USAID/Millennium Water and Sanitation Program

Programme d'Eau Potable et d'Assainissement du Millénaire

(USAID/PEPAM)

Annual Report No 2 – FY-2011

(October 2010 –September 2011)

Cooperative Agreement
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Abbreviations

ADEMAS	Agency for the Development of Social Marketing	*Agence pour le Développement du Marketing Social*
ADY	Association for the Development of Yamakeuy	*Association de Développement du Yamakeuy*
AEMV	Multi-village water supply system	*Adduction d'eau multi-villageoise*
AEP	Drinking water supply system	*Adduction d'eau potable*
AJAC	Association of Young Farmers of Casamance	*Association des Jeunes Agricultures de Casamance*
AJAEDO	Association of Young Farmers and Stock-breeders of Oussouye	*Association des Jeunes Agriculteurs et Éleveurs du Département d'Oussouye*
ARD	Regional Development Agency	*Agence Régionale de Développement*
ARD, Inc.	Associates in Rural Development, Inc. U.S. subcontractor	*Sous-traitant américain du Program*
ASUFOR	Association of Rural Borehole Users	*Association des Usagers de Forage*
ATPC/CLTS	Community-led total sanitation	*Assainissement total piloté par la communauté*
AWP	Annual Work Plan	*Plan de travail annuel*
BRH	Regional Hygiene Bridge	*Brigade Regionale d'Hygiene*
CARITAS	Local NGO working in water and sanitation	*ONG locale qui travaille sur des projets d'adduction d'eau et d'assainissement*
CBO	Community-based organization	*Organisation communautaire*
CG	Village management committee	*Comité de gestion*
CIR	Inter-regional Conference	*Conférence inter-régionale*
CQ	Neighborhood Council	*Conseil de quartier*
CR	Rural community	*Communauté rurale*
CREPA	Regional Center for Affordable Potable Water and Sanitation	*Centre Regional de l'Eau Potable et d'Assainissement a Faible Couts*
CTS	Technical Monitoring Committee	*Comité Technique de Suivi*
DA	Sanitation Department	*Direction d'Assainissement*
DCEF	Department of Economic and Financial Cooperation	*Direction de la Coopération Economique et Financière*
DDI	Department of Debt and Investment	*Direction de la Dette et de l'Investissement*
DEEC	Department of the Environment and Classified Natural Resources	*Direction de l'Environnement et des Etablissements Classés*
DEM	Operations and Maintenance Department	*Direction de l'Exploitation et de la Maintenance*
DGP	Development Grants Program	*Programme de Subventions*
DGPRE	Water Resources Management and Planning Department	*Direction de Gestion et Planification des Ressources en Eau*
DHR	Department of Rural Hydrology	*Direction de l'Hydraulique Rurale*
DAR	National Division of Rural Sanitation	*Direction de l'Assainissement Rurale*
EMMP	Environmental Monitoring and Mitigation Plan	*Plan de suivie et d'atténuation des impacts sur l'environnement*
ENDA	Environmental Development Action in the Third World	*Environnement et Développement du Tiers Monde*
EPQ	Education Priority Quality project	*Education Priorité Qualité*
FDAL	End of open-air defecation	*Fin à la défécation à l'air libre*
FODDE	Forum for Sustainable, Endogenous	*Forum pour un Développement Durable*

	Development	*Endogène*
FOG	Fixed obligation grant	*Subvention à Oblogation Fixe*
FtF	Feed the Future Program	*Feed the Future Program (USAID)*
FY	Fiscal year	*Exercice*
GOS	Government of Senegal	*Gouvernement du Sénégal*
IDEN	Local Area Inspector of Education	*Inspection Départemental de l'Education National*
M&E	Monitoring and evaluation	*Suivi et evaluation*
MDG	Millennium Development Goals	*Objectifs de Développement du Millénaire*
MOU	Memorandum of understanding	*Protocole d'accord*
MSA	MS & Associés	*Malick Sow & Associés*
MUAH	Ministry of Urban Planning, Sanitation and Public Hygiene	*Ministere de l'Urbanisme,de l'Assainissement, de l'Hygiene Publique*
MHCH	Ministry of Housing, Construction, and Hydraulics	*Ministère de l'Habitat, de la Construction et de l'Hydraulique*
MUHHA	Ministry of Urban Planning, Housing, Hydraulics, and Sanitation	*Ministere de l'Urbanisme, de l'Habitat, de l'Hydraulique, et de l'Assainissement*
NGO	Nongovernmental organization	*Organisation non gouvernementale*
ODC	Other direct costs	*Autres charges directes*
PACTE	Concerted Program of Action for Environmental Change	*Programme d'Actions Concertées pour la Transformation de l'Environnement*
PCR	Rural Council President	*Président de Conseil Rural*
PEPAM	Millennium Water and Sanitation Program	*Programme d'Eau Potable et d'Assainissement du Millénaire*
PLHA	Local Water Supply and Sanitation Plan	*Plan Local d'Hydraulique et d'Assainissement*
PMP	Performance Monitoring Plan	*Plan de Suivi des Performance*
REGEFOR	Rural Motorized Boreholes Management Reform	*Réforme de Gestion des Forages Ruraux Motorisés*
RI/EWV	Relief International/ Enterprise Works – Vita; US Subcontractor	*Sous-traitant américain du Program*
SNH	National Hygiene Service	*Service National d'Hygiène*
TOR	Term of reference	*Termes De Reference (TDR)*
ToT	Training of trainers	*Formation des formateurs*
UNICEF	United Nations Children's Fund	*Fond des Nations Unies pour l'Enfance*
USAID	U.S. Agency for International Development	*Agence Américaine pour le Développement International*
WASH	Water, sanitation, and hygiene	*L'eau, l'assainissement, et l'hygiène*
WESWA	Water and Environmental Sanitation for West Africa	*De l'Eau et l'Assainissement de l'Environnement pour l'Afrique de l'Ouest*
WSS	Water supply and sanitation	*Secteur de l'eau et de l'assainissement*
WUA	Water Users' Association	*Association des utilisateurs d'eau*

1 Introduction and Program History

Despite outstanding efforts made by the Government of Senegal (GOS), along with the support of development partners and donors, several regions of Senegal still suffer from low access to safe drinking water and a lack of basic sanitation systems.

Senegal has set its national Millennium Development Goals (MDGs) for connection to safe and potable drinking water for urban and rural areas at 90% (100% in urban areas and 82% in rural areas) and for sanitation facilities at 67% (78% and 59% in urban and rural areas, respectively).

The country is moving swiftly toward these goals. According to the PEPAM Coordination Unit (UC-PEPAM) study (December 2010), the current national access rate to potable water in urban areas is 98.5%, i.e., 8.5 percentage points gained toward MDGs, compared to the 2004 baseline of 90%. During the same period, the rural water coverage rate went from 64% in 2005 to 72%.

Progress for sanitation services is slower. The access rate for urban sanitation grew from 56.7% in 2004 to 63.1% in December 2010. For access to rural sanitation facilities, 29.6% was recorded in 2010, compared to a 26.2% baseline rate in 2005.

Additionally, the Senegal Demographic and Health Survey (DHS IV) revealed that in 2005, diarrheal diseases represented the second most important cause of morbidity, mainly among children under age 5; one out of five (22%) children had diarrhea during the two weeks preceding the DHS surveys. Today, according to the World Health Organization's 2011 statistics, the rate has dropped to 14%, moving diarrheal diseases down to third place in the ranking of causes of morbidity for children.

The UC-PEPAM study (2010) also revealed that Casamance, in Senegal, which includes the Ziguinchor, Kolda, and Sédhiou regions, ranks at the bottom of the list in its access to safe drinking water. The Kolda and Sédhiou regions' access rates are 36.8% and 57.9% respectively, i.e., less than the national regional average (77.5%). The access rate for the Ziguinchor region is 86%, substantially higher than the average.

Access to sanitation facilities still lags considerably behind that of water supply systems in Casamance. The UC-PEPAM survey report (2010) indicates the following:

- In Ziguinchor, the rural population access rate to sanitation infrastructure is 26.2%, less than the national average of 29%.
- In Sédhiou, the sanitation infrastructure inventory revealed that coverage was stable, albeit very low: 8.1% in 2009 and 2010.
- Kolda demonstrates the same trend as Sédhiou. The rate recorded there was 8.1% in 2009 and 2010.

RTI International and its partners present to the United States Agency for International Development (USAID) and the GOS the second Annual Report of the Millennium Water and Sanitation Program (USAID/PEPAM) for Fiscal Year (FY) 2011. This report covers the period from October 2010 to September 2011.

2 Program Description

USAID/PEPAM is financed by USAID and was negotiated with GOS. It is a 5-year program, which started in July 2009 and will end in September 2014. The purpose of the Program is to improve sustainable access to water supply and sanitation (WSS) and to promote better hygiene in rural, small towns and peri-urban areas of Senegal. There are five integrated project components for the implementation of this Program:

1. Strengthen participatory governance by improving village-level governance of WSS services and supporting participatory infrastructure planning, management, construction, and maintenance;
2. Increase demand for sustainable water, sanitation, and hygiene (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;
3. 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 businesses to respond to the demand for improved WSS and ensure sustainable operations and maintenance of the infrastructure;
4. Install and rehabilitate improved drinking water and sanitation infrastructure, using a service delivery framework;
5. Use and promote community-led total sanitation (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.

The Program targets regions within Senegal that currently have low access and service delivery for WSS. The current intervention sites are in the Casamance region, Ziguinchor, Sédhiou, and Kolda. The Program will expand to two additional regions—Tambacounda and peri-urban Dakar—upon recommendations of both USAID/Senegal and the program Oversight and Coordination (Steering) Committee, headed by the Ministry of Habitat, Construction, and Hydraulics (MHCH).

USAID/PEPAM now has five key results that contribute to its five components and, in combination, to the purpose of USAID-funded programs, presented in Figure 1 below. The Program has established 37 indicators to track and measure progress on the water and sanitation activities and 18 indicators to track the CLTS, hygiene promotion, and WASH in schools activities. Several of the program monitoring and evaluation (M&E) indicators are appropriately aligned with USAID and GOS–PEPAM indicators. The Program uses PEPAM multipliers and definitions to measure access and count beneficiaries.

A key strategy adopted for the implementation of the Program is to ensure that there is active local participation and buy-in with the population's participation and the involvement of ministerial departments in charge of water and sanitation issues at national and local levels, as well as the collaboration of nongovernmental organizations (NGOs) and community-based organizations (CBOs). This includes the following:

- Active participation from civil society/local population
- Active and engaged local government

- Buy-in and involvement from government technical units and ministries responsible for the provision of water and sanitation services the national and local levels
- Capacity building for NGOs and CBOs

The Project management and implementation have been entrusted by USAID to a consortium led by RTI International as prime contractor, with the support of TetraTech/Associates in Rural Development (ARD, Inc.) and Relief International/Enterprise Works/VITA (RI/EWV) as sub-contractors. There are 11 partner NGOs that collaborate with the consortium and play an important role in project implementation: ADY, AJAC LUKAAL, AJAEDO, PACTE, WESWA, and Kabonketoor (in Ziguinchor); and ENDA, CARITAS, CASADES, FODDE, and Enfance et Paix (in Sédhiou and Kolda). For CLTS and WADA 2 activities, Kabonketoor has been contracted to operate in the Ziguinchor region, CASADES in Sédhiou, and ENDA in Kolda.

3 Executive Summary and Program Results

Main achievements during Years 1 and 2 (August 2009–September 2011)

The USAID/PEPAM Program is an integrated water, sanitation, and hygiene program. Using an effective, participatory approach to work with local stakeholders, the program placed emphasis in Year 1 on putting a model of good governance and service delivery in place; promoting sustainable, low-cost solutions; and strengthening local capacities in the region of Ziguinchor. During Year2, the program extended the model in the regions of Sédhiou and Kolda while responding to the increasing demand generated in the Ziguinchor region. In addition in Year 2, project staff promoted CLTS activities, hygiene promotion campaigns, and WASH in schools as part of the integrated approach, demonstrating that these can contribute to changes in behavior and a rise in the demand for construction or rehabilitation of drinking water sources and sanitation facilities.

Following are key project achievements during Years 1 and 2 of project implementation:

The Program supported establishment of an effective service delivery framework and local government system for planning and implementing WSS programs. We also supported 22 local government WSS plans (PLHAs) and helped provide all Ziguinchor rural communities (CRs) with infrastructure development plans and infrastructure inventories. In Kolda, the development of 27 WSS plans, started in mid-Year 2, are in final production and printing. In a USAID/PEPAM-supported workshop in Ziguinchor, Presidents of CRs (PCRs) were trained on how Local Water Supply and Sanitation Plans (PLHAs) can be used as a planning tool and a resources mobilization instrument. The workshop, piloted by the Regional Development Agency (ARD) director, emphasized the practical use of the PLHAs. In developing synergies with other donors, USAID/PEPAM also reached agreement with the African Development Bank (AfDB) and UC-PEPAM that AfDB will fund the development of CR WSS plans in the Sédhiou region. That activity has not started yet.

The program trained 11 local well-drilling businesses in business management skills, hydrology and hydrogeology techniques, and low-cost hand-drilling techniques. These well drillers installed 64 wells in rural areas, which now provide clean drinking water for up to 11,700 formerly underserved beneficiaries. These same well drillers have expanded their repertoire and installed wells for other clients outside of the program.

The program supported the creation of local employment and businesses to meet the demands and needs for WSS infrastructure:

- the program trained 5 craftsmen in water pump manufacturing and supported the local manufacture of 33 simple-to-maintain manual pumps (EROBON rope pumps) that benefitted 4,950 villagers;
- the program trained 36 local artisans and entrepreneurs in manual pump maintenance and repair to ensure the long-term operation and maintenance of the pumping equipment in 64 villages in rural areas (2 people per village);
- the program trained 112 local village masons and 11 NGO technicians in the construction of the three types of affordable latrines that the Program is promoting (San Plat lined ditch latrine, the double pit ventilated latrine [DLV], and the double pit latrines [VIP]). In two years, the trained village masons constructed 1,928 latrines.

The program established an effective communication strategy and media campaign in partnership with 10 local NGOs. Six local community radio stations and promotional materials were used to help raise demand for latrines to 3,606 units, of which 2,797 have mobilized beneficiary counterpart financing. Water infrastructure demand also significantly increased and reached 214 units, of which 132 have mobilized the counterpart financing.

The program put 111 WUAs and local village management committees (CGs) in place and trained them in WSS infrastructure planning and management. Through these WUAs and CGs, local communities provided monetary and in-kind cost-share contributions to build 1,928 sanitation units and 59 water points—WSS infrastructure units.

The program trained regional hydraulic and hydrology services representatives from Ziguinchor, Kolda, and Sédhiou in hand drilling and hydrology. This training, together with the institutional support provided by USAID/PEPAM, gave regional officials the ability to perform approvals for infrastructure units and to positively contribute to the program.

The program identified and trained local women's associations, which were given the responsibility of implementing CLTS. The approach has been field tested in six CR villages in Ziguinchor. Given the successes noted, the approach was replicated in 18 additional villages in the 3 regions of Ziguinchor, Sédhiou, and Kolda, with financial support from the Water Development Alliance (WADA–Coca-Cola alliance).

The program has put an effective M&E system in place. Data is collected in the field that is then entered into a database, quality checked, processed, and analyzed to appraise the results against the targets.

The Program impacts are being measured against the original 34 indicators of the Performance Monitoring Plan (PMP), of which there are three USAID indicators that we are closely monitoring. Because of recent construction and installation of infrastructure, data on long-term impacts are not yet available. Through the Component 2 program activities (media campaigns and social marketing efforts), we are monitoring project impact by gauging various beneficiaries' and stakeholders' reactions to program activities, as well as their acceptance and buy-in of infrastructure solutions. We also hold quarterly reviews with the program's NGO partners to review progress on meeting targets and exchange best practices and means for improving project management and logistics.

