k.	DES SELLES SONT-ELLES VISIBLES SUR LA DALLE OU LE SOL ?	[1]	[2]	[99]
l.	LE TROU DE LA LATRINE EST-IL COUVERT?	[1]	[2]	[99]
m.	DES MATÉRIAUX/PRODUITS POUR LE NETTOYAGE ANAL (PAPIER TOILETTE OU RECIPIENT D'EAU) SONT-ILS DISPONIBLES?	[1]	[2]	[99]
n.	PRESENCE DE PLUS DE TROIS MOUCHES	[1]	[2]	[99]
C18.	POUR OBSERVATION : EXISTE-IL UNE STATION DE LAVAGE DES MAINS À 5 MÈTRES DE LA LATRINE (10 PAS)	[5] OUI [6] NON		

PRENEZ DES PHOTOS DE LA LATRINE

A37.	RELEVEZ DE NOUVELLES COORDONNEES GPS EN CREANT UN NOUVEAU POINT DE CHEMINEMENT (WAYPOINT). ATTENDEZ, SI POSSIBLE, D'AVOIR UNE PRECISION D'AU MOINS 10 METRES.	ID DU WAYPOINT: |__|__|__| [9] N °|__|__|. |__|__|__|__|__| E °|__|__|__|. |__|__|__|__|__|

À REMPLIR AU MOMENT DE LA SAISIE DES DONNÉES SI LA VERSION PAPIER A ETE UTILISÉE SUR LE TERRAIN
DE.1 Cette enquête a-t-elle été saisie sur ordinateur sur le terrain? [1] OUI [2] NON DE.2 Cette enquête a-t-elle été saisie sur ordinateur sur le terrain ET sur papier et partiellement sur ordinateur au bureau? [1] OUI [2] NON DE.3 Cette enquête a-t-elle été saisie sur papier sur le terrain et ensuite sur ordinateur au bureau? [1] OUI [2] NON DE.4 PERSONNE 1 ayant effectué la SAISIE DES DONNEES NOM/ID _____ /|__|__|__|__| DE.5 Date de SAISIE DES DONNEES par la PERSONNE 1 |__|__|/|__|__|/|__|__|__|_ DE.6 Commentaires sur la Saisie des données (Mettez vos initiales à côté des commentaires):

14. CONTRÔLE QUALITÉ OBSERVATIONS STRUCTURÉES AUX POINTS D'EAU

MODULE A: CONTRÔLE QUALITÉ EMPLACEMENT DES POINTS D'EAU		
A23.	DATE D'OBSERVATION (JJ/MM/AA)	|__|__|/|__|__|/|__|__|
A24.	NOM DU SUPERVISEUR: /_____/ /_____/ /_____/ (1er PRENOM) (2eme PRENOM) (NOM DE FAMILLE)	
A25.	**Nom de la Région:**	[9] Kolda [10] Sédhiou [11] Tambacounda [12] Ziguinchor
A26.	**Nom de la Commune:**	/_____/
A27.	**Nom du Village:**	/_____/
A28.	**ID du Village ID:**	|__|__|__|
A29.	**ID du Point d'Eau:**	|__|__|__|__|__|

MODULE B: Contrôle Qualité AUTORISATION POUR l'OBSERVERVATION DE POINTS D'EAU & PERSONNES CONTACTS		
B25.	Quel est votre nom ? NUMERO DE TELEPHONE LOCAL: /_____/ /_____/ /_____/ (1er PRENOM) (2eme PRENOM) (NOM DE FAMILLE)	
B26.	Quel est votre rôle au sein de cette communauté ?	[9] Chef [10] Représentant du poste de santé ou de la case de santé [11] Agent de santé communautaire (ASC)

		[12] Représentant de l'association des usagers d'eau [77] Autres, Précisez:_____
B27.	Quel est votre numéro de téléphone ? NUMERO DE TELEPHONE LOCAL:	|__|__| |__|__|__| |__|__| |__|__|
B28.	Quelqu'un est-il venu dans votre village pour vous parler du projet PEPAM/USAID (d'Atraxis) ?	1] OUI 2] NON -> Sauter à B13 [99] NE SAIT PAS -> Sauter à B13
B29.	Vous souvenez-vous du nom de la personne qui est venue dans votre village pour poser des questions sur le projet PEPAM/USAID ?	1] OUI 2] NON -> Sauter à B6 [99] NE SAIT PAS -> Sauter à B6
B30.	Quel était leur nom?	/_____/ /_____/ (NOM 1) (NOM DE FAMILLE) [99] NE SAIT PAS
B31.	Avez-vous donné la permission d'observer la source d'eau ?	1] OUI SAUTER À B10 [2] NON
B32.	Si non, pourquoi pas?	_____ → SAUTER À LA FIN DE L'ENQUÊTE
B33.	Combien de temps environ sont-ils restés et ont-ils observé (surveillé) la source d'eau ?	1] 0-30 minutes 2] 31-60 minutes 3] Plus d'une heure 77] Autre_____ [99] Ne sait pas
B34.	Pendant combien de temps environ sont-ils restés dans votre village ?	1] 1 heure 2] 2 heures 3] 3 heures 4] 4 heures 5] 5 heures ou plus [99] Ne sais pas
B35.	Ont-ils pris de l'eau au point d'eau (p. ex. dans un sac ou une bouteille) ?	[1] OUI [2] NON [99] NE SAIT PAS