In October and November of 2010, USAID/PEPAM submitted a revised set of projections for the USAID standard indicators, which was included in the Year 2 Work Plan and Year 1 Annual Report. The table is as follows:

Table 1: USAID/PEPAM—projections for Standard USAID Indicators – FY 2009 to FY 2014

USAID/PEPAM Projections for Standard USAID Indicators

Indicator Statement *(Custom indicators are in italics)*	Date of Last DQA	Performance Data								
		FY09		FY10		FY11	FY12	FY13	FY14	LOP
		Actual	Target	Actual	Target	Target	Target	Target	Target	Target
Number of people in target areas with access to improved drinking water supply as a result of USG assistance	7-Sep-10	0	1,250	1,200	6,750	41,400	40,000	40,000	19,250	**141,850**
Number of people in target areas with access to improved sanitation facilities as a result of USG assistance	7-Sep-10	0	50	320	12,500	13,130	30,500	30,500	18,550	**93,000**
Number of producer's organizations, water users associations, trade and business associations, and Community-Based Organizations (CBOs) receiving USAID assistance	7-Sep-10	0	20	165	114	133	60	30	0	**388**

Source: USAID/PEPAM Program Annual Report and Work Plan

Date: October 2010

For each of the three key USAID Indicators, the following results can be noted, with percentage achieved at the end of FY 2011:

Table 2: Project PMP results for FY 2011 – key data for USAID/PEPAM, indicators for water and sanitation, from 2010 to the end of September 2011

USAID/PEPAM - Senegal Water and Sanitation Program - Project PMP Results for FY-2011

Key Results for Hyrology and Sanitation - Cumulative Totals for FY-2010 and FY-2011

SECTOR		Region	Total number of infrastructures achieved	Number of infrastructures placed in service	Number of beneficiaries affected	Objectives / Targets set for FY2010 + FY2011	Achievement rate
HYDRAULIC							
	Number of mini-boreholes constructed	Ziguinchor	41	35	7,050		
		Kolda	12	10	1,800		
		Sédhiou	10	7	1,200		
		Total	**63**	**52**	**10,050**		
	Number of wells/boreholes rehabilitated	Ziguinchor	2	2	300		
		Kolda	4	4	600		
		Sédhiou	5	5	750		
		Total	**11**	**11**	**1,650**		
	TOTAL HYDRAULIC		**74**	**63**	**11,700**	**42,600**	**27%**
SANITATION							
	Number of household latrines constructed within the framework of the grants program	Ziguinchor	1,514	1,514	15,140		
		Kolda	195	195	1,950		
		Sédhiou	219	219	2,190		
		Total	**1,928**	**1,928**	**19,280**	**13,450**	**143%**
	Number of household latrines constructed/rehabilitated and equipped with a handwashing device within the framework of the CLTS program	Ziguinchor	106	106	1,060		
		Kolda	97	97	970		
		Sédhiou	80	80	800		
		Total	**283**	**283**	**2,830**	**4,080**	**69%**
	TOTAL INDIVIDUAL SANITATION		**2,211**	**2,211**	**22,110**		
	Number of public sanitation facilities constructed (in schools)	Ziguinchor	1	1	300		
		Kolda	0	0	0		
		Sédhiou	0	0	0		
	TOTAL PUBLIC SANITATION FACILITIES		**1**	**1**	**300**	**600**	**50%**
CAPACITY BUILDING		**Region**		**Number of organizations / associations affected**			
	Number of producer's organizations, water users associations, trade and business associations, and Community-Based Organizations (CBOs) receiving USAID assistance	Ziguinchor			259		
		Kolda			65		
		Sédhiou			63		
		Total			**387**	**298**	**130%**

Source : USAID/PEPAM M&E Database - 30th September 2011

As noted in the tables, the program has met and surpassed the combined FY 2010 + FY 2011 targets for two of the standard USAID indicators:

B: Number of people in target areas with access to improved sanitation facilities as a result of USG assistance = 19,280 at 143% of target
3.1.A: Number of producer's organizations, water users associations, trade and business associations, and Community-Based Organizations (CBOs) receiving USAID assistance = 387 at 130% of target

For these two indicators, a combination of a strong media and marketing campaign, our CLTS and hygiene promotion activities, strong buy-in by local government officials and regional GOS technicians, improved engagement and technical implementation by the local NGOs, promotion of affordable solutions—all contributed to obtaining good results.

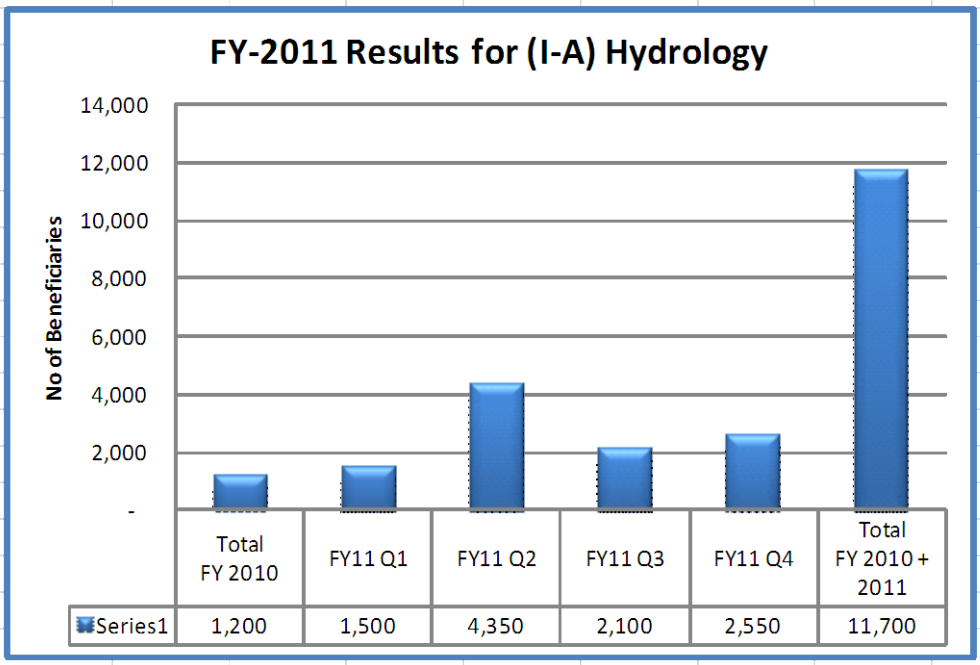
For hydrology and water access:

A: Number of people in target areas with access to improved drinking water supply as a result of USG assistance = 11,700 at 27% of target

For this indicator, we were not able to meet the target due to the time and level of effort it is taking to implement the large and medium infrastructures. Fourteen large and medium infrastructure projects and sites are ready to go in the Casamance region, will be under construction in early FY 2012, and will benefit 38,000 beneficiaries. It took 6 to 7 months for all the hydro-geological surveys, ground water and technical studies, water quality testing, site selection and GOS approvals, and technical drawings and specifications, to be completed. The program is meeting the Ministry of Environment (DEEC) requirements and USAID requirement to carry out environmental assessments for the large and medium infrastructures. The program was overly optimistic in estimating the time it would take to carry out all the studies and seek administrative approvals.

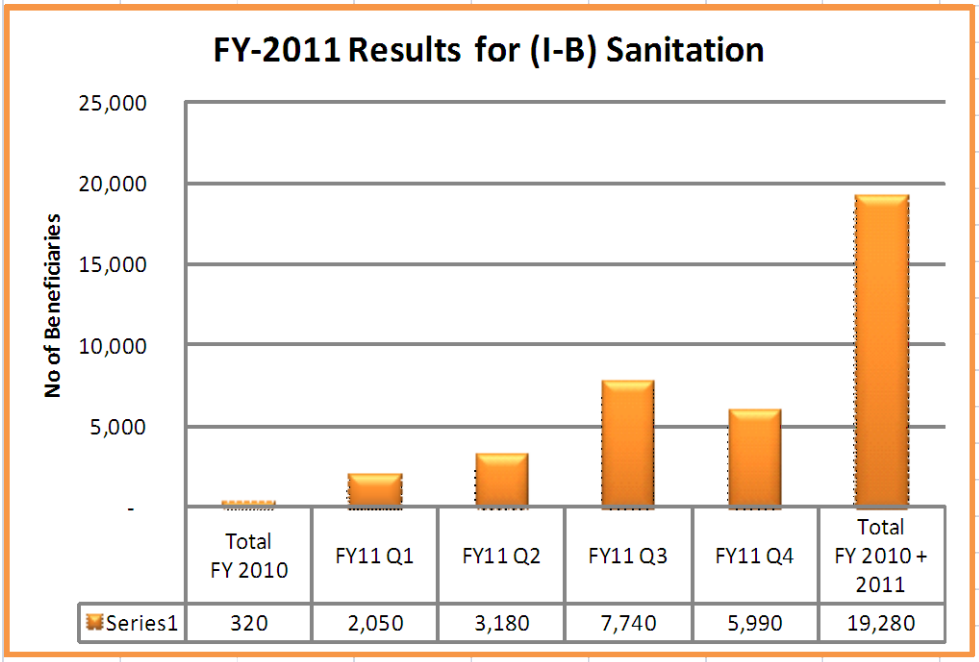
Another reason for the delays in meeting hydrology targets is the long administrative procedures for procurement of supplies, some of which must be imported and take time to ship and clear customs. In addition, beneficiaries and CGs have needed time to mobilize their counterpart financing and meet the administrative and contractual obligations for the water infrastructure.

Results for the Standard USAID Indicators - No A - Hydrology / Water Points - Number of people (estimated) in target areas with access to improved drinking water supply as a result of USG assistance through USAID/PEPAM using locally sustainable strategies



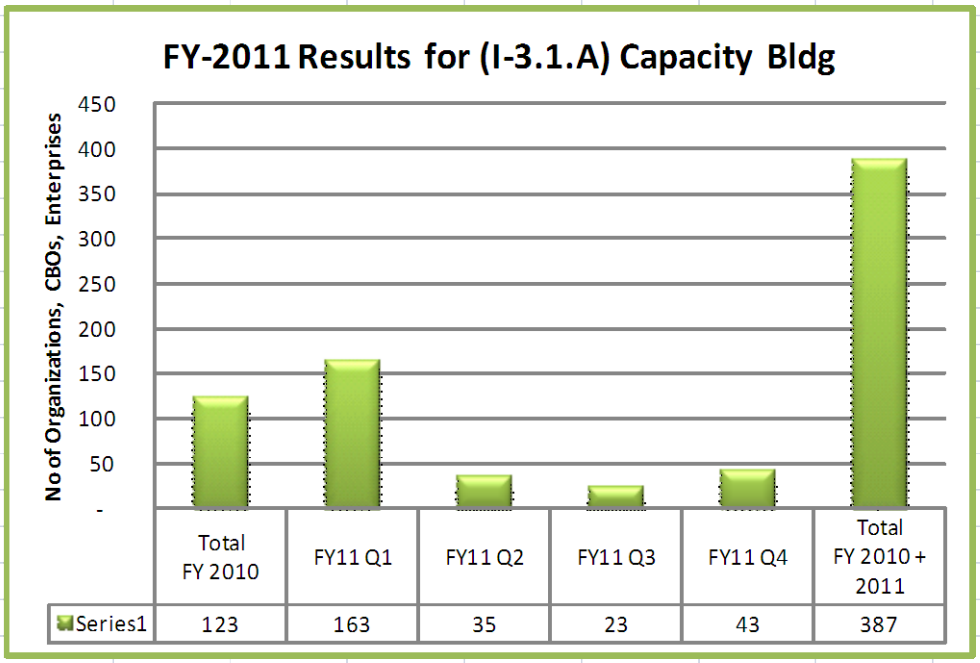
Source : USAID/PEPAM M&E database - September 30, 2011

Results for the Standard USAID Indicators - No B - Sanitation / Latrines - USAID Standard Indicator: Number of people (estimated) in target areas with access to improved sanitation facilities as a result of USG assistance through USAID/PEPAM using locally sustainable strategies



Source : USAID/PEPAM M&E database - September 30, 2011

Results for the Standard USAID Indicators - No 3.1.A - Number of producer's organizations, water users' associations, trade and business associations, and Community-Based Organizations (CBOs) receiving USAID assistance through the USAID/PEPAM program in the FY



Source : USAID/PEPAM M&E database - September 30, 2011

4 Achievements in FY 2011 and Planned Activities

4.1 Component 1: Strengthen participatory governance

The main objective of this component is to improve village-level governance of water and sanitation services and support the planning, management, installation, and maintenance of infrastructure.

4.1.1 Activities achieved

❖ **Conduct participatory planning**

With the support of USAID/PEPAM, the two regions of Ziguinchor and Kolda are now the first in Senegal to be fully covered by PLHAs. To ensure coverage of all the Casamance CRs, the PEPAM/BAD2 program will finance the production of PLHAs in Sédhiou.

- USAID/PEPAM has finished the formulation process for 22 PLHAs in the Ziguinchor region. These 22 PLHAs have been validated by the rural councils and responsible technical services units, and approved by the administration. They are available to users on the UC-PEPAM site at the following address: http://www.pepam.gouv.sn/zig-plha.php.
- On May 24, 2011, USAID/PEPAM organized a workshop for the submission of the 22 PLHAs (Ziguinchor region). The assistant governor in charge of development for the region of Ziguinchor chaired the workshop, with the participation of the ARD, all of the region's PCRs, their community assistants (ASCOMs), heads of the regional

technical departments for water supply and sanitation, developmental partners, the ARD director, and the Regional Council (see Textbox 1).

- USAID/PEPAM will also update 3 older PLHAs in the Ziguinchor region to better align results with the 22 new PLHAs.
- Because of this success in Ziguinchor, USAID/PEPAM initiated the planning process to ensure complete coverage of the Kolda region with funding of 27 new PLHAs.
- USAID/PEPAM organized a special Rural Development Committee for the launch of development activities for 27 PLHAs in the Kolda region, April 22, 2011, with the goal of engaging all stakeholders in the process. The region's governor chaired the committee, and the Kolda ARD actively contributed, as well as the PCRs, their ASCOMs, the heads of the state regional technical departments, and the developmental partners active in the area.
- The three consulting firms hired to formulate the 30 PLHAs (27 new and 3 updated)—Groupe d'Etude, de Recherche et d'Appui au Développement (GERAD), l'Africaine d'Ingénierie du Développement Local et de la Formation (AIDF), and Malick Sow & Associés (MSA)—are finalizing the process.

These PLHAs are of great value to all stakeholders working to achieve the MDGs in the drinking water and sanitation sectors in Casamance. The PLHA is a fundamental instrument for implementing the Unified Intervention Framework (CUI) defined by PEPAM. Full coverage in Ziguinchor and Kolda means that 52 CRs in these regions now have the following:

- Synthesis of the inventory of drinking water and sanitation infrastructure
- Establishment of a balance sheet of access to safe water and sanitation as well as a coherent information system with consistent references
- Development plan for drinking water and sanitation infrastructure to achieve MDGs by 2015
- Costs and financial plan for water and sanitation infrastructure to achieve MDGs by 2015
- Costs and financial plan for social support measures (information, education, and communication [IEC] and capacity building) for WASH
- Development of a 3-year action plan for initial investment, including projects under implementation and operational priorities
- Articulation of the PLHA into the Local Development Plan (PLD)
- etc.

❖ **Commitment of all stakeholders**

The USAID/PEPAM Program continues to reinforce its collaboration with civil society (local NGO/CBO partners), local collectives, governmental authorities, local private sector, and regional technical departments for the implementation of the program:

- USAID/PEPAM has engaged 10 partner NGOs/CBOs: we have signed cost-reimbursable grant (CRG) contracts with them to conduct field operations in the regions of Ziguinchor (5 NGOs/CBOs), and Sédhiou and Kolda (5 NGOs/CBOs). These NGOs/CBOs ensure the local oversight and supervision of the technical and

social community works at target locations. As such, they are operators for all 4 program components as well as for M&E. All these NGOs/CBOs received an orientation workshop on program strategy for better visibility and harmonization of activities. They were also trained on (1) implementation procedures for activities to strengthen village-level participatory governance: approach, strategy, procedures, and tools; (2) the strategy and implementation rollout for CGs: organization, composition, selection criteria, and tools; and (3) the manual and trainer's guide for Establishment of Responsibility and Operationalization (*Mise en Responsbilité et Oprationnalisation* [MeRO]) for CGs/Associations of Rural Borehole Users (ASUFORs).

- USAID/PEPAM and the NGO/CBO partners have invested and mobilized 204 local collectives (villages and communes) to conduct drinking water, hygiene, and household sanitation projects in the regions of Ziguinchor (54 sites), Sédhiou (71 sites), and Kolda (79 sites). In addition to the 114 enrolled in the first year, 90 new extension sites were selected in the regions of Sédhiou (41 sites) and Kolda (49 sites). The selection of these new sites is based on needs expressed in local planning documents (PLHAs, PLDs, Annual Investment Plans [PIAs], etc.). Currently, 127 local collectives have signed a letter of commitment with USAID/PEPAM and have agreed to participate with monetary and in-kind contributions for infrastructure construction and financing.
- USAID/PEPAM signed a partnership agreement with each of the 69 targeted local collectives in the regions of Ziguinchor (25 CRs and 1 commune), Sédhiou (13 CRs and 1 commune) and Kolda (28 CRs and 1 commune).
- USAID/PEPAM signed a memorandum of agreement (MOU) with the Equipment Maintenance and Operation Department (DEM), the Rural Sanitation Department (DAR), and the Rural Water Supply Division (DHR) concerning the involvement and support of the Regional Divisions of Water (DRH) and Sanitation (DRA) and the Well and Borehole Squad (BPF).
- USAID/PEPAM has designed participatory tools for strengthening governance, through the establishment of a partnership framework that is integrated and supports program implementation.
- USAID/PEPAM has also developed an integrated global strategy for WASH project implementation, from demand generation to the final infrastructure approval. As soon as an appropriate participatory governance entity (CG or ASUFOR) is put in place in the target community and a bank account is open, this strategy outlines operational procedures in 10 steps, involving all the components and actors.

The involvement, participation, and synergy of actions of all stakeholders in program implementation ensure greater ownership. In addition, the implementation of all these tools and procedures has the advantage of being based on a broad consensus among all stakeholders.

❖ **Organization of users and training for user associations**

USAID/PEPAM, in accordance with its objectives of good, participatory governance, supports the target communities in establishing a CG or ASUFOR at each site. These CGs/ASUFORs are responsible for construction of WSS infrastructure in the village. In addition to their traditional

mission of managing water infrastructure, the management entities will be responsible for the promotion of WSS facilities and hygiene practices. This reinforces their roles and responsibilities.

In support of this, the following activities were conducted:

- USAID/PEPAM set up and trained 111 CGs/ASUFORs in the regions of Ziguinchor (53 CGs/ASUFORs), Sédhiou (28 CGs/ASUFORs), and Kolda (30 CGs/ASUFORs); they have also opened their bank accounts.
- USAID/PEPAM, in collaboration with the consulting firm Malick Sow & Associés (MSA) within the framework of the PEPAM/BAD2 program, also completed the establishment and revitalization of Committees of Directors and Executive Offices of ASUFORs in 14 sites for large and medium infrastructures in the regions of Ziguinchor (Diouloulou, Séléty, Dombondir, Petit Coulaye, Médiégue, and Ebinako Néma), Sédhiou (Marsassoum, Djibabouya, Boudiémar, and Djiragone Diafar) and Kolda (Mampatim, Salikégné, Médina Passy, and Saré Samba Cissé).

At the same time, USAID/PEPAM attaches special importance to strengthening participatory WASH governance for the sustainability of activities in its intervention areas. This sustainability is largely based on sustainable management and promotion mechanisms, supported by endogenous resources and governance structures (CGs/ASUFORs) that are autonomous, participatory, and strong. To establish responsibility and operationalization (MeRO) for CGs/ASUFORs, the program conducted the following activities:

- USAID/PEPAM revised the CG/ASUFOR MeRO manual and trainer's guide, in collaboration with Component 3's management training and business development. The manual contains financial procedures and administrative and financial management tools. The trainer's guide is for use by NGO/CBO supervisors and facilitators.
- Using this manual and guide, USAID/PEPAM trained CG offices in administrative and financial management in the first 60 sites in the regions of Sédhiou (30 sites) and Kolda (30 sites).
- USAID/PEPAM has also published the administrative and financial management tools as books and registers that are provided to each CG and ASUFOR for the implementation, governance, and monitoring of community WASH projects.
- As of September 30, 2011, USAID/PEPAM has received 314 funding requests from CGs/ASUFORs, of which 240 are for household sanitation projects and 74 are for water projects. USAID/PEPAM has also signed 225 contracts for fixed obligation grants (FOGs) with CGs/ASUFORs, of which 169 are for household sanitation and 56 are for water projects (see ***Annex 3***).

The gender dimension has been properly taken into account in member elections that have taken place in CGs and ASUFORs that are already established. Women represent 44% of the project-trained CG/ASUFOR membership. In addition, certain CGs and ASUFORs have reserved several leadership positions for women, including treasurer and WASH promotion.

❖ **Activity monitoring and maintenance of manual pumps**

Within the sustainability framework, USAID/PEPAM relies heavily on the functionality of CGs/ ASUFORs, as well as their autonomy in monitoring and maintenance of installed infrastructure.

- Through synergistic efforts from both Components 1 and 3 (management training and business development), USAID/PEPAM conducted a monitoring-support mission for 45 targeted CGs and ASUFORS in Ziguinchor. Currently, 95 CGs/ASUFORs in the regions of Ziguinchor (49), Sédhiou (24), and Kolda (22) hold meetings every three months to report on their activities to the public.
- USAID/PEPAM developed two types of contracts for monitoring and maintenance of manual pumps (India and EROBON) for small local private service providers. 35 CGs in the regions of Ziguinchor (14), Sédhiou (8), and Kolda (13) have signed monitoring and maintenance contracts for manual pumps with local artisan/ manufacturers and repairmen.

Monitoring and maintenance of manual pumps installed through a USAID/PEPAM grant are the responsibility of the CGs, who are fully in charge of all support. USAID/PEPAM requires this signing of a maintenance contract between CGs and local private service providers (artisan/ repairmen and artisan/pump manufacturers). To ensure the establishment of sustainable manual pump maintenance, USAID/PEPAM has identified several artisan/pump repairmen who were trained by UNICEF, who have repair kits, and who are approved by the technical service units.

4.1.2 Challenges and solutions (Component 1 activities)

Table 3: Differences/gaps between targeted results and achievements

Results/Targets Planned in Year 2	*Achievements in Year 2*	*Difference/Gap*
Identification and selection of target communities in the regions of Ziguinchor, Sédhiou, and Kolda	Identification and selection of 191 target communities in the regions of Ziguinchor (54), Sédhiou (65), and Kolda (72)	0
Engagement of partner local collectives with the signing of partnership agreements (regions of Ziguinchor, Sédhiou, and Kolda)	Signing of 69 partnership agreements with target local collectives in the regions de Ziguinchor, Sédhiou, and Kolda	0
Engagement of target local collectives in the regions of Sédhiou and Kolda with the signing of letters of request and letters of commitment	Signing of 137 letters of request and commitment by communities in the regions of Sédhiou and Kolda	0
Completion of 18 PLHAs	Completion of 30 PLHAs	+ 12 PLHAs completed in the regions of Ziguinchor and Kolda
Capacity building of 10 NGO/CBO partners in the regions of Ziguinchor Sédhiou, and Kolda in participatory governance in water supply services (installation, management, operations, and monitoring of ASUFORs)	0	10
Organization of users (ASUFORs/CGs) training of management entities in the target communities of Sédhiou and Kolda	Establishment and training of managing bodies of 108 ASUFORs/CGs in Sédhiou and Kolda	Remaining establishment of 29 CGs and training of 77 CGs in the extension sites in the regions of Sédhiou and Kolda

Justification of gaps between the target and achieved results

USAID/PEPAM is primarily a program for social and community development in which the water and sanitation facilities are a reason to build on participatory mechanisms, autonomous self-management in order to work toward endogenous development. During the course of the second intervention year in Casamance, we consolidated the framework for the program's integrated implementation, which is unprecedented in the field of rural water and sanitation. However, the responsiveness of village communities, from the process of demand generation and formulation to the implementation of infrastructure, is sometimes slow compared to program progress and objectives. The length of the rainy season (June–October) also causes delay in rolling out the process, agriculture being the main socio-economic activity of the Casamance population.

Challenges/constraints to carrying out interventions

The implementation of these mechanisms and autonomous reflexes for participation and self-management constitutes a challenge in an area where water and sanitation rights and competencies are not yet transferred to local communities. The synergy and capabilities of various stakeholders (responsible technical service units, local communities, local NGOs/CBOs, grassroots organizations, etc.) take time. The foundation of this strategy is mainly based on village communities, and they are multi-dimensional, being the targets, the actors, and the constraints at the same time.

Textbox 1: Workshop for the submission of PLHAs in Ziguinchor

- A workshop for the submission of the 22 PLHAs (Ziguinchor region) financed by the USAID/PEPAM program and for the launch of the updates of 3 others in the region of Ziguinchor was organized on May 24, 2011.
- The workshop highlighted the value of PLHAs, defined the roles and responsibilities of each stakeholder, and analyzed the budgetary implications and the harmonization of activities. It was the first time this type of workshop took place in the region, and during the meeting, a series of recommendations and a plan of action were developed by the participants. The participants expressed unanimously that USAID/PEPAM should remain in the region of Ziguinchor, extend its operations, and increase the infrastructure quotas.

Activities at the central level and participation in conferences, workshops, and technical coordination meetings

Component 1 participates in exchange and harmonization workshops, technical coordination meetings, and meetings with other partners. These meetings and exchanges with actors in the WSS sector promote synergy with other development programs in our program's intervention region.

4.1.3 Activities planned for the next quarter

ACTIVITIES	DATE	RESPONSIBLE PARTIES
Development of the sustainability strategy and dissemination in Casamance	Oct – Dec 2011	Target communities, local collectives (Rural and Regional Councils), ARD, administrative authorities, GOS regional technical services units, NGO/CBO operators, small local providers, USAID/PEPAM, etc.
Extension into Vélingara and the third intervention region (Tambacounda)	Oct – Dec 2011	GOS central and regional technical services units, UC-PEPAM, ARD, target communities, local collectives and administrative authorities, USAID/PEPAM, etc.
Participatory planning: development of PLHAs	Oct – Dec 2011	GOS central and regional technical services units, UC-PEPAM, ARD, USAID/PEPAM and consultants
Capacity building of local partners in governance (field agents from the Peace Corps)	Oct – Dec 2011	USAID/PEPAM and partners
Establishment, training, and monitoring of user associations (CGs/ASUFORs and Neighborhood Councils [CQs])	Oct – Dec 2011	Target communities, NGO/CBO operators, local collectives, administrative authorities and USAID/PEPAM
Establishment of Responsibility and Operationalization (MeRO) for user associations (CGs/ASUFOR et CQs)	Oct – Dec 2011	Technical services units, target communities, NGO/CBO and program operators, financial services, USAID/PEPAM

4.2 Component 2: Increase demand for water supply and sanitation (WSS) services and hygiene

The primary aim of the communication campaign is to facilitate the following activities:

- Promotion of demand for, and access by rural and peri-urban populations to, drinking water services and low-cost sanitation systems that ensure a hygienic environment
- Improvement of sanitary and hygienic behaviors identified as critical within the community

10 local NGOs lead these communication activities under the direction and the supervision of the project's head of the Communications Component and the communications assistant.

4.2.1 Activities achieved

❖ **Generation of demand for WSS services at the community level**

From 1,367 demands in Year 1, the overall demand for sanitation (in the three regions of Ziguinchor, Kolda, and Sédhiou) increased to **3,606**, of which **2,797** were real demands, i.e., with mobilized cost-share in the CG bank accounts. This is an increase of **1,430** new demands generated during Year 2.

Table 4: Status of demand for WSS services

SECTOR	REGION					
	Ziguinchor		Kolda		Sédhiou	
	Expressed (potential)	Actual (w/cost-share)	Expressed (potential)	Actual (w/cost-share)	Expressed (potential)	Actual (w/cost-share)
Sanitation	2,605	1,954	429	395	572	448
Hydraulic	112	81	57	31	45	30

In hydrology (water points), the overall demand is around **214**, including **132** with cost-share already mobilized. This relatively low demand in hydrology is primarily due to the communities' non-support for technology promoted by the program. Rather than mini-boreholes with manual pumps, most of the targeted communities prefer multi-village water supply systems (AEMVs) or mini water supply systems (AEPs) that they deem more suited to their needs because of the population size and where they are located.

To remedy this situation, the program, in collaboration with local technical service units, has invested in new extension sites, selected based on existing PLHAs, and strengthened advocacy activities toward local authorities.

❖ Generation of WSS demand in schools

As part of the sanitation and hygiene in schools component, the program generated **23** actual demands for hydrology works and **18** sanitary blocks out of **30** targeted primary schools. The breakdown is as follows:

Table 5: Summary of demands for school infrastructure

REGION	NUMBER OF DEMANDS FOR HYDOLOGY (WATER POINTS)	NUMBER OF DEMANDS FOR SANITARY BLOCKS
ZIGUINCHOR	9	9
KOLDA	5	3
SEDHIOU	9	6
TOTAL	**23**	**18**

❖ Hygiene promotion at the community level

Hygiene promotion activities mainly involved home visits (VAD), informal talks, and social mobilization. The major themes for these activities include demand generation, hand-washing with soap, latrine maintenance, using potable water, and water supply point maintenance. The hygiene promotion activities are coordinated closely with the Component 5 activities and CLTS.

A child in the village of Ebinako (Diouloulou) washes his hands with the local hand-washing device.

The following table contains a summary of hygiene promotion activities conducted in Year 2.

Table 6: Summary of hygiene promotion activities

REGION	ACTIVITIES			
	VAD	TALKS	ADVOCACY	SOCIAL MOBILIZATION
ZIGUINCHOR	2,835	105	45	169
KOLDA	350	57	19	228
SEDHIOU	884	368	84	147
TOTAL	**4,069**	**530**	**148**	**544**

During the last quarter of Year 2, the program launched a major hygiene promotion campaign, focused on two major themes: hand-washing with soap and the use of Aquatabs for treatment of drinking water. The results obtained during this phase are the following:

- **1,092** hand-washing devices installed (objective of **1,500**)
- **21,151** Aquatabs tablets sold (objective of **20,000**), which translated to **422,500** liters of water treated in households
- Training of CGs and academic staff on hygiene promotion

The following results were achieved by the program:

- **45** CGs and ASUFORs out of **54** in the region of Ziguinchor were trained in hygiene education and promotion; this is a total of **204** members of our CGs.
- **59** CG members were trained in hygiene promotion in the region of Kolda.
- **23** school inspectors (IAs) and education inspectors (IDENs) were trained on use of the Health–Nutrition–Environment (SNE) Guide. They, in turn, disseminated this training to **114** primary school teachers in the regions of Ziguinchor, Kolda, and Sédhiou.