B36.	Les avez-vous vus parler/interroger d'autres personnes dans votre village ?	[1] OUI [2] NON [3] [99] NE SAIT PAS
B37.	De quel type de réseau d'adduction d'eau disposez-vous? AEP ou AEMV? REMARQUE: AEP/ADDUCTION D'EAU POTABLE (PETIT SYSTEME D'APPROVISIONNEMENT EN EAU COURANTE ALIMENTANT UN SEUL VILLAGE) ; AEMV (ADDUCTION D'EAU POTABLE MULTIVILLAGES) QUI CONSISTE EN UN RESEAU DE CHATEAUX D'EAU ET DE FORAGES SPECIFIQUES, ALIMENTANT PLUSIEURS VILLAGES.	[5] OUI [6] NON → PASSEZ A LA RUBRIQUE B6.
B38.	Quel est le nombre de points d'eau connectés à ce réseau ?	[3] |__|__| POINTS D'EAU
B39.	Quand est-ce que ce point d'eau a été construit ou réhabilité pour la dernière fois ? Format année : (AAAA)	[5] ANNEE: |__|__|__|__| [6] NE SAIS PAS
B40.	Existe-t-il d'autres sources d'eau PEPAM/USAID dans votre village ?	[1] OUI [2] NON
B41.	Ce point d'eau a-t-il été construit ou réhabilité dans le cadre du projet PEPAM/USAID (Notamment ENTRE 2009 ET 2014) ?	[5] OUI [6] NON → METTEZ FIN A LA COLLECTE DE DONNEES [99] NE SAIS PAS
B42.	Existe-il une plaque commémorative soulignant le soutien de l'USAID?	[5] OUI [6] NON
B43.	Qui gère le point d'eau ? SELECTIONNEZ TOUTES LES REPONSES QUI S'APPLIQUENT	[7] Associations des usagers de l'eau [8] Comité de gestion (CG) [9] ASUFOR [77] Autres, PRECISEZ: _____ [99] NE SAIS PAS

	SI LES POINTS D'EAU SONT Gérés SEPAREMENT, ENUMEREZ, POUR CHAQUE POINT D'EAU, LES DIFFERENTES STRUCTURES DE GESTION EXISTANTES.	
B44.	Quelle est la <u>principale personne contact</u> au sein de la structure de gestion ? NOM DE LA PERSONNE CONTACT AU SEIN DE LA STRUCTURE DE GESTION: /_____/ /_____/ /_____/ (1ER PRENOM) (2EME PRENOM) (NOM DE FAMILLE)	
B45.	Quel est son numéro de téléphone ?	+211 |__|__|__| |__|__|__|__|
C35.	Le point d'eau est-il opérationnel ? Par exemple, est ce qu'on peut y tirer de l'eau ?	[5] FONCTIONNE PARFAITEMENT [6] NE FONCTIONNE PAS

PRENEZ DES PHOTOS DU POINT D'EAU
FAITES UN COMMENTAIRE SUR LES DEFIS ET LES MENACES QUI PLANENT DE MANIERE GENERALE SUR LE BON FONCTIONNEMENT DU POINT D'EAU :

A30.	UN POINT GPS A-T-IL ETE ENREGISTRE POUR LA COLLECTE DE DONNEES SUR LA QUALITE DE L'EAU?	[13] OUI → PASSEZ A LA RUBRIQUE A4. [14] NON
A31.	RELEVEZ DE NOUVELLES COORDONNEES GPS **EN CREANT UN NOUVEAU POINT DE CHEMINEMENT (WAYPOINT)**. ATTENDEZ, SI POSSIBLE, D'AVOIR UNE PRECISION D'AU MOINS 10 METRES.	ID DU WAYPOINT: |__|__|__| N ° |__|__|. |__|__|__|__|__| E ° |__|__|__| |__|__|__|__|__|