Imam from the village of Bagadadji (Kolda) preaching on the advantages of hand-washing with soap

- **Production of radio jingles/spots and videos on hygiene promotion**

The program produced six jingles focused on hygiene promotion in Joola, Mandinka, Wolof, and French. Two videos have also been produces on hand-washing and open-air defecation.

- **Development of a Water–Hygiene–Sanitation Guide (EHA) for middle secondary schools**

During the month of August 2011, the program organized three production workshops for the EHA Guide for middle schools, aimed at middle school students in Senegal. This document, which will be validated during the next quarter, is the first of its kind in the Senegalese education system.

- **Media campaign with community radio stations**

This activity was conducted only during the first quarter of FY 2011. 632 spots were broadcast by six partner community radio stations. Collaboration with partner radio stations, suspended during the second and third quarter, was renewed in September 2011.

Promotion of the Aquatabs product at Medina Passy

The following table summarized the status of activities achieved during the year.

Table 7: Level of achievement of planned activities during Year 2

Activity	Objective	Achieved	Gap
Demand generation for sanitation services in the regions of Ziguinchor, Kolda, and Sédhiou (Number of demands with mobilized cost-share)	3,296	2,797	499
Demand generation for water supply in the regions of Ziguinchor, Kolda, and Sédhiou (Number of demands with mobilized cost-share)	214	132	82
Demand generation for water supply (mini-borehole) in schools (Number of demands with mobilized cost-share in the schools)	30	23	07
Demand generation for sanitation (sanitary block) in schools (Number of demands with mobilized cost-share in the schools)	30	18	12
Hygiene promotion at the community level (Number of VADs/IEC sessions)	4,000	4,069	+ 69
Hygiene promotion at the community level (Number of informal talks)	400	530	+130
Hygiene promotion at the community level (Number of social mobilizations)	300	544	+144
Hygiene promotion at the community level (Number of advocacy actions)	100	148	+48
Training of CG members in hygiene promotion	425	263	162
Training of school staff in hygiene promotion	137	137	0
Production of radio jingles/spots and videos on hygiene promotion	8	8	0
Promotion of hand-washing with soap (Number of hand-washing devices installed in households)	1,500	1,092	408
Promotion of Aquatabs (Number of Aquatabs tablets sold in the villages)	20,000	21,151	+1151

Activity	Objective	Achieved	Gap
Development of an EHA Guide for middle secondary schools	1	1	1
Media campaign (Number of radio spots broadcast)	500	632	+132

4.2.2 Challenges and solutions

Constraints

The main constraints encountered in implementing the activities include the following:

- Lack of staff for this component (only 2 people cover three intervention areas); this does not permit assurance of regular monitoring for field activities.
- Local targeted population's low level of interest in certain program technologies (e.g., mini-boreholes)

Lessons learned

- It is imperative to ensure regular monitoring of the communities if we want sustainable behavior change. This requires more frequent field visits to ensure the gains made in terms of behavior change and to sustain good hygiene practices.
- It is necessary to use mixed marketing techniques to better reach the communities. Using a single communication channel (radio or interpersonal communication, for example) is not sufficient to guarantee the desired behavior change in the population. It is therefore necessary to combine multiple types of communication (interpersonal, media, poster, mass communication) to reach the targets effectively and generate behavior change.
- It is necessary to target specific themes for each phase of the communication campaign. This includes splitting the campaign into two or three phases, of three months each, and identifying at most two themes per phase. Using a strategy of mixed communication around the identified themes for each phase can maximize the impact of the communication campaign on the population and ensure the desired success.

4.2.3 Activities planned for the next quarter

ACTIVITIES	DATE	RESPONSIBLE PARTIES
Monitoring and coordination for the hygiene promotion campaign	Oct – Dec 2011	USAID/PEPAM
Celebration of World Hand-Washing with Soap Day	15 October 2011	USAID/PEPAM + NGO
Advocacy campaign for the increase in hydraulic demand	Oct – Dec 2011	USAID/PEPAM + NGO
Promotion of the Aquatabs product at the community level	Oct – Dec 2011	NGO + CG
Rollout of school sanitation activities in Ziguinchor, Kolda, and Sédhiou: a new concept—"my school, my pride"	Oct – Dec 2011	USAID/PEPAM IAs and IDENs
Certification ceremony for the sanitary block at Badiana College	October 2011	USAID/PEPAM IA Ziguinchor IDEN Bignona

National validation workshop for the EHA Guide for middle schools	November 2011	DCMS USAID/PEPAM
Capacity-building workshop for media members on the treatment and taking charge of issues and challenges in Senegal's WSS sector	December 2011	USAID/PEPAM Consultant
Formative study for Region 3	Dec 2011 - Feb 2012	Consultant

4.3 Component 3: Strengthen the capacity of small-scale private service providers and Water Users' Associations (WUAs)

Component 3 supports the other program components through activities that improve the capacity of local businesses to meet the demand of WSS products and services.

The main opportunities identified for the USAID/PEPAM program to support private businesses and contractors concern the following areas:

- Installation of boreholes equipped with manual pumps
- Quality control of the installation of boreholes and pumps
- Local fabrication and installation of rope pumps for individuals and small communities
- Training of CGs in infrastructure maintenance
- Rehabilitation of large-diameter concrete wells that became unusable because of the penetration of fine sand
- Rehabilitation of broken pumps

4.3.1 Activities achieved

❖ **Training of manufacturers in the "EROBON" manual rope pump**

USAID/PEPAM trained three new metalworking shops to locally manufacture the EROBON manual rope pump: 2 in Kolda and 1 in Sédhiou. These craftsmen are selected by the project in collaboration with the two regions' chambers of commerce. This gives us a total of five metalworking shops trained since the inception of the program (including two in Ziguinchor trained during Year 1 of the program).

Metalworking shop Omar Sané, Kolda

Artisan Etienne Mar of Sédhiou in front of his workshop

❖ Quality control of pumps manufactured by project-trained craftsmen

In June 2011, the project received a visit from a consultant from Practica Foundation, a specialist in manual pumps, to conduct quality control on pumps manufactured in our craftsmen's workshops. This mission focused exclusively on the manufacturers in the regions of Sédhiou and Kolda. The consultant noted that the pumps manufactured in these workshops are of good overall quality, and he urged the craftsmen to continue to maintain the quality of these pumps to ensure the established system sustainability. However, he advised the craftsmen to improve the paint and to remove welding burrs from the pumps to prevent rusting, given the aggressiveness of the climate in this area. He made some new modifications in the manufacture of certain parts of the pumps, which the craftsmen have welcomed. These modifications have already begun to be applied in some metalworking shops for a better local pump production.

❖ Training of businesses/private providers in manual borehole installation

USAID/PEPAM has expanded its activities in the regions of Kolda and Sédhiou. To rapidly advance the installation of hydraulic works, the project has trained seven new manual drilling enterprises. Three enterprises were trained in Sédhiou, three in Kolda, and another one in Ziguinchor. Each drilling enterprise is composed of a 5-person team. Two drilling techniques are taught to each of these enterprises: the Rota jetting technique and percussion drilling.

In addition to the drilling enterprises, partner NGO technicians also participated in the training. This will enable them to monitor and inspect the trained enterprises' activities as they complete project works.

Training in the jetting technique for an enterprise in Sédhiou

Training in percussion drilling for a team in Kolda

❖ Provision of drilling equipment for trained manual drilling enterprises

In January 2011, USAID/PEPAM officially presented drilling equipment to 4 enterprises—2 in Sédhiou and 2 in Kolda. Dean Swerdlin, the program director, presided over the presentation ceremony, which was attended by members of the technical staff and the beneficiary enterprises. As a reminder, the cost of all this equipment will be reimbursed by the enterprises at a rate of 87.5%. 12.5% of the cost is subsidized by the project and covers the cost of transportation, manufacturing, and the cost of a bag of drilling fluid (polymer).

In total, 8 of the 11 trained enterprises in Casamance have been equipped by USAID/PEPAM, of which 7 enterprises have reimbursed the project for their equipment "credit." Equipment for the last three enterprises is being manufactured and will be available and distributed next quarter.

❖ Training in jetting well installation and rehabilitation of hydraulic works

USAID/PEPAM trained drilling enterprises and certain service providers to conduct rehabilitation activities for water supply points in intervention zones. The training focused on putting in concrete wells with installation of a capped - closure slab and a manual pump for water extraction.

The project also trained Ziguinchor drilling enterprises in the installation of jetting wells. A jetting well is a borehole installed within a well that is becoming dry, to help increase its recharge capacity. This increase in well productivity is made possible by inserting a 3m–6m pipe with a strainer in the inlet portion of the installation at the aquifer. This is a very effective technique, but only possible in wells having a sandy aquifer.

Training in jetting well installation for enterprises in Ziguinchor

Rehabilitation of traditional well in Sare Yoro Diaw (Kolda)

❖ Training of manual pump craftsmen/repairers

To ensure the sustainability of the established EROBON pump fabrication system, another mission of the project is to train craftsmen/repairers and installers in all project regions. During June 2011, the project hired a consultant to provide training in the maintenance, installation, and repair of the EROBON manual pump in Kolda. This training was attended by all craftsmen/repairers selected by the project to perform maintenance on the India pumps, as well as pump manufacturers and NGO technicians. The training was very informative and allowed the craftsmen/manufacturers who have mastered the pump to learn many aspects of the manufacturing process. During the training, the participants indicated that maintenance problems occur rapidly if the pump is not correctly built. Thus, the instructor emphasized that the quality inspectors should perform a thorough check of the pumps at the shop before they are deployed in the field.

Practical training for repairers in Kolda

Participants at the training for repairers in Kolda

- **Establishment of a supply chain for drilling fluid (polymer)**

Polymer is an essential product for drilling, and it is important to set up an import chain to fill the needs of trained drilling enterprises. The polymer is a biodegradable product used to prevent water loss and to maintain stable pit walls when building the boreholes. Because the product is not available in Senegal, it is important to establish a reliable supply chain for the sustainability of manual drilling activities. In December 2010, an MOU was established between USAID/PEPAM and a Ziguinchor hardware supplier (Korka hardware shop) to import polymer for drilling.

- **Establishment of an import chain for quality India Mark2 pumps with PVC pipes and stainless steel rods**

A channel for importing high quality India pumps, adapted to the context of the program's intervention area, was set in place by the project and has started to take shape. The supplier targeted by the project has already imported 50 pumps, allowing the replacement of the first pumps installed by the project in which corrosion of the metal pipes degraded the water quality.

With assistance from the project team, a company called Sygelec is in the process of opening outlets in Casamance to allow the beneficiaries to have access to pumps and spare parts when there are maintenance needs. The India Mark2 pumps sold in Senegal are installed with galvanized steel pipes and rods. Given the aggressive nature of the water in the region (water loaded with iron or with a non-standard pH level), the galvanized metal drainage pipes rust quickly and give the water a reddish color, causing the beneficiaries to abandon the well. During a field mission, USAID/Senegal instructed the project team to replace these early pumps with higher quality pumps, and establish a supply chain for spare parts.

India pumps delivered by the private supplier in Ziguinchor

Components of the new India Mark2 pump

- **Replacement of 24 pumps that have galvanized steel pipes**

The original India pumps placed on the boreholes installed through the USAID/PEPAM program used metal pipes and galvanized steel rods. Because the water collected and pumped in almost all the hydraulic works is aggressive & acidic, corrosion of the drainage column was found shortly after the commissioning of the water supply points. This corrosion is characterized by reddish discoloration of the water, resulting in low use or even abandonment of the well. To alleviate this problem, the program has ordered new pumps with PVC pipes and stainless steel end assemblies and rods.

In June 2011, the project started to replace all or part of each pump, according to the state in which it was found. A prior check had shown that the older pumps were adaptable to having accessories from the new pumps. This meant that the intervention could be limited to replacing the drainage column and some worn parts. In all, 24 pumps were replaced out of a total of 26 identified. Only two pumps could not be replaced: the pump in Tandine, where the area has residual insecurity, and the pump in Djifangor, which requires the drilling to be redone because the well is not deep enough.

This action allowed USAID/PEPAM to regain public confidence following the resolution of this problem—fear of using the reddish water from the India pumps. All the villages committed to restoring the collection of maintenance funds needed to maintain the installations. These villages will need to be regularly monitored to ensure compliance with these commitments in order to consolidate gains.

- **Business management training and procurement training**

The monitoring/support mission for CGs/ASUFORs continued this year, with the support of the project management trainer. A draft of the "Enterprise—Business Best Practices Manual" was developed and submitted for review by USAID/PEPAM management for validation. To continue this process, administrative and financial management tools have been selected and will be used as instruments of work and evaluation as part of the close monitoring of the program's private providers.

As part of capacity building for local actors, USAID/PEPAM organized two training sessions in June and July 2011, dealing with bidding procedures (training for Ziguinchor enterprises) and business management (for enterprises in Kolda and Sédhiou). The consulting firm "Groupe Expert International," based in Dakar, provided these trainings, which enabled the participants to better understand the management of their structures as well as public procurement procedures. All the participants reported being satisfied with the progress and content of the training.

A monitoring and support plan for these enterprises was developed for the application of lessons learned.

Participants in the procurement training in Ziguinchor

Management training in Ziguinchor

- **Training in hydrogeology and hygiene applied to manual drilling**

The training in hydrogeology and hygiene, as applied to manual drilling, took place in June 2011. This training was conducted by a Dutch consultant for the drilling enterprises, partner NGO technicians, and some technicians from USAID/PEPAM.

In addition to those cited above, the heads of the wells and boreholes regional brigades and the officials of the regional hygiene divisions in the three regions (Ziguinchor, Sédhiou, and Kolda) participated in the training. This participation was an opportunity to convince the officials of the regional technical departments of the validity of manual drilling in their areas to provide water to the rural population. The project decided to train drilling enterprises in each region of Casamance to make manual drilling accessible. To allow these enterprises to take advantage of drilling activity, drillers are advised to stimulate the market by drilling for both private households as well as irrigation in conjunction with project wells (productive use).

Training in hydrogeology in Kolda - support of practical training for participants

- **Fabrication of a new auger to solve the problem of hard layers in Casamance**

Given the problems related to drilling through soils with moderately hard layers by means of the jetting method (without using percussion drilling), the project undertook the fabrication of a new 3-blade auger to solve the problem. This new 3-blade auger has been made and is undergoing testing by the drilling enterprises in the field. This research results from information collected in the field and feedback from drillers about the need to improve the first auger. The first model is only designed for sandy layers, but the drillers are struggling to use it to cut through lateritic (clay) layers that require the use of percussion drilling. The consistency of these layers leads to the teeth of the old auger becoming deformed because it is not adapted to cutting through the laterite layers.

- **Exploration of gravel extraction sites in the Tambacounda region**

The installation of boreholes requires the use of fine silica or quartz gravel with particle sizes between 1.5mm and 3mm for the 0.75mm–1mm strainer slots currently being used. Because this material is not found in the program's intervention regions, it is necessary to order fine basalt gravel by the truckload from Dakar and have it crushed and screened to obtain the size required for the drilling equipment. Although the use of crushed gravel delivered from Dakar has led to progress in the achievement of installations, the search for local solutions remains the most sustainable option.

As a result of information collected from a local Kolda enterprise, the project sent two emissaries to a mining site in Tambacounda in March 2011. This mission led to the discovery of the Ndiengue quarry (located 17 km from Gouloumbou), whose materials, once sifted, can be used as gravel packing for the boreholes.