À REMPLIR AU MOMENT DE LA SAISIE DES DONNÉES SI LA VERSION PAPIER A ETE UTILISÉE SUR LE TERRAIN
DE.1 Cette enquête a-t-elle été saisie sur ordinateur sur le terrain? [1] OUI [2] NON DE.2 Cette enquête a-t-elle été saisie sur ordinateur sur le terrain ET sur papier et partiellement sur ordinateur au bureau? [1] OUI [2] NON DE.3 Cette enquête a-t-elle été saisie sur papier sur le terrain et ensuite sur ordinateur au bureau ? [1] OUI [2] NON DE.4 PERSONNE 1 ayant effectué la SAISIE DES DONNEES NOM/ID _____ /|__|__|__|__| DE.5 Date de SAISIE DES DONNEES par la PERSONNE 1 |__|__|/|__|__|/|__|__|__|_ DE.6 Commentaires sur la Saisie des données (Mettez vos initiales à côté des commentaires):

15. CONTRÔLE QUALITÉ OBSERVATIONS STRUCTURÉES AUX POINTS D'EAU (PHONE BACKCHECK)

MODULE A: CONTRÔLE QUALITÉ EMPLACEMENT DES POINTS D'EAU		
A32.	DATE D'OBSERVATION (JJ/MM/AA)	|__|__|/|__|__|/|__|__|
A33.	NOM DU SUPERVISEUR: /_____/ /_____/ /_____/ (1er PRENOM) (2eme PRENOM) (NOM DE FAMILLE)	
A34.	**Nom de la Région:**	[15] Kolda [16] Sédhiou [17] Tambacounda [18] Ziguinchor
A35.	**Nom de la Commune:**	/_____/
A36.	**Nom du Village:**	/_____/
A37.	**ID du Village ID:**	|__|__|__|
A38.	**ID du Point d'Eau:**	|__|__|__|__|__|

MODULE B: Contrôle Qualité AUTORISATION POUR l'OBSERVERVATION DE POINTS D'EAU & PERSONNES CONTACTS		
B46.	Quel est votre nom ? /_____/ /_____/ /_____/ (1er PRENOM) (2eme PRENOM) (NOM DE FAMILLE)	
B47.	Quel est votre rôle au sein de cette communauté ?	[13] Chef [14] Représentant du poste de santé ou de la case de santé [15] Agent de santé communautaire (ASC) [16] Représentant de l'association des usagers

		d'eau [77] Autres, Précisez:_____
B48.	Quel est votre numéro de téléphone ? NUMERO DE TELEPHONE LOCAL:	|__|__| |__|__|__| |__|__| |__|__|
B49.	Quelqu'un est-il venu dans votre village pour vous parler du projet PEPAM/USAID (d'Atraxis) ?	1] OUI 2] NON -> Sauter à B13 [99] NE SAIT PAS -> Sauter à B13
B50.	Vous souvenez-vous du nom de la personne qui est venue dans votre village pour poser des questions sur le projet PEPAM/USAID ?	1] OUI 2] NON -> Sauter à B6 [99] NE SAIT PAS -> Sauter à B6
B51.	Quel était leur nom?	/_____/ /_____/ (NOM 1) (NOM DE FAMILLE) [99] NE SAIT PAS
B52.	Avez-vous donné la permission d'observer la source d'eau ?	1] OUI SAUTER À B10 [2] NON
B53.	Si non, pourquoi pas?	_____ → SAUTER À LA FIN DE L'ENQUÊTE
B54.	Combien de temps environ sont-ils restés et ont-ils observé (surveillé) la source d'eau ?	1] 0-30 minutes 2] 31-60 minutes 3] Plus d'une heure 77] Autre_____ [99] Ne sait pas
B55.	Pendant combien de temps environ sont-ils restés dans votre village ?	1] 1 heure 2] 2 heures 3] 3 heures 4] 4 heures 5] 5 heures ou plus [99] Ne sais pas
B56.	Ont-ils pris de l'eau au point d'eau (p. ex. dans un sac ou une bouteille) ?	[3] OUI [4] NON [99] NE SAIT PAS

B57.	Les avez-vous vus parler/interroger d'autres personnes dans votre village ?	[4] OUI [5] NON [6] [99] NE SAIT PAS

16. FORMULAIRE D'AMÉLIORATION DES OUTILS QUANTATIFS ET QUALITATIFS

IDENTIFICATION:

NOM(S): _____
DATE: _____
SITE: _____
EQUIPE: _____

INSTRUCTIONS:

1. . UTILISEZ CE FORMULAIRE LORS DE L'ADMINISTRATION DES INSTRUMENTS DE COLLECTE DE DONNÉES.
2. ENREGISTREZ LES INFORMATIONS DANS LES CHAMPS CI-DESSOUS POUR NOUS AIDER À SUIVRE ET À METTRE À JOUR LES INSTRUMENTS DE COLLECTE DE DONNÉES.
3. SOUMETTEZ À VOTRE SUPERVISEUR OU AU CHEF D'ÉQUIPE À LA FIN DE L'ACTIVITÉ QUI VA FAIRE REMONTER CES OBSERVATIONS

Questionnaire	Numéro de la Question (Chiffre et letter)	Décrivez le problème

17. FORMULAIRE DE PRISE DE CONTACT AVEC LES VILLAGES

1. Nom du village: _____
2. Nom du Chef du Village: _____
3. Numéro de Téléphone du Chef du Village : _____
4. Nombre de pointes d'eau mise en œuvre dans le village : _____
5. Est-ce que le projet PEPAM-USAID a construit les latrines entre 2009-2014 ? Oui ou Non
6. Si oui, est-ce qu'il y a un Comité de Gestion, ASUFOR, ou un Organisation des Usagers d'Eaux qui gère les pointes d'eaux ? Oui ou Non
7. Les heures de puisage : _____
8. Qui était identifié par le projet comme Leader Naturel ? Quels sont leurs noms et leurs rôles ?