Truck loading gravel at the Ndiengue quarry

Taking a sample of sifted gravel

- **Importation of a mini-rig drill for boreholes of medium depth (40m to 70m)**

In March 2011, USAID/PEPAM received a mini-rig drill imported from the US to enable the installation of boreholes with depths between 30m and 70m. This drill works only in sedimentary zones and will enable the project to install boreholes in locations where the aquifer depth exceeds the capabilities of manual drilling enterprises, and in locations where access is difficult. The drill can be dismantled and transported in a pick-up truck to the drilling site. It is accompanied by a compressor for the air lift for the well, to improve the development and enhance the productivity of the installations. Training on the drill will be provided to drillers and USAID/PEPAM technicians by a member of the project technical team (M. Ahmed Boubacar), who has experience in using this type of drill. In addition to his experience, M. Ahmed Boubacar was trained on deep wells in Oklahoma in the US, in May 2011. USAID/PEPAM's goal is to enable an efficient and rational use of the imported mini-rig drill for boreholes that exceed the capacity of manual drilling enterprises and to improve the water supply for the Casamance population. The training has already been

applied in the field with the use of drilling fluid, comprising a mixture of bentonite and polymer, to reduce costs. Several series of demonstrations are organized for the hydraulic services units in the project's intervention regions to allow them to keep abreast of new technologies.

Drill and accessories in the crate in Ziguinchor

Drill loaded onto a pick-up going to the drilling site

- **Installation of four deep boreholes with the hydraulic mini-rig drill**

In March 2011, a first demonstration borehole, 40 m deep, was installed in the village of Petit Coulaye. The demonstration allowed not only the equipment test, but also allowed the village to benefit from a modern water supply point with the support of USAID/PEPAM.

Petit Coulaye is a village in the Bignona department, abandoned due to the war in Casamance. Today, because peace has returned to this area, people want to return to the village but do not have an adequate water supply point.

In June, the project continued testing the drill with the completion of three boreholes, including two in the region of Ziguinchor and one in the region of Kolda. These boreholes are installed in the villages of Selety, Mediegue, and Medina Passy, with respective borehole depths of 31.50 m, 31.50 m, and 62 m. All of these boreholes are positive, and the installations are achieved in conjunction with the regional hydraulic service units.

Flow rates greater than 10 m^3/h were achieved with these boreholes with drawdowns of less than 2 m.

Mini-rig drill in action at Medina Passy (Kolda)

Borehole achieved by the mini-rig drill in Selety (Ziguinchor)

Illustrative photos of activities taken by the Component 3 project team.

Training of craftsmen in Sédhiou

Training of craftsmen in Kolda

Installation of an India pump in Sédhiou

Installation of a rope pump in Sare Taning Dao (Kolda)

Drilling training in Sédhiou

Drilling training in Kolda

Drilling training in Kolda

Drilling training in Sédhiou

Head of the drilling enterprise Sow of Kolda

Delivery of drilling equipment by the project director

Rehabilitated well (Kolda region)

Rehabilitated well (Sédhiou region)

PVC pipes for the new India Mark2 pump

Replacement of old pumps in Ziguinchor

Replacements of old pumps in Ziguinchor

USAID/PEPAM drill in action at Petit Coulaye

Borehole with mini-rig drill at Petit Coulaye

Borehole at Selety

Pipe installation at Selety

Table 8: Summary of achievements of Component 3 in relation to indicators

Description	Achievements in Year 1 FY-2010	Objective in Year 2 FY-2011	Achievements in Year 2 FY-2011	% of achievements Year 2	Total achievements Y1+Y2	Overall project objectives for 5 years
Number of shops trained in manual pump fabrication	2	3	3	100%	5	16
Number of enterprises trained in borehole installation with jetting technique	4	6	7	116.6%	11	20
Number of companies trained in borehole installation with percussion technique	4	6	7	116.6%	11	20
Number of private suppliers trained in repair and maintenance	12	20	18	90%	30	40
Establishment of a supply chain for polymers	0	1	1	100%	1	0
Establishment of an import chain for India Mark2 pumps with PVC piping	0	1	1	100%	1	1
Importation and test of a portable drilling rig for deep boreholes	0	1	1	100%	1	1
Achievement of 40 m to 70 m deep boreholes with the portable drill	0	6	4	66.66%	4	15
Training in hydrogeology for drillers and technicians	1	1	1	100%	2	2
Number of private enterprises trained in management by the project	6	6	9	150%	15	0

Reasons for gaps between the target and results attained

The gaps between achievements and the target can be found in the training of manual pump enterprises and the installation of medium-deep boreholes.

For the training in of manual pump craftsmen, the capacity created on the spot in the project intervention area is more than enough to satisfy the demand for products and services. Currently,

the trained enterprises do not have a sufficient market for their product, and training additional enterprises is not recommended. Additional training will generate a very small number of sales for trained craftsmen, who will work a long time before seeing a profit from their business. This could result in outright abandonment of pump manufacturing in the region, which would strongly affect the sustainability of project activities. However, project intervention in new areas will require training of other manual pump craftsmen and will bridge the gap in terms of attaining the objective.

For deep boreholes, the drill that was ordered took time before arriving in Senegal. This delay in the delivery of the machine caused a delay in the completion of the number of scheduled works.

Also, the results of geophysical studies, which are most often a prelude to the installation of certain boreholes that use the mini-rig drill, were delayed. This was reflected in the installations that have spilled over into the rainy season (during which it is impossible to drill in Casamance).

4.3.2 Constraints

- Logistical constraints and late transfer of funds for CGs
- Withholding information from the program on the part of the private providers: the management trainer had problems implementing his program with them.
- The pump importer purchased and stored pumps that took a long time to be sold.

4.4 Component 4: Install and rehabilitate improved drinking water and sanitation infrastructure, using a service delivery framework

4.4.1 Part 1: hydraulics, hydrology, installation of water points

The objective of this portion of the USAID/PEPAM program's Component 4 is to install, jointly with Components 1 and 2, hydraulic infrastructure in accordance with demands expressed by the targeted village communities. In addition to the infrastructures mentioned above, the program will initiate detailed technical studies for three large projects: a peri-urban system for water supply, a peri-urban system for sanitation, and an AEMV. It also has the goal of conducting a rehabilitation program for wells and boreholes in the USAID/PEPAM regions of intervention.

4.4.1.1 Activities achieved

❖ **Training workshop on infrastructure design and management**

This workshop presented the planning and design techniques for mini-boreholes. Also, the management tools for small hydraulic infrastructure projects were presented, as well as the infrastructure development plan for FY 2011.

Eight technicians from partner NGOs in Kolda and Sédhiou took part in this workshop, as well as three representatives of the regional technical service units that are involved.

❖ **Studies for AEMV, peri-urban AEP, and mini-AEP projects**

Terms of reference were developed for a project management mission for AEMV and peri-urban AEP sites. This involves a total of six systems: AEMV project management in Ebinako, Bessire, and Mapamptim; and peri-urban AEP in Diouloulou, Salikégné, and Marsassoum.

The consulting firm Joël Gandois is responsible for this project management. At the end of this year, the firm has completed the hydraulic studies for five sites; only the study on Marsassoum is not yet completed.

The bid packages were issued for four traditional boreholes, two water towers of 150 m^3, and a 35 km network for potable water. Bids have already been received for the installation of two water towers.

For the foundation design of these water towers, the terms of reference were developed for geotechnical studies. The consulting firm SENELABO-BTP, in charge of the study, is in the process of finalizing the report.

Finally, the terms of reference have been developed for geophysical studies to enlist the consultant Dr. Sam Diouf. Two geophysical study campaigns were conducted. They were used to analyze 11 sites and to propose, for each site, three implantation sites for boreholes, including associated technical needs.

- **Study for a mini-AEP project**

The specifications and model of a min-AEP for project sites has been developed; the system comprises a borehole with a diameter of 4 ½ inches or 6 inches, a mini water tower 5 m^3 to 20 m^3 by 6 m to 8 m high, water collection points (hydrant, gibbet, trough), and a pump booth. This set of technical specifications and model was developed entirely by the program technical staff, and a local consultant (GRE. CONS) executed the technical drawings.

These systems will reach a larger number of the population because of the motorized system to draw water and the multiplication of distribution points. The AEP systems can also incorporate productive uses for livestock and agricultural needs, depending on the quantity and water availability.

For eight targeted locations, a land survey for the water networks was performed. Also, the launch of a simplified bid package resulted in a bid for four boreholes for mini-AEPs not yet constructed. The bid package for the remaining installations is being developed.

- **Achievements for hydraulic infrastructure**

During this year 57 boreholes with manual pumps and 11 rehabilitations were completed, for a total of 68 water supply points. Taking into account the 6 boreholes completed in FY 2010, the cumulative number of small hydraulic water supply points achieved by the program during the two years is 75 water supply points.

For installed pumps, the ratio between the number of EROBON and India pumps has greatly improved, mainly because the EROBON pump has become more accepted in the Kolda and Sédhiou regions. Today, the ratio of EROBON to India pumps is about 30%.

In addition to these two types of pumps, a min-borehole at Badiana College was equipped with a solar pump. The borehole, via the solar pump, flows into a tank perched at 3 m, which serves 10 faucets that can be used simultaneously. This opens up certain perspectives around a recurring question from the population dealing with the possibility of a motorized means to draw water from a mini-borehole.

Finally, for large and medium infrastructures (AEMVs, peri-urban AEPs, deep boreholes), four deep wells were installed, using the mini-rig drill acquired by the program.

❖ **Inspection, monitoring, approval, and placing hydraulic infrastructures in service**

Placing a hydraulic infrastructure in service is conditional on fulfillment of two conditions: the approval of the infrastructure and certification of the water's potability, conducted by the region's Hygiene Brigade. 33 boreholes have met these criteria, including the solar water supply system at Badiana College.

Results obtained

#	Description	Objective	Result	Gap
	Technical studies for projects			
	Multi-village water supply system (AEMV)	1	3	+200%
	Peri-urban AEP	1	3	+200%
	Deep borehole/mini-AEP	7	8	+14.3%
	Geophysical study	13	11	-15.4%
	Achievements for infrastructures			
	AEMV	1	0	-100%
	Peri-urban AEP	1	0	-100%
	Deep borehole/mini-AEP	7	0*	-100%
	Medium borehole	12	28	+133.3%
	Simple borehole	57	30	-49,1%
	Rehabilitation of water supply point	39	11	-71.8%

*4 deep boreholes have actually been installed: 2 are at schools, and the other 2 are at locations where the entire village is in the process of moving to take advantage of these water supply points.

Many of these results have not lived up to expectations due to several difficulties that have arisen in the course of execution; solutions have been developed

At the end of the second fiscal year, we would like to point out an opportunity that is occurring for the first time in the program: the stock of actual demands for infrastructure has reached a level that can cover objectives for one to two quarters. These include the following:

- 36 mini-boreholes approved and 27 mini-boreholes in the approval process
- Contracts in the process of being awarded for 2 water towers (150 m^3/20 m high), 35 km of water networks, and 7 traditional boreholes
- 8 complete mini-AEP systems for which the consultation bid packages are being developed

4.4.1.2 Challenges and solutions

The perception of non-resident enterprises regarding the security situation in Casamance

Work on traditional boreholes and water towers often necessitates consultation with non-resident enterprises; at the local level, there are very few companies specializing in this type of work.

However, many established non-resident companies have decided not to operate in Casamance because they feel that security is still insufficient. This led us to re-launch the call for bids (requests for proposals [RFPs]) for traditional boreholes (we had only received one submission). This was also the case for bidding on the Diouloulou and Ebinako water networks.

To avoid this situation, the experience of the business itself is no longer required; rather, the focus is on the experience of the staff and the quality of the technical proposal for work to be carried out.

This has broadened the pool of companies able to be consulted, including those at the local level, and minimized the risk of an unsuccessful RFP.

The high rate of cost-share for rehabilitations

For a long time, there has been a very low demand for water supply point rehabilitation because it is not very competitive compared to other technology options. The adjustment to the cost-share rate (10% with a cap of 75,000 CFA) and the opportunity to mobilize a part of this as in-kind cost-share have made the offer of rehabilitation more attractive. We expect to benefit from these measures in FY 2012.

4.4.1.3 Activities planned for the next quarter

Activity	Date	Responsible Parties
Site surveys	Nov 2011	Integrated staff from the 4 components
Open bids and award work for AEMV, peri-urban AEP, and mini-AEP	Oct – Nov 2011	Head of hydraulic infrastructures, consulting firm Joël Gandois, COP
Start work on AEMV, peri-urban AEP	Nov – Dec 2011	Head of infrastructures, businesses, COP
Construction of mini-boreholes and rehabilitation of water supply points	Oct – Dec 2011	Head of infrastructures, businesses, COP
Complete 3 deep boreholes	Nov 2011	Head of infrastructures, businesses, COP
Finalize the technical study of the AEP network rehabilitation at Marsassoum	Oct – Nov 2011	Consulting firm Joël Gandois
Inspection and provisional approval for hydraulic infrastructures	Oct – Dec 2011	Regional hydraulic technical service units
Inspection and monitoring of water quality	Oct – Dec 2011	Regional Hydraulic Brigade
Selection of a technical inspection firm for the 10-year guarantee on two water towers to be completed	Oct – Nov 2011	Head of hydraulic infrastructures

"**Perspective of a motorized system for drawing water in mini-boreholes**"

The possibility to motorize the system for drawing water in mini-boreholes is a recurring question, often motivated by mini-boreholes from development operations that perform well. From the few experiences with known motorization, the answer to this question is not evident.

Until the day that there are sufficient statistics to answer this question in absolute terms, it is necessary to consider each case individually.

With this in mind, the program has been monitoring three cases, from which the first results have been drawn.

Of these cases, we conducted tests of flow levels and tests of long-term pumping. The results showed flow rates ranging from 4m^3/h to 7.5m^3/h, and the boreholes supported a working flow rate of at least 3.5 m^3/h for four hours of service.

Analytical and monitoring work on this issue will be pursued by defining a more rigorous protocol to better respond to demand for motorized mini-boreholes.

4.4.2 Part 2: sanitation

The objective of the sanitation efforts for USAID/PEPAM program's Component 4 is to implement infrastructures based on the demand in village communities, as generated by Component 2 and coordinated with the NGO partners together with the CGs.

This year, we focused on construction of household latrines, implementation of hand-washing devices, construction of sanitation installations in areas with high water tables, approval of installations by the sanitation services departments, improvement of sanitation facilities implemented by communities as part of the CLTS approach, and monitoring the implementation of the Environmental Monitoring and Mitigation Plan (EMMP).

4.4.2.1 Activities achieved

- **Training of masons**

Achievements in installations in the Kolda and Sédhiou regions began this year. The program's strategic option is to use local masons selected by the CGs to construct household latrines. CREPA was asked to provide training in two sessions for 60 local masons, 10 sanitation technicians, and a project coordinator for NGOs on construction techniques for three types of household latrines promoted by USAID/PEPAM. The heads of the regional hygiene and sanitation technical service units from Kolda and Sédhiou actively participated in these training sessions.

Participants in the training for local village masons in Sédhiou

- **Construction of sanitation works**

Local program-trained masons in the regions of Ziguinchor, Kolda, and Sédhiou built 1,928 household latrines during FY 2011. This resulted in 19,280 people having access to improved sanitation systems. The following table provides information of the number of works achieved by NGOs in Ziguinchor, Kolda, and Sédhiou.

Table 9: Number of household latrines constructed during Year 2 (FY 2011) and the population covered

NGO/CBO	NGO quotas for project duration	Objective FY 2011	Number of works achieved	Population covered	Percentage of achievements compared to FY2 011 objective	Percentage of achievements compared to quotas
Ziguinchor						
ADY	250	243	340	3,400	**140%**	136%
AJAC	67	67	52	520	**78%**	78%
AJAEDO	233	167	223	2,230	**134%**	96%
PACTE	200	168	358	3,580	**213%**	179%
WESWA	167	457	542	5,420	**118%**	324%
Sub-Total	**917**	**1,102**	**1,515**	**15,150**	**137%**	**165%**
Sédhiou						
CARITAS	119	109	97	970	**89%**	82%
CASADES	68	47	33	330	**70%**	49%
ENDA	136	119	57	570	**48%**	42%
Enfance et Paix	177	150	32	320	**21%**	18%
Sub-Total	**500**	**425**	**219**	**2,190**	**52%**	**44%**
Kolda						
CARITAS	177	142	27	270	**19%**	15%
CASADES	102	70	37	370	**53%**	36%
ENDA	53	62	46	460	**74%**	87%
FODDE	168	151	84	840	**56%**	50%
Sub-Total	**500**	**425**	**194**	**1,940**	**46%**	**39%**
Total	**1,917**	**1,952**	**1,928**	**19,280**	**99%**	**101%**

Faced with a large demand for sanitation in the region of Ziguinchor, the program authorized the partner NGOs to enroll all the actual demands that were mobilized before April 25, 2011. This decision contributed to improved performance in terms of construction, with an achievement rate for installations of 165% compared to quotas. Only the NGOs AJAC and AJAEDO have not yet attained the number of latrines that were dedicated to them for the three years that the program will be in this region, because of recorded delays in material delivery. Completion of 92 household latrines is planned before the end of October 2011.

The NGO WESWA initiated an innovative strategy: to train members of an association of women from the commune of Diouloulou, called “Kagnalène,” in construction techniques for the DLV and SanPlat (two types of latrine) slabs. Over a period of two months, these women have made 266 round slabs.

The relatively low results in the regions of Kolda (39% achieved) and Sédhiou (44% achieved) are mostly related to a late start in construction.

The 20 installations in Djilapao (a region with clay and high water tables during the rainy season) were completed. This will significantly contribute to improved living conditions at this location, a peninsula frequented by many tourists.

Raised VIP latrine in Djilapao (area with a high water table) in the region of Ziguinchor

The public lavatories at Badiana College were delivered, and the school community in the village would like to organize an official inauguration at the beginning of classes.

To boost the production of "Tippy Taps" for hand-washing with soap at latrine exits, the program set up a strategy to orient NGO technicians and CG/ASUFOR members on the technique for making a device for hand-washing with soap. They will then disseminate this information to masons and head of households. In addition, the program has placed 800 plastic jerry cans at the disposal of the NGOs/CBOs to make Tippy Taps. This strategy led to the production of 926 Tippy Taps in the regions of Ziguinchor, Sédhiou, and Kolda. The following table provides information of the distribution of Tippy Taps, by region and by NGO.

Table 10: Distribution of hand-washing devices produced by NGOs

NGO/CBO	Cumulative production achieved FY1+FY2	Number of Tippy Taps produced	Population Covered
Ziguinchor			
ADY	340	2	20
AJAC	52	27	270
AJAEDO	223	223	2 230
PACTE	358	48	480
WESWA	542	408	4 080
Sub-Total	**1,515**	**708**	**7,080**
Sédhiou			
CARITAS	97	62	620
CASADES	33	15	150
ENDA	57	50	500
Enfance et Paix	32	31	310
Sub-Total	**219**	**158**	**1,580**
Kolda			
CARITAS	27	31	310
CASADES	37	29	290
ENDA	46	0	0
FODDE	84	0	0
Sub-Total	**194**	**60**	**600**
Total	**1,928**	**926**	**9,260**

However, the achievement rate of hand-washing devices is still low. To reverse this trend, Component 2 is in the process of rolling out a social mobilization campaign around the theme "one household, one Tippy Tap."

A Tippy Tap at the exit of a SanPlat latrine in Séléty (Bignona)

- **Approval for installations**

This year, 831 latrines have been approved and certified by the heads of regional sanitation service units in Ziguinchor (707 installations) and Sédhiou (124 installations), in the presence of NGOs, CGs, masons, and program staff.

- **Improvement of CLTS works**

The lack of durability and construction standards of sanitation works and infrastructure is always mentioned by opponents of the CLTS approach. To ensure durability in the installations constructed by the "community engineers," households continue to ask the program staff for advice. To this end, we have strengthened the hillocks (stabilized earth mounds) used to protect the pits from runoff (the main cause of early collapse), introduced pit ventilation by installation of a vent pipe, and coated the pit slaps with cement to reinforce their seal and their strength.

For these actions, the population of the villages of Maracounda, Djaghour, Bouhinor, and Djiroungoumane (Ziguinchor) and Bougniry, Bémet Djimandé, and Bémet Baghangha (Sédhiou) were charged for the purchase of the bags of cement, the PVC Ø63 pipe, the mosquito mesh, and the anti-fly and anti-light plates. These interventions have improved construction and rehabilitation standards for sanitation for these latrines.

- **Proposed model for low-cost public lavatories**

The hygiene promotion activities in schools have led to a significant demand for sanitary blocks. The public lavatory model constructed at Badiana College (a middle school) came in at a fairly high cost (about 6,000,000 CFA). At this price, it will be impossible to cover the registered demands. USAID/PEPAM, with the support of an architect, worked on a sanitary bloc facility model with 5 stalls, estimated at 1,800,000 CFA. The model sanitary block has been presented to the Department of Sanitation (DA) for validation. The plans for this low-cost model are in the Program's Sanitation Technologies Manual, which is currently in production.

- **Operational research**

To help increase coverage of rural and peri-urban populations with a sanitation system, USAID/ PEPAM proposes to implement a study of the sanitation value chain. The terms of reference for this study are being validated by RTI and USAID.

4.4.2.2 Challenges and solutions

The following challenges have caused some difficulties in the progress of installations:

- Delay in grants advances and payments to NGOs and for construction and operations: this situation was caused by and accumulation of non-justified expenses by NGOs and delayed expense reporting. Because of this situation, construction started in June 2011 in Sédhiou and Kolda.
- Inadequate logistical means hampered the mobility of technicians and facilitators (who are responsible for monitoring work sites) for some NGOs, e.g., ADY and AJAC.
- Delay in delivery of construction materials from suppliers, caused by the following:
  - The blockade of the Gambian crossing by the carriers on strike against harassment in Gambian territory

- Quantities of materials ordered for remote sites: the suppliers, registering a loss for the transport of small orders, were slow to make a run with these orders, resulting in significant delays at construction sites.
- Heavy rains made most of the access roads to the program's target villages impassable.

Delivery truck with construction materials stuck on the road to Lamoye (Kolda)

To curb these delays and accelerate achievements, the program established an intervention strategy for the regions of Kolda and Sédhiou, streamlining the contracting mechanism, and where program staff, side by side with the CGs, are in the process of contracting and constructing 139 household latrines.

The recruitment of the grants and financial monitoring assistant, who was posted to the Ziguinchor field office in August 2011, will allow closer support for the NGOs in terms of tracking technical and financial reports and reviewing supporting justification documents.

The program provided support in the form of mopeds and motorcycles for NGOs to increase the mobility of technicians and facilitators for monitoring work sites.

For the next years, everything possible will be done and implemented to avoid interventions during the rainy seasons.

SanPlat excavation overrun by rainwater in Boucounoume (Ziguinchor)

4.4.2.3 Activities planned for the next quarter

Activities	Date	Responsible Parties
Launch of peri-urban activities in Ziguinchor	Oct. 2011	Head of infrastructure, and staff for Components 1, 2, 3, CLTS, and grants
Identification of target village masons in the Tambacounda region	Dec. 2011	Head of infrastructure, NGOs, heads of regional sanitation and hygiene services units
Construction of household latrines in the regions of Ziguinchor, Kolda, and Sédhiou	Oct. – Dec. 2011	Head of infrastructure, NGO technicians, CG and masons
Requests for information and pricing for school sanitary blocks	Nov. 2011	Joël Gandois, head of infrastructure
Construction of school sanitary blocks	Dec. 2011	Joël Gandois, head of infrastructure
Approval of sanitation installations	Each month	Heads of regional sanitation service units
Selection of a consulting firm for environmental assessments	Oct. 2011	Head of EMMP, COP/DCOP
Implementation of environmental assessments	Oct. 2011	Head of EMMP, DCOP
Launch of the sanitation value chain study	Dec. 2011	DCOP, head of sanitation infrastructure
Disseminate the technicians' sanitation manual	Nov. 2011	Head of sanitation infrastructure, Component 2 staff

4.5 Component 5: WADA/CLTS

The CLTS component seeks to change the behavior of the population so that they implement the sanitation infrastructures themselves, without any subsidies, and achieve ODF status. For hygiene promotion in a school environment, this component seeks to educate the students in good hygiene practices and thus to create the potential for a real behavioral change concerning water and sanitation. All CLTS activities are financed through a contribution from the Water and Development Alliance (WADA).

The introduction of CLTS in the USAID/PEPAM program is a way for beneficiary communities themselves to improve or change practices and behaviors related to WASH, more quickly advancing Senegal toward achievement of MDGs. Our CLTS program supports the following:

- improvement of hygiene and health at community levels
- increase in the demand for sanitation
- augmentation of the number of latrines constructed
- reduction and eradication of open-air defecation (ODF)

4.5.1 Activities achieved

4.5.1.1 Activities achieved in the region of Ziguinchor

The activities below were conducted during Year 2:

- Selection of a local NGO (Kabonketoor) to implement CLTS activities in the Ziguinchor region
- Selection of 12 sites (6 for the first phase and 6 for the second) for the implementation of CLTS activities
- Training of NGOs and 60 natural leaders on the CLTS approach

- Establishment of 12 CLTS committees, one per village
- Development of social marketing strategies, as well as hygiene education and promotion activities
- Certification of the first 6 villages in "end of open-air defecation" (FDAL, *fin de la défécation à l'air libre*) status
- Scale-up with the recruitment of 6 new CLTS sites in the rural community of Ouonck

Activities achieved during the first phase are mainly attributed to WADA 1; they were mostly held in the region of Ziguinchor. All the CLTS activities have been implemented by a local NGO as well as by natural leaders who were trained and oriented in a training-of-trainers session for the application of CLTS techniques. This was reinforced with follow-up training and regular monitoring of field activities. The main activities achieved are the following:

❖ **Selection of NGOs**

The program contracted with a local NGO in Ziguinchor, "Kabonketoor," to implement the approach in the rural community of Ouonck, in the region of Ziguinchor. This NGO, along with natural leaders from the communities targeted by the program, was trained in the application of the CLTS approach.

❖ **Site selection and implementation of activities**

Following this, the program, with the support decentralized regional services units, selected six villages in the rural community of Ouonck to implement the activities. The six selected villages are Diaghour, Bouinor, Maracounda, Djirignoumane, Bouyal, and Ouffoulo.

In addition to these villages, a control village was selected, taking into consideration the fact that there is no subsidy or intervention there, and that the diseases incidence as well as the anti-hygienic behaviors are related to water and sanitation. Also, the distance between the control village and the CLTS intervention sites is reasonable.

The first phase of CLTS activities began in August 2010, with site selection and training sessions on planning an expansion in the regions of Ziguinchor and Sédhiou through the WADA 2 program, using the same approach. Implementation of CLTS activities was done with the support of the regional technical services units (Regional Services for Rural Sanitation, Regional Hydraulic Services, and the Regional Hygiene Brigade).

60 natural leaders were trained on the CLTS, 5 for each village targeted by the project. These leaders participated in the facilitation of CLTS activities in their own villages.

To strengthen the governance and project sustainability activities in these villages, 12 CLTS committees were set up in the 12 CLTS villages.

❖ **Verification**

After six months of activities in the rural community of Ouonck, the six targeted villages were declared FDAL. A celebration to certify the FDAL status was held in Diagour, one of the six CLTS villages. The other five villages (Bouinor, Maracounda, Djirignoumane, Bouyal, and Ouffoulo) were invited to take part in the festival, as well as other surrounding villages. This has helped these villages to learn about the CLTS approach and facilitates scale-up throughout the rural community. As a reward after the certification, the program negotiated the installation of a mini-borehole equipped with a manual pump in each of the 6 FDAL villages. This experience implementing CLTS activities with Kabonketoor, which was a great success, helped the project to better analyze and plan

its interventions in the two regions of Kolda and Sédhiou, and after to scale up in the region of Ziguinchor.

The scale-up in the rural community of Ouonck began with selection of six additional villages after the first six FDAL villages. The selected villages are: Mandouard2, Ndiagne, Diagho, Djiguipoune, Tongho, and Djikountang.

Apart from the CLTS activities, WADA 1 funded and supported USAID/PEPAM activities, including the construction of subsidized individual latrines not in the CLTS villages. In this context, 190 individual latrines were constructed in the region of Ziguinchor, out of the 425 completed in the three program-targeted regions. These latrines have given 1,900 people access to improved sanitation in the region of Ziguinchor. To construct these latrines, 45 local masons, trained in construction techniques by USAID/PEPAM, were used.

For access to potable water, 6 mini-boreholes were dug by local craftsmen, trained and supervised by the USAID/PEPAM technical staff. Physico-chemical analyses were performed to determine water quality. Manual pumps were installed in the first six FDAL villages (one pump per village). For proper management of these systems, six management committees (one per village) were created within the CLTS committees.

4.5.1.2 Activities achieved in the regions of Kolda and Sédhiou (WADA 2 grant)

For Kolda and Sédhiou, the following activities were conducted:

- Selection of two local NGOs to implement CLTS activities, one in each region: ENDA (Kolda) and CASADES (Sédhiou)
- Selection of 12 CLTS sites in the two region (6 in Sédhiou and 6 in Kolda)
- At least two natural leaders per village were identified and selected by their own community in the 12 new villages in Sédhiou and Kolda.
- The two local NGOs (ENDA and CASADES) were trained, along with 24 natural leaders from the 12 selected villages, for implementing CLTS activities.
- Establishment of 12 CLTS committees in the 12 villages (one per village)
- Development of social marketing strategies, as well as hygiene education and promotion activities

❖ **Selection of NGOs**

At the beginning of April, two local NGOs were selected in Kolda and Sédhiou to implement CLTS activities: CASADES was selection for the region of Sédhiou and ENDA for the region of Kolda. 12 sites were selected—6 villages for each region—using project selection criteria.

❖ **Site selection**

For the Kolda region, the rural community of Badion was chosen. The six selected villages are Dirimaro, Sibidian, Saré Samba Sow, Saré Pateyel, Saré Yoro Handeng, and Saré Tening Mara.

For the region of Sédhiou, two rural communities were selected: Bémet Bdjini and Djibabouya. For the rural community of Djibabouya, the villages are Bougniry and Seloto.

For the rural community of Bemet Bidjini, the selected villages are Francounda Baynounk, Francound Bodiancounda, Bemet Baghagha, and Bemet Djimandi.

❖ Training of NGOs and natural leaders

During the last week of April and first week of May, the USAID/PEPAM staff organized the training-of-trainers, with the assistance of the Network of CLTS Trainers in Senegal (UNICEF, CREPA, Sanitation Department, Direction du Contrôle Medico-Scolaire, USAID/PEPAM). Participants included the three local NGOs, the technical services units from the three regions (Hygiene and Sanitation), and the local partner NGOS who implement the grant program in the program regions.