Nom	**Rôle**

9. Qui sont les relais dans le village ? Quels sont leurs noms ?

_____

10. Est-ce quelqu'un dans le village était formé comme maçon ou autre entrepreneur par le projet ? Si oui, quels sont leurs noms ?

_____

11. REMPLIR LE FORMULAIRE SUR L'EXISTENCE D'AUTRES PROJECT WASH (DANS LA TABLETTE)

18. FORMULAIRE SUR L'EXISTENCE D'AUTRES PROJETS WASH

Date [JJ/MM/AA]: |__|__|/|__|__|/|__|__| ID du village: |__|__|__|

Région: 1) Kolda 2 Sédhiou 3 Tambacounda 4 Ziguinchor 5) national

Commune: _____

Village: _____

Emplacement d'entrevue: _____

INSTRUCTIONS**:** LES ÉLÉMENTS SUIVANTS EST UN QUESTION QUANTITATIVES QUI AURAIT PU RÉPONSES MULTIPLES. VEUILLEZ **CERCLE TOUTES LES RÉPONSES QUI S'APPLIQUENT** PENDANT LE INTERVIEW.

Est-ce qu'il y'a eu des projets d'eau, d'assainissement ou d'hygiène (WASH) dans votre communauté entre les années de 2009 et 2018?

Oui------ Non------

INSTRUCTIONS**:** LES QUESTIONS SUIVANTES SONT DE COLLECTER LES DÉTAILS DE CHAQUE ACTIVITÉ DE WASH. INDQUEZ LE NOM DU PROJET, LE NOM DE L'ENTITE DE MISE EN ŒUVRE, LE TYPE DE PROJET, ET LA PERIODE DE MISE EN ŒUVRE ET LE TYPE D'ENTITE QUI L'A MIS EN OEUVRE. **UTILISEZ LA LISTE SUIVANTE POUR IDENTIFIER LE TYPE DE PROJET**.

1. Approvisionnement en eau
2. Assainissement
3. Hygiène
4. Politique locale sur l'eau et l'assainissement (e.g. Plan Local d'Hydraulique et d'Assainissement (PLHA)
5. Gouvernance participative et associations
6. Changement de comportement de lavage (c.-à-d., marketing, Etc)
7. Autres _____

Le nom du projet:_____

Nom de l'entité de mise en œuvre : _____

1. De quel type de projet s'agissait-il ?

   1 2 3 4 5 6_____

2. Si oui, quelle est l'année démarrage et de la fin du projet ?

   a. Démarre [AAAA]
   b. Fin [AAAA]

2. Quel type d'organisation a mis en œuvre ce projet?
   c. Organisation non gouvernementale (ONG) Locale
   d. Gouvernement
   e. ONG internationale

Le nom du projet:_____

Nom de l'entité de mise en œuvre : _____

3. De quel type de projet s'agissait-il ?

   1 2 3 4 5 6_____

4. Si oui, quel est l'année démarrage et de la fin du projet ?
   a. Démarré [AAAA]
   b. Fin [AAAA]

5. Quel type d'organisation a mis en œuvre ce projet?

   a. Organisation non gouvernementale (ONG) Locale
   b. Gouvernement
   c. ONG internationale

Le nom du projet:_____

Nom de l'entité de mise en œuvre : _____

6. De quel type de projet s'agissait-il ?

   1 2 3 4 5 6_____

2. Si oui, quelle est l'année démarrage et de la fin du projet ?

   f. Démarre [AAAA]
   g. Fin [AAAA]

7. Quel type d'organisation a mis en œuvre ce projet?
   h. Organisation non gouvernementale (ONG) Locale
   i. Gouvernement
   j. ONG internationale

Le nom du projet:_____

Nom de l'entité de mise en œuvre : _____

8. De quel type de projet s'agissait-il ?

   1 2 3 4 5 6_____

9. Si oui, quel est l'année démarrage et de la fin du projet ?
   a. Démarré [AAAA]
   b. Fin [AAAA]

10. Quel type d'organisation a mis en œuvre ce projet?

    a. Organisation non gouvernementale (ONG) Locale
    b. Gouvernement
    c. ONG internationale