Since these training sessions, the CLTS activities began in the 12 sites in Sédhiou and Kolda, with CLTS committees and natural leaders identified and put in place. Orientation and capacity building were provided to the natural leaders and to the communities in the target villages to help them to identify, analyze, and plan solution to deal with problems related to WASH.

Social marketing activities and hygiene promotion were also conducted with the CLTS committees.

❖ Verification

Verification of FDAL villages was conducted in the two regions of Kolda and Sédhiou, to find out if indeed the 12 CLTS villages had met all the requirements for being FDAL certified. This verification step was carried out with the regional sanitation service units of Kolda and Sédhiou. Of the 12 villages, 11 have been declared FDAL: 6 in Sédhiou (Bougniry, Séloto, Bemet Baghagaha, Bemet Djimandi, Francounda Bainounck, and Francounda Bodinacounda) and 5 in Kolda (Saré Tening Mara, Saré Pateyel, Saré Demba Sow, Saré Yéro Handeng, and Sibidiang). For the sixth village, Dirimaro, in the region of Kolda, the committee has not completed all the action plan activities; Dirimaro has not been declared FDAL. Therefore, the commission will conduct a verification visit again in this village.

In addition, the commission proceeded to choose villages to host the festival/certification of FDAL status. In Sédhiou, the village of Bémet Djimandi was chosen in the rural community of Bémet Bidjini, and in Kolda, the village of Saré Tening Mara was chosen in the rural community of Badion.

As in Ziguinchor, apart from the CLTS activities, WADA 1 funded and supported activities for USAID/PEPAM, including construction of subsidized individual latrines **not in the CLTS villages**. In this context, 67 individual latrines were completed, 38 in Kolda and 29 in Sédhiou.

Table 11: Results for the 24 CLTS villages

Regions	Number of new latrines constructed	Number of latrines rehabilitated	Total number of latrines achieved	Number of hand-washing devices installed	Number of persons served	Number of facilitation sessions on hygiene promotion	Number of persons covered
Ziguinchor WADA 1	144	156	300	112	4,005	75	2,411
Kolda WADA 2	50	57	107	107	1,084	96	582
Sédhiou WADA 2	24	57	81	81	958	63	610
Total	**218**	**270**	**488**	**300**	**6,047**	**234**	**3,603**

4.5.2 Challenges and solutions

The rainy season was one of the major constraints encountered during the year. As a consequence, there has been a delay in implementing CLTS committees' action plans. The four months planned for attaining FDAL status were exceeded, and certain planned activities could not be executed. To close this gap, it is planned to better support CLTS committees in planning for new CLTS villages that will be recruited for future campaigns.

In addition, there are human resource constraints related to monitoring NGOs contracted to carry out the CLTS work. Gradually, as new villages are recruited, we will need the human resources to effectively monitor these NGOs. Contracted NGO staff will need to be increased to support and monitor not only the first set of villages, but the new villages as well that will be integrated into the CLTS programs and process. Fifty four (54) new CLTS villages will be selected and integrated into program activities for FY 2012; as a consequence, it will be necessary to strengthen the program staff, and also allow NGOs to increase their number of field agents.

4.5.3 Activities planned for the next quarter

Activities	Date	Responsible Parties
WADA program launch	Oct 2011	USAID/PEPAM
Certification	Oct – Nov 2011	USAID/PEPAM / technical services units / partner NGOs
Negotiation of mini-boreholes/ manual pumps and public lavatories	Oct – Nov 2011	USAID/PEPAM and partner NGOs
Scale-up and selection of new sites	Nov 2011	USAID/PEPAM / technical services units / partner NGOs
Implementation of CLTS activities	Oct – Nov – Dec 2011	Partner NGOs

5 Program Grants and Grants Management

The purpose of the grants section is to provide financial support to the program through the funding of activities and also to support the recipients of direct grants under the Development Grants Program (DGP), funded by USAID.

5.1 Activities achieved

During this second year of program activities in the regions of Ziguinchor, Sédhiou, and Kolda, the grants section recorded the following results:

- **Renewal of NGO contracts**

10 simplified cost reimbursable (SIG) NGO contracts were renewed in the context of traditional water and sanitation activities for Kolda, Sédhiou, and Ziguinchor. One SIG contract was renewed for CLTS activities in Ziguinchor, and two new SIG contracts were signed for CLTS activities in the regions of Kolda and Sédhiou. With the renewal, our aim is the following:

- Development of demand-generating activities for WSS infrastructure

- Continued construction of latrines in Sédhiou and Kolda, where we have not yet attained the quotas
- Completion of infrastructures already begun in Ziguinchor
- Capacity building for CG members
- Development of hygiene and health promotion activities
- Identification of extension sites in terms of PLHAs for the rehabilitation of infrastructure

❖ **Fixed obligation grants (FOG) for CGs**

"191 partner CGs in the USAID/PEPAM program"

The establishment of CGs aims to better democratize and govern WSS management, with a view to sustaining the program. 233 FOGs are already signed and funded.

More funding is expected in Year 3 for CGs, due to the consolidation of activities in Kolda and start-up in the new region of Tambacounda. Already, to complete Ziguinchor, 490 real demands with mobilized cost-share will be funded during the next quarter.

See ***Annex 3*** for tables of the situation on formulating requests for funding and signing contracts for FOGs with CGs/ASUFORs. In this table, there is a list of sites, by region and by NGOs.

❖ **Monitoring of NGO activities**

During Year 2, a large follow-up monitoring mission was organized during June 2011. The mission report highlights weaknesses requiring further monitoring of partner NGOs. The following recommendations were made to address the issues:

- Strictly adhere to the budget guidelines
- Establish an expense claim form for field operations staff, approved by the project coordinator or the head of the project, and then submitted to the accountant
- Chronologically archive supporting documents as well as monthly financial reports
- Systematically inspect the math, and carry this out with double verifications – in excel workbooks and manual adding machines
- For all expenses (over 200,000 CFA), require at least three pro forma invoices
- Do not pay expenses with petty cash, and establish checks or bank orders to suppliers
- Produce and send the monthly report on or before the 7th of the following month
- Collect, document and report the cost-share contributions monthly

These recommendations are to ensure the reliability of our partners' accounting and financial systems and will be integrated as soon as possible.

❖ **Mobilization of cost-share**

Cost-share is a contractual obligation that the project continues to mobilize, and submitted cost-share reports are accompanied by supporting documents on the cost-share collection. In the final months of FY 2011, the program initiated a verification process for the cost-share amount and supporting documentation.

The total cost-share amount is in accordance with the basic criteria of acceptability for cost-share, verified and documented according to USAID criteria.

Currently, the important work of collecting the cost-share is being conducted in the field. Latrine certification by the government's technical services units will allow us to validate the CGs' cost-share. The work of the regional Sanitation Division will be done shortly. Thus, we have decided to verify the cost-share and to collect at the same time the minutes from the infrastructure approvals / certifications. This will be done in the presence of NGOs, the CGs, the governmental technical services units, and USAID/PEPAM.

As part of our activities, we mobilize members of the national and regional technical services units (Sanitation, Hygiene, and Hydraulics). Their participation in various program activities is important and defined in an MOU, and is considered as technical support and cost share contributions to the program.

❖ **Beneficiaries of USAID/DGP grants—collaboration with USAID/PEPAM**

There are five beneficiaries of USAID direct grants through the DGP program: CREPA, WAMEE, RADI, CARITAS, and GADEC. These NGOs have received multifaceted and technical support and advice from USAID/PEPAM.

- Technical support mission to RADI in its intervention area to train latrine masons, visit WSS infrastructure, and make recommendations on construction standards
- Support mission to GADEC in its intervention area to offer advice on technical standards for WSS infrastructure construction, water quality, and established governance structures. An action plan resulting from the mission is in progress.
- At the request of WAAME, a training for its members on the PHAST/SARAAR method to organize their intervention area. The NGO now has the communication tools necessary to support behavior change in the beneficiary population.
- Support and technical advice was also provided to the NGOs to prepare their documents related to the environment, such as the EMMPs.

5.2 Challenges and solutions

Constraints

The constraints noted during this fiscal year are the following:

- The large number of partner NGOs and CGs, leading to numerous FOG and SIG contracts. This leads to a significant level of effort for monitoring.
- Failure to monitor more regularly the partner grantees of the project
- Vagueness characterizing the support provided to the DGP grantees in our cooperation agreement

Proposed solutions

- We propose to terminate 2 contracts with NGOs at the end of Year 2, and to not renew them; the technical activities will be continued by USAID/PEPAM staff.
- We will continue to make only one FOG per CG, lasting one year, based on a proper assessment of the CG's capacity to mobilize demand. And if it is necessary, we will extend the contract. This will significantly reduce the number of contracts to be made.
- With the recruitment of the Grants Assistant, support and closer monitoring will be provided for NGOs and partners.

- We are in the process of developing a document proposing the various areas of collaboration with USAID in the context of providing support to DGP grantees.

5.3 Activities planned for the next quarter

ACTIVITIES	DATE	RESPONSIBLE PARTIES
Monitor grantees - Financial monitoring - Capacity building	Nov – Dec 2011	NGO accountants, Grants Manager, Grants Assistant
Audit of grantees with the "site visit tools"	Nov – Dec 2011	NGO accountants, Grants Manager, Grants Assistant
Technical support to DGP grantees	Nov 2011	CARITAS, WAAME, RADI, GADEC, CREPA
Sustainability of USAID/PEPAM activities	Nov – Dec 2011	Grants Manager, head of Component 1, consultant

6 Data Collection, M&E Activities, and the Performance Monitoring Plan (PMP)

6.1 M&E and PMP

Data collection, processing, and retrieval

- **Data collection**

For the purpose of monitoring the program indicators, 204 data collection sheets were administered and filled out in a timely manner by the end of September 2011: 54, 79, and 71 respectively for the regions of Ziguinchor, Kolda, and Sédhiou.

At the same time, 24 village sheets were filled out for the ongoing CLTS-Senegal-WADA II implementation in the three intervention regions.

The analysis shows that the data collection sheets were filled out correctly by all NGO partners.

- **Processing of collected data**

Automated M&E information management systems (MONDABA and CLTS-DABA) allowed on-time generation of the 34 program indicators and the 18 initial indicators for the CLTS program. Seven additional indicators related to the CLTS program were determined at the request of the donor (GETF / WADA). This will increase the number of CLTS indicators to 25.

The M&E performance charts were developed on schedule and shared with the program team.

- **Information retrieval**

The program's technical coordination meetings, meetings for information exchange and sharing, and evaluation workshops, among others, were key moments to share M&E information contained in the periodic performance reports among staff members, as well as to use the information to make programmatic decisions.

In addition, summary tables of USAID/PEPAM achievements are produced quarterly and sent to UC-PEPAM to take into account, in real time, the program's contribution to improving access to water and sanitation in the intervention areas. We do not know the status of UC-PEPAM incorporating our program results in their WatSan database.

Quality control of collected data

Two missions to assess the quality of collected data were conducted during FY 2011 (first and third quarters, 2011). Theses missions were conducted with 11 partner NGOs in the regions of Ziguinchor, Kolda, and Sédhiou.

These missions have verified the accuracy or precision, reliability, validity, integrity, and timeliness of the information collected by NGOs in relation to performance indicators. They were also an opportunity to evaluate the functionality of the M&E data archiving system and each NGO's means of verification.

As a general rule, data collected by NGOs and input into the program's information and M&E system is of satisfactory quality. However, some problems were identified and recommendations were formulated. Said recommendations will be rigorously and regularly monitored by the program's M&E archivist/assistant.

The report of the second mission was sent to USAID/Senegal for information and examination.

Internally, the program technical staff for each project component also inspected and validated data quality, following exchange meetings with the head of M&E.

Methodological support to consulting firms responsible for PLHA development

The three consulting firms to which the contracts for developing the 30 PLHAs have been awarded have benefited from technical support provided by USAID/PEPAM's M&E team during the third quarter of FY 2011. These three firms were requested in their terms of reference to administer a household survey on water and sanitation practices at the household level.

The program's M&E team has proposed a sampling methodology for establishing baseline data to the three consulting firms, which the firms have validated. The methodology is based on a random selection of households (sample units) with a minimum survey rate of 10%, by degree (village level), and stratified as a function of village size (less than 500 residents, between 500 and 1,000 residents, and more than 1,000 residents). The consolidation of the methodology will permit improved reliability, aggregation, and comparability of statistical data.

Furthermore, to improve the reliability of inventory and household survey databases, the program's M&E team has invited the three consulting firms to a sharing session on the unification of coding systems in order to avoid any eventual data aggregation problems in the WATSAN database. The conceptual model of WATSAN data has also been reviewed and discussed to obtain a better overall understanding.

M&E issues for USAID projects—"Feed the Future"

The USAID/PEPAM program's M&E team participated in the workshop on the M&E for the "Feed the Future" (FtF) projects, organized by USAID/SENEGAL on June 6–7, 2011, on its premises.

Below are the main lessons learned that need to be applied:

- Evaluation systematization
- Systematization of Data Quality Assessment (DQA)
- Integration of two FtF indicators in the PMP:
    - (l) Indicator_9_FtF "Number of rural households benefiting directly from USG interventions" and
    - (2) Indicator_18_FtF "Number of private enterprises, producers' organizations, water users' associations, trade and business associations and community-based organizations (CBOs) that applied new technologies or management practices as a result of USG assistance."
- Quantification of standard indicators using multipliers/actual data

PMP revision

Because of difficulties identified in the formulation and/or validity of certain indicators, the program's PMP was revised in late September 2011. The indicators for each component were subjected to an extensive review, and amendments were made accordingly. The total number of indicators for grant activities is being proposed to increase from 34 to 42—8 new indicators. The number of CLTS / WADA activity indicators will increase from 18 to 25.

The detailed document on the PMP revision is included in the Revised M&E Plan. It contains the rationale for the changes and the new list of the indicators for the funded water and sanitation program, as well as those for the CLTS/WADA program.

6.2 Challenges and solutions

At the start of the USAID/PEPAM, the M&E staff established two very simple Excel databases and applications—"MONDABA" and "CLTS_DABA"—to monitor performance of the water and sanitation activities and the CLTS program. These applications are currently operating in centralized mode at program headquarters in DAKAR. Besides the "MONDABA," a database in the form of pivot tables was also developed, to pull information from Excel for M&E information management and decision making. This database is called "MACRODABA." A database to monitor activities under Component 2 (communication for behavior change) was established in MS Access format. Along the same lines, the leaders of participatory local governance, capacity building for providers, sanitation, water, grants management, and CLTS manage Excel data files individually to monitor their respective activities.

The existence of multiple databases does not facilitate the alignment of collected data. The production of M&E performance charts demand more time and effort than it would take with a unified database system.

Given the extent of M&E activities due to the spread of increasing program support in other areas (127 new locations), the difficulties may be exacerbated if the status quo is maintained.

Perspectives

To overcome the major challenges identified as constraints, we plan to establish a much more efficient M&E database.

All the information and M&E systems that currently exist with the program will switch to a single Internet-based information system during FY 2012.

This new database will operate in a decentralized mode at the program's regional offices (Ziguinchor, Kolda, and Tambacounda). The information contained there will be open to the general public for consultation to ensure transparency, as advocated by the program.

The terms of reference for the selection of a consultant to design this new database have been shared and finalized during the fourth quarter of FY 2011.

7 EMMP Compliance and Activities

During the formulation of the USAID/PEPAM program, USAID had initiated an initial environmental evaluation. Taking into account the recommendations of this evaluation, an Environmental Monitoring and Mitigation Plan (EMMP) was the developed by the program, April 30, 2010, and approved by USAID. Activities in our EMMP have three main purposes: (1) protection of water resources, (2) preservation of flora, and (3) maintenance of environmental health.