ANNEX C: LIST OF RESPONDENTS

DATE OF INTERVIEW	LOCATION	TITLE	ORGANIZATION	STAKEHOLDER TYPE
6/1/2018	Skype		USAID	USAID
7/31/2018	Skype	Former Communication Officer for PEPAM/USAID activity	USAID	USAID
8/10/2018	Skype	Former PEPAM/USAID Component 5 Manager	Oxfam (currently)	USAID
8/9/2018	Skype	PEPAM/USAID for Component 4 (Large Infrastructure)	USAID	USAID
8/1/2018	Skype	Former PEPAM/USAID M&E Officer and DCOP (Current Position)	USAID	USAID
1/3/2019	Dakar	Coordonnateur	ENDA	IP/NGO
1/3/2019	Dakar	3 Keys Persons	OFOR	GoS
10/9/2018	Kolda	Coordonnatrice	CASADES KOLDA	IP/NGO
12/12/2018	Kolda	Chargée de Programme	CARITAS	IP/NGO
11/21/2018	Kolda	Chef du Service Régional	Hydraulic	GoS
11/26/2018	Kolda	Lieutenant Adjoint au SRH	Hygiene	GoS
11/28/2018	Sédhiou	Chef du Service Régional	Sanitation	GoS

11/28/2018	Sédhiou	Chef du Service Régional	Hydraulic	GoS
11/28/2018	Sédhiou	Chef du Service Régional	Hygiene	GoS
11/24/2018	Tambacounda	Chargée de Programme	LA LUMIERE	IP/NGO
11/28/2018	Tambacounda	Chef du Service Régional	Hydraulic	GoS
11/30/2018	Tambacounda	Chef du Service Régional	Hygiene	GoS
11/23/2018	Tambacounda	Chef du Service Régional	Sanitation	GoS
11/23/2018	Ziguinchor	Président Coordonnateur	WESWA	IP/NGO
11/16/2018	Ziguinchor	Responsable	ADY	IP/NGO
11/16/2018	Ziguinchor	Chef du Service Régional	Sanitation	GoS
11/16/2018	Ziguinchor	Chef du Service Régional	Hygiene	GoS
11/16/2018	Ziguinchor	Chef du Service Régional	Hydraulic	GoS
10/9/2018	Ziguinchor	Présidente	KABONKETOR	

DATE	REGION	STAKEHOLDER TYPE	VILLAGE TYPE	APPROACH
1/18/2019	Kolda	Natural Leader	S	CLTS
11/29/2018	Kolda	Natural Leader	W&S	Subsidy
2/2/2019	Kolda	Community Members	S	CLTS
11/23/2018	Kolda	Community Members	W&S	Subsidy

11/18/2018	Kolda	Water Committee	W&S	CLTS
11/22/2018	Kolda	Water Committee	W&S	Subsidy
11/28/2018	Kolda	Water Committee (ASUFOR)	W	Subsidy
12/2/2018	Kolda	Private Sector		
11/23/2018	Sedhiou	Natural Leader	W&S	CLTS
11/18/2018	Sedhiou	Natural Leader	S	Subsidy
11/23/2018	Sedhiou	Community Members	W&S	CLTS
11/18/2018	Sedhiou	Community Members	S	Subsidy
11/22/2018	Sedhiou	Water Committee	W&S	CLTS
11/22/2018	Sedhiou	Water Committee	W&S	Subsidy
11/21/2018	Sedhiou	Water Committee (ASUFOR)	W	Subsidy
11/24/2018	Sedhiou	Private Sector		
11/23/2018	Ziguinchor	Natural Leader	W&S	CLTS
11/25/2018	Ziguinchor	Natural Leader	W	Subsidy
11/22/2018	Ziguinchor	Community Members	W&S	CLTS
11/25/2018	Ziguinchor	Community Members	W	Subsidy
11/21/2018	Ziguinchor	Water Committee	W&S	CLTS
	Ziguinchor	Water Committee	W	Subsidy
	Ziguinchor	Water Committee (ASUFOR)		
11/29/2018	Ziguinchor	Private Sector		
11/17/2018	Tambacounda	Natural Leader	W&S	Hybrid
11/18/2018	Tambacounda	Natural Leader	W&S	Hybrid
11/21/2018	Tambacounda	Natural Leader	W	Hybrid
11/24/2018	Tambacounda	Natural Leader	W	Hybrid

11/25/2018	Tambacounda	Natural Leader	S	Hybrid
11/25/2018	Tambacounda	Natural Leader	S	Hybrid
11/17/2018	Tambacounda	Community Members	W&S	Hybrid
11/18/2018	Tambacounda	Community Members	W&S	Hybrid
11/21/2018	Tambacounda	Community Members	W	Hybrid
11/24/2018	Tambacounda	Community Members	W	Hybrid
11/25/2018	Tambacounda	Community Members	S	Hybrid
11/25/2018	Tambacounda	Community Members	S	Hybrid
11/22/2018	Tambacounda	Water Committee	W&S	Hybrid
11/22/2018	Tambacounda	Water Committee	W	Hybrid
11/26/2018	Tambacounda	Water Committee (ASUFOR)		Hybrid
	Tambacounda	Private Sector		Hybrid

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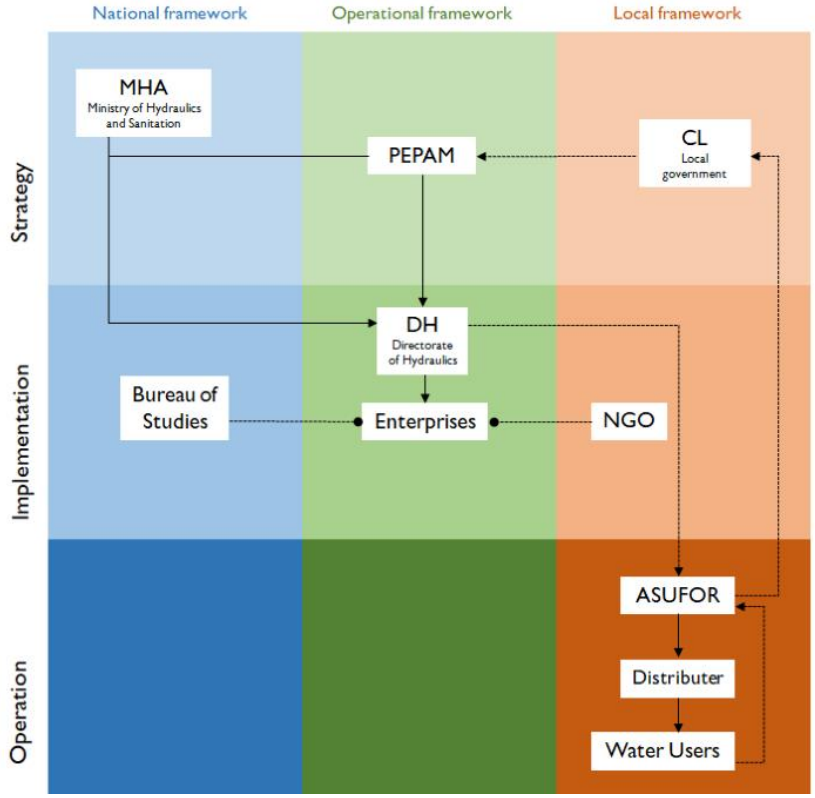
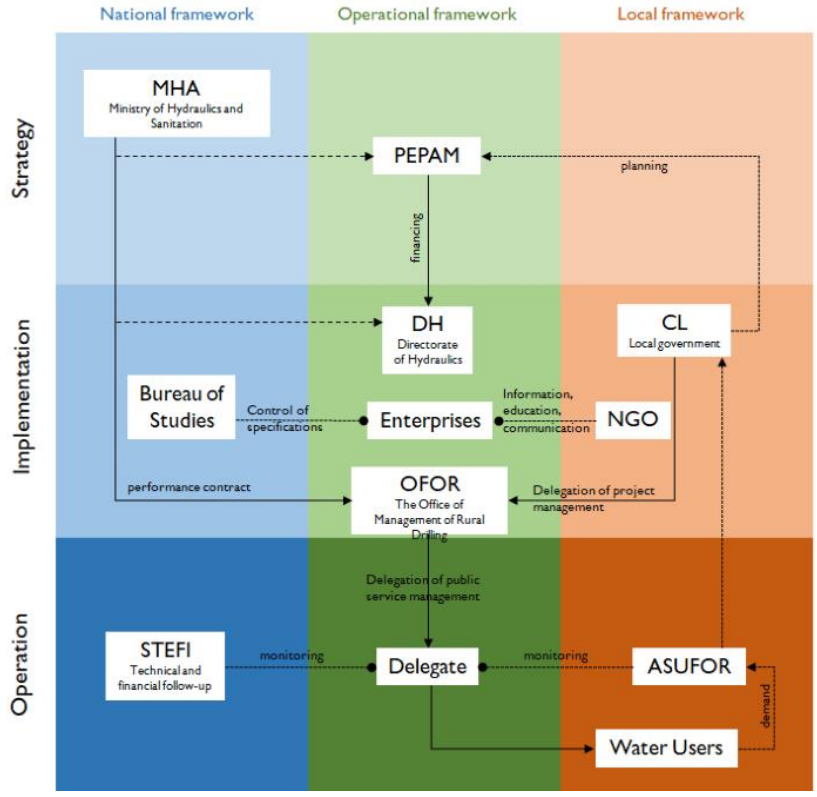
ANNEX E: SENEGAL WATER CONTEXT



Public Water Service Provision Organizational Structure in 2000

Adapted from Conceptual Diagram 2.3, "PEPAM 2016 Actualisation du manuel pour les projets d'eau potable", p. 33.

Type of Relationship
- Institutional
- Consultation
- Contractual
- Monitoring / oversight



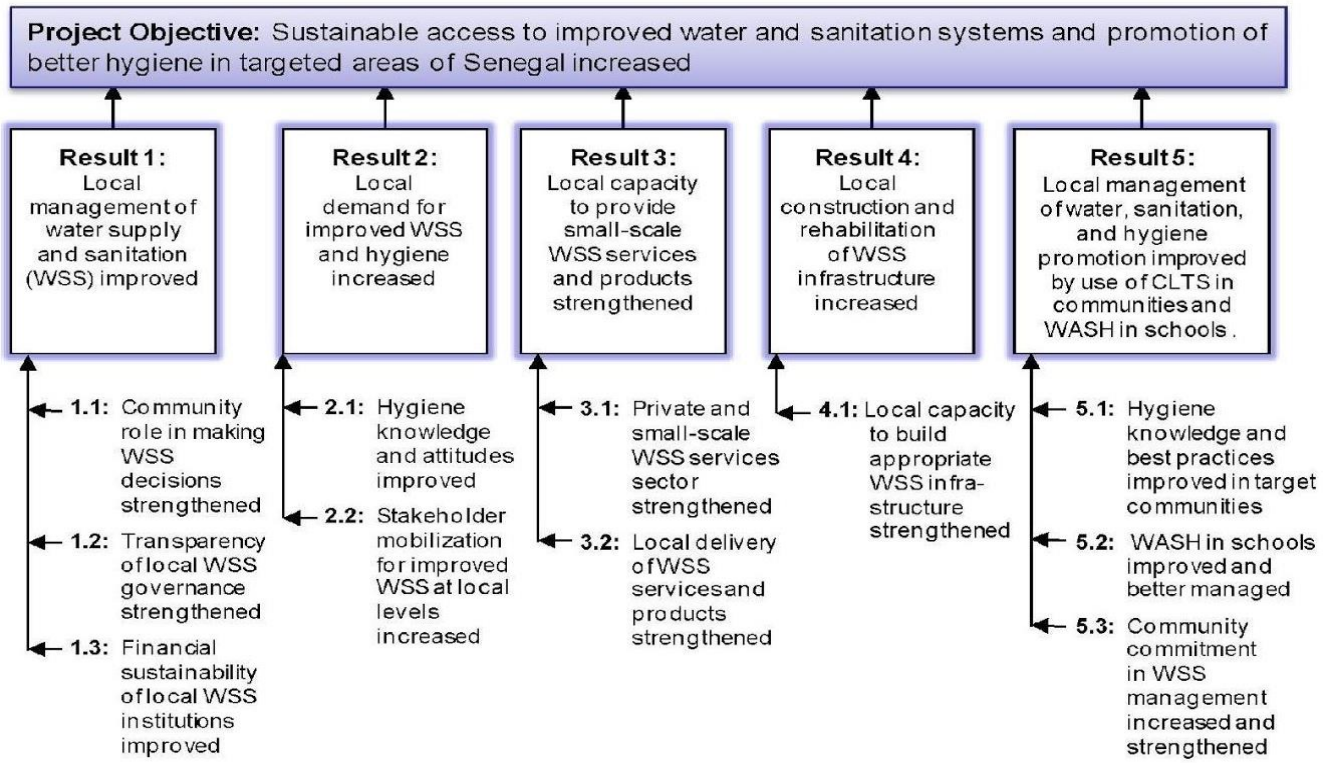
Public Water Service Provision Organizational Structure – the 2016 Goal

Adapted from Annex 1.5, "PEPAM 2016 Actualisation du manuel pour les projets d'eau potable"

Type of Relationship
- Institutional
- Consultation
- Contractual
- Monitoring / oversight

ANNEX F: PEPAM/USAID RESULTS FRAMEWORK

The five key development results of the PEPAM/USAID activity are presented in the Results Framework below.



- ***Development Result 1. Improve Local Management of Water & Sanitation Supply***: Strengthen participatory governance by improving village-level governance of WSS services and supporting participatory infrastructure planning, management, construction, and maintenance
- ***Development Result 2. Increase Local Demand for Improved WSS and Hygiene***: Increase demand for sustainable WASH services and products through a communications and social marketing program that increases the demand and access to safe drinking water, promotes appropriate low-cost sanitation systems, and changes behaviors surrounding hygiene practices
- ***Development Result 3. Strengthen Local Capacity to Provide WSS Services***: Create local business opportunities; strengthen the capacity of small-scale service providers, the private sector, and Water Users' Associations to improve the ability of local enterprises to respond to the demand for improved WSS and ensure sustainable operations and maintenance of the infrastructure;
- ***Development Result 4. Increase Local Construction & Rehabilitation of WSS Infrastructure:*** Install and rehabilitate improved drinking water and sanitation infrastructure, using a service delivery framework
- ***Development Result 5. CLTS & WASH-in-Schools: Improve Local WSS Management:*** Use and promote CLTS as a strategy for diversifying the program methods, reducing or eliminating subsidies, and as an entry point into the rural communities; support hygiene promotion and behavior change activities, as well as WASH in schools

ANNEX G: SUMMARY OF PEPAM/USAID APPROACHES

APPROACH	DESCRIPTION	REGION	# VILLAGES	WASH Intervention	
				W	S & H
CLTS approach (once ODF, eligible for water incentive) [Water and Development Alliance, WADA]	IPs triggered, implemented local development action plans, and certified each CLTS village for ODF status. ODF status led to eligibility for a subsidized WP (10% cost-shared for new WP and 50% to 100% for any major rehabilitations). Not all villages chose to obtain a water point once eligible.[22]	Kolda, Sédhiou, Ziguinchor	ODF Verified 36		✓
			ODF Verified 72	✓	✓
Subsidy approach (water and/or sanitation approach (no CLTS) [PEPAM/USAID]	Villages and HHs identified preferred WASH infrastructure (WP and/or latrines), fundraised, and cost-shared 10% of the project's capital expenses for WP. HH latrine subsides were provided to HH that could afford their portion of the payment and are listed in Table 6 PEPAM/USAID subsidized the remaining costs. User fees covered ongoing operational expenses.	Kolda, Sédhiou, Tambacounda, Ziguinchor	64	✓	
			57		✓
			112	✓	✓
Hybrid approach CLTS & subsidy approach for water and/or sanitation: Integrated Community-Based Approach for Water, Hygiene, and Sanitation (ACIEHA) [PEPAM/USAID]	Implementers followed CLTS practices, e.g., triggered communities and ~3 months later introduced subsidized household sanitation infrastructure. In water communities, demand generation was followed by a subsidy for a WP.	Tambacounda	31	✓	
			9		✓
			34	✓	✓

[22] These three approach descriptions are derived from calls with PEPAM/USAID implementers of the CLTS and water infrastructure components, held in August 2018.

ANNEX H: TIMELINE

From 2009 to 2012, the activity worked in Senegal's Casamance implementing both the CLTS and subsidy approaches. From mid-2012 to 2014, PEPAM/USAID integrated the Tambacounda region into the activity where 20 subsidy villages and the hybrid approach were exclusively implemented.[23] Additionally, WADA collaborated with PEPAM/USAID and the Coca-Cola Africa Foundation on a $1.3 million subcomponent in a subset of activity sites in Ziguinchor, Sédhiou, and Kolda from May 2011 to August 2013.[24]

	2009	2010	2011	2012	2013	2014
PEPAM/USAID	Activities in Casamance				Casamance + Tambacounda	
WADA Sub-Component			WADA Subcomponent in Casamance			

[23] Note that a piloting for the hybrid approach occurred in the Casamance prior to launching in Tambacounda.

[24] RTI International, August 2013, Senegal - WADA 1 WADA 2 Monitoring Data for the Final Close Out Report.

ANNEX I: USAID'S WASH ACTIVITIES IN SENEGAL SINCE 2014

Since the conclusion of PEPAM/USAID activities in 2014, USAID has launched a number of other activities in southern Senegal promoting locally driven access to water and sanitation. Major investments include Governance for Local Development (2016–2021), which strengthens collectivités locales by improving basic services, and the *Projet Assainissement – Changement de Comportement et Eau pour le Senegal* WASH activity (2016–2021), which seeks to improve nutrition through investments in WASH in the most malnourished regions of Senegal. Further details are available in the inception report (Annex A). The GoS's WASH budget in 2017 was $166 million USD, or 1.13 percent of the Gross Domestic Product.[25]

Senegal's rural water sector has experienced several reforms since the late 1990s. Management of rural water services shifted from the community-based management committees in the 1980s to the ASUFORs in the late 1990s, and finally to the private sector in 2014. With the launch of PEPAM from 2005 to 2015, the GoS integrated all O&M functions into larger and more complex clusters of rural water systems through the introduction of public-private partnerships in the form of lease contracts. The role of private operators expanded from provision of O&M services to also taking on the commercial risks of running water systems. In 2014 the government passed a law to establish the new public corporation, the Office of Rural Borehole Management (OFOR), to own, manage, rehabilitate, and delegate rural water supply assets across Senegal. The OFOR is responsible for asset management, infrastructure renewal and extension, and the control and monitoring of the quality of operations.

In addition, the broader PEPAM effort continues to promote access to water and sanitation across 11 regions nationwide in collaboration with implementing partner NGOs, the World Bank, and local CBOs.