To ensure better monitoring of the EMMP, a checklist was developed and made available to the NGOs/CBOs. Quarterly visits to the program's target villages have enabled the following observations:

Protection of water resources

Drilling mini-boreholes and constructing dry latrines were identified as potentially causing an alteration of groundwater quality if certain precautions were not taken into consideration.

- Installation of hydraulic and sanitation works: For the 64 hydraulic infrastructure and 1,928 household latrines constructed since the beginning of the program, the installation sites were approved by commissions, with strict adherence to standards. For all of these infrastructures, the installation reports, duly signed, are available at our offices in Ziguinchor and Kolda.
- Monitoring of drillers: NGO technicians, with the support of Component 3 field agents, ensured monitoring at all the work sites, and no complaints about adherence to hygienic conditions were recorded.
- Cleaning and disinfection prior to placing new boreholes in service: Before placing the 58 boreholes completed this year in service, the enterprises disinfected the boreholes to offset possible contamination that may have occurred during the drilling. The disinfection procedure was proposed by the program.
- Quality control for water: To ensure the provision of safe water, we conducted a systematic analysis of the borehole water prior to use by the population. To ensure proper execution of this task by the regional hygiene services units of Ziguinchor, Kolda, and Sédhiou, the program provided these units with laboratory equipment and materials: 2 Potatests and 2 Potalabs equipped with an arsenator (arsenic content indicator). These rapid analysis kits can cover a wide range of physico-chemical and bacteriological water analyses (including the determination of arsenic incidence).

Water analysis kit "POTALAB," purchased by the program and assigned to the Hygiene Service

For FY 2011, 52 water supply points out of the 58 boreholes completed were analyzed. The 6 boreholes that were not analyzed presented some shortcomings in terms of production. The following table gives the results obtained after analyses.

Table 12: Results of the water analyses conducted by the regional hygiene service units of Kolda, Sédhiou, and Ziguinchor, FY 2011

Region	Number of boreholes completed in FY 2011	Number of boreholes analyzed	Number of analyzed boreholes with poor water quality
Ziguinchor	35	35	5
Kolda	12	10	0
Sédhiou	11	7	0
Total	**58**	**52**	**5**

For the five sites with poor quality water, microbiologically speaking, the following actions were undertaken:

- Temporary closure of the water supply point
- Environmental visit to identify the source of contamination
- Advice given to the population for water treatment
- Analysis conducted again after a long period of pumping
- Contact made with the hygiene service unit to conduct an analysis again at these five water supply points

Protection for water supply points

A water supply point protection perimeter is systematically demarcated. Within this perimeter, no activity, pastoral or domestic, such as household washing (clothes or dishes), or solid or liquid waste dumping, is allowed. All completed water supply points are equipped with an enclosure. Local CG/ASUFOR members and NGO/CBO and program personnel ensure the strict application of these provisions.

Preservation of flora

Flora preservation is one of the determining criteria in the selection of work sites. All works to-date have been installed in sites where their implementation and operation will not lead to any loss of trees. At Diembereng, in the department of Oussouye, one of the beneficiaries cut down a tree without asking our opinion. He was asked to plant 10 trees on the site. As of our last visit, the beneficiary was in the process of planting a nursery.

Maintenance of environmental health

For sanitation, the maintenance and operation of the installations, as well as the disposal and management of dry latrine pit excreta, are determined to potentially have a negative impact on the environment. Community liaisons trained by the CGs/ASUFORs and project facilitators regularly organize informal talks and conduct VADs regarding this theme. Monitoring and supervision visits conducted by program technical staff did not identify any major problems with latrine use.

Management of latrine pit excreta

The latrines, which are all newly built, are not yet full enough to be emptied. However, a method for the eventual management, emptying and disposal of latrine pit excreta is described in the technicians' sanitation manual developed by the program.

Hydraulics

Slurry removal during borehole drilling and water stagnation during borehole operation are the two main negative impacts. Regarding the slurry, a portion is used as sanitary seals and returned into the borehole, and the remainder is dried and spread out in the slurry pits. All boreholes have a water pump slab and a drain for water lost during extraction. The drains are connected to a soak-away pit filled with rocks and gravel. During routine control site visits, none of the managed boreholes had stagnant water.

Furthermore, after each construction, special emphasis is placed on site restoration to its initial condition. Failure to do so is grounds for not receiving certifications or provisional approvals.

8 Other Activities

8.1 SUWASA peri-urban activities

In early 2010, SUWASA, a USAID-funded project, studied the sanitation situation in the peri-urban regions of Dakar and showed interest in a partnership with USAID/PEPAM. SUWASA's objective is to improve and expand the provision of WSS services in urban and peri-urban areas, focusing on responding to the needs of the poor.

In March 2011, SUWASA's due diligence team visited Senegal to determine, with USAID/ PEPAM's assistance, possible projects that are consistent with their objective. The scope of the mission included the following:

1. Conduct a review of literature and documents pertinent to potential projects and sites
2. Meet with key individuals and organizations from Senegal to solicit their views on the project and/or evaluate potential partnerships
3. Determine location of project sites and activities; Dakar peri-urban communities, Ziguinchor, Kolda, or other sites, as may be defined by USAID and stakeholders

4. Prepare the due diligence report defining SUWASA and USAID/PEPAM roles and responsibilities
5. Determine next steps and program project activities

The due diligence report determined a series of activities, including the following:

1. Peri-urban CLTS for demand creation and community organization strengthening
2. Training of small-scale private-sector artisans for peri-urban sanitation household infrastructure construction
3. Local government engagement in best practices information exchange and capacity building
4. Entrepreneurial business planning and public-private partnerships (PPPs), i.e., expanding the role of septic tank "vidangeurs" and providing franchise support; concession contracts for sanitation services
5. National policy reform to support PPPs, i.e., PPPs in fecal sludge management; licensing for "vidangeurs"; endorsement of urban CLTS

A project design team is expected early in FY 2012 to finalize the work plan for the 30-month SUWASA program, select peri-urban sites and activities, and plan a start-up/mobilization strategy for Dakar and Ziguinchor.

8.2 Gender considerations and equity

To strengthen participatory governance of infrastructures and activities, the gender dimension has been properly taken into account in the election of officers for the user associations (CGs/ASUFORs). The role of women and youth is largely reflected in the governance of WSS services, through the application of the regulatory provisions of the Rural Motorized Boreholes Management Reform (REGEFOR). In the composition of the CGs' and ASUFORs' steering committees, all the women's advancement groups are represented. This holds true as well for the community youth associations (boys and girls) and the neighborhood associations (men and women).

For the composition of the executive boards, composed of nine members, a minimum of 30% are supposed to be women.

For indicators on the inclusion of gender, the following results were recorded by the Program:

- 1.1.B: Percentage of WUA management positions in partner communities that are held by women (average percentage)
  - Ziguinchor (43.88%)
  - Sédhiou (46.67%)
  - Kolda (47%)
- 1.3.A: Number of WUA members in partner communities trained with program support in financial, technical, and/or administrative management for WUAs
  - Ziguinchor (43.69%)
  - Sédhiou (45.71%)
  - Kolda (43.15%)

In addition to these percentages that exceed the required minimum of 30%, some CGs and ASUFORs have reserved several management positions, including treasurer, secretariat, and head of WASH promotion, for women.

Regarding the development of enterprises (craftsmen, repairers, and well drillers), the following is noted:

- Since FY 2010, the program has trained a number of private-sector individuals and enterprises: craftsmen, repair operators, and well drillers.
- Well drillers: we trained and opertionalized 11 enterprises, of which one is a women-led and managed well drilling team and operator.
  - 5 operators in the Ziguinchor region, of which one is women-led
  - 3 operators in Sédhiou region
  - 3 operators in Kolda region

For the CLTS and hygiene promotion activities, the program tracked and promoted the following gender initiatives and results:

- The project contracted with three local NGOs to facilitate and manage CLTS activities in each of the regions of Casamance:
  - Ziguinchor: Kabonketoor, a women-led NGO, where all the facilitators are women
  - Sédhiou: CASADES, where 90% of the facilitators and staff are women
  - Kolda: ENDA, where at least 80% of the facilitators and staff are women
- The PMP reporting on the CLTS/WADA indicators has several gender data fields and can be found in ***Annex 2*** of the report.

Women as key actors in the water and sanitation sector

In Senegal, women are a key element for WASH projects, in terms of water management, hygiene education, and sanitation in households and communities. They are in charge of taking care of children when they are sick; of cleaning latrines, households, and surroundings; cleaning babies; and fetching water. This very important position makes them key actors for the WADA project. Gender is a very big issue in WASH projects, and for this reason it has been given importance in all stages of the WADA project implementation.

NGO selection

At the beginning of the project, it was decided to give precedence to women-based organizations as actors who are going to implement CLTS activities (in line after village responsibility). For that reason in Ziguinchor, Kabonketoor, which is a women's run NGO, was selected. In Kolda and Sédhiou, ENDA and CASADES were chosen—these are not women-led NGOs, but the field facilitators chosen are women (all 12 facilitators who are working with CLTS committees in villages are women).

Local governance

The implementation of CLTS activities in villages requires the establishment of organizations that are able to implement community action plans as well as sustain activities in the long term. In every targeted village, a CLTS committee is established for that purpose. In all 24 villages that are using the CLTS strategy, these committees have a representation and membership of more than 50% women:

- Ziguinchor: 12 CLTS committees, of which 52.9% of the members are women
- Kolda: 6 CLTS committees, of which 60% of the members are women
- Sédhiou: 6 CLTS committees, of which 54% of the members are women

If we consider the cultural norm and role given to woman in rural areas, these results are encouraging and interesting on the grounds that gender balance and equity is still being worked on, is an on-going issue at rural areas, and yet women have proved that they have a place and role in local community development and in the WASH sector.

In spite of these good results, some efforts are still needed to provide a place these committees for women: in the 24 committees, only 11 of the presidents are women. This can be improved if women are further sensitized in the role they could play in leadership and decision making.

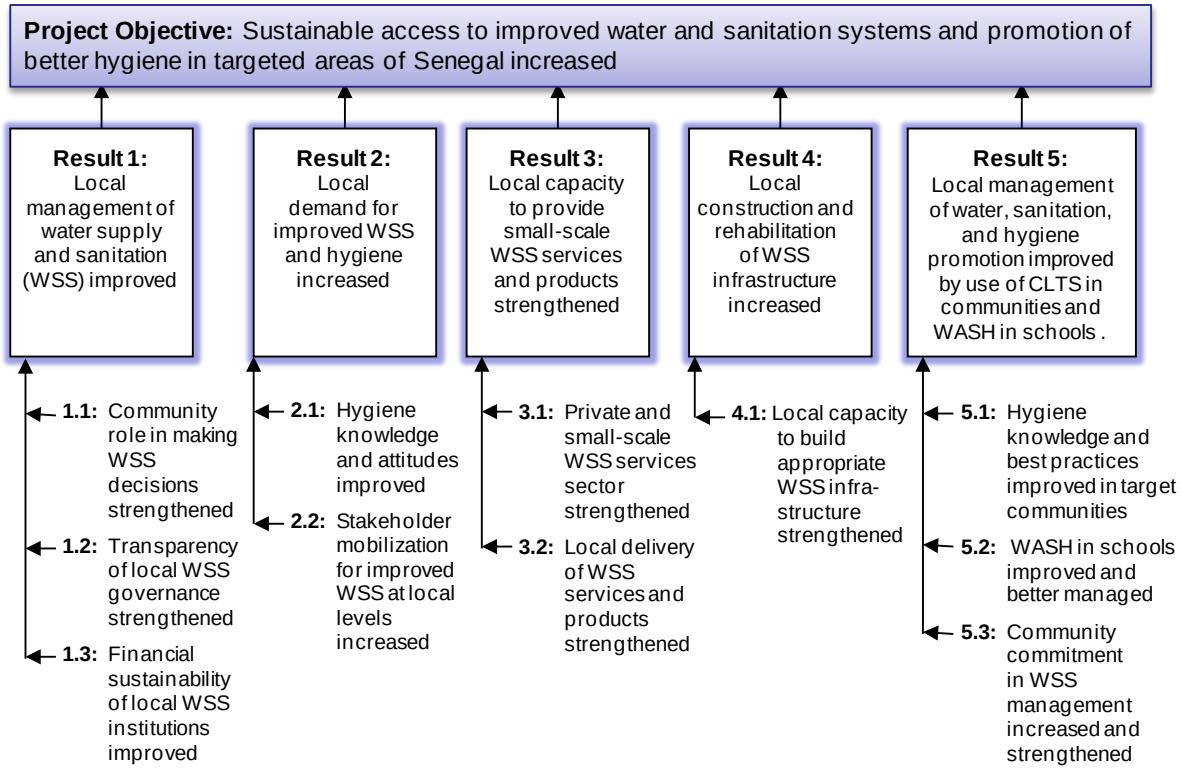
For WUAs, the program is taking into account article 10 of the rules and regulations set up by the GOS in the water sector that states, *"at least 1/3 of Water Management Committees' members must be women."* The six water management committees established in the first six FDAL villages in Ziguinchor have respected this ratio; more than 50% of the members are women.

During the implementation of the WADA program, staff will strive to ensure that activities are planned in the coming quarters to better include and empower women as a result of the WADA project. Economic activities will be initiated to help women obtain micro-finance/financial resources to establish local economic and sustainable activities, such as local soap making and Aquatabs sales and distribution in CLTS villages.

With this Annual Report, we are submitting two "Success Stories" that cover the "Kagnalène," the "Concrete Ladies" in the region of Diouloulou, Ziguinchor.

Annexes

Annex 1: Results Framework



Annex 2: M&E Tables & M&E Plan Indicators

USAID/PEPAM - Senegal Water and Sanitation Program - Project PMP Results for FY-2011

		Targets LoP	Targets FY 2011	FY 2011 Projections				Achievements						Target Balance
				Q1	Q2	Q3	Q4	Total FY 2010	FY11 Q1	FY11 Q2	FY11 Q3	FY11 Q4	Total FY 2010 + 2011	
Program Strategic Result: Sustainable access to improved water and sanitation systems and promotion of better hygiene in targeted areas of Senegal increased														
A: USAID Standard Indicator: Number of people (estimated) in target areas with access to improved drinking water supply as a result of **USG** assistance through USAID/PEPAM using locally sustainable strategies (by gender and urban/rural) (n.b. we usedPEPAM calculation of 150 people for each simple well or forage considered modern with at least a manual pump and 300 people for each medium and deep well or forage) Gender Indicator	Z'chor F	7,881	6,900	1,725	1,725	1,725	1,725	600	225	1,500	375	975	3,675	4,206
	Z'chor M	7,881	6,900	1,725	1,725	1,725	1,725	600	225	1,500	375	975	3,675	4,206
	Sdhu F	7,881	6,900	1,725	1,725	1,725	1,725	-	300	375	-	300	975	6,906
	Sdhu M	7,881	6,900	1,725	1,725	1,725	1,725	-	300	375	-	300	975	6,906
	Kld F	7,881	6,900	1,725	1,725	1,725	1,725	-	225	300	675	-	1,200	6,681
	Kld M	7,881	6,900	1,725	1,725	1,725	1,725	-	225	300	675	-	1,200	6,681
	Region II & III F	47,283											-	47,283
	Region II & III M	47,283											-	47,283
	Total	**141,850**	**41,400**	**10,350**	**10,350**	**10,350**	**10,350**	**1,200**	**1,500**	**4,350**	**2,100**	**2,550**	**11,700**	**130,150**
B: USAID Standard Indicator: Number of people (estimated) in target areas with access to improved sanitation facilities as a result of **USG** assistance through USAID/PEPAM using locally sustainable strategies (by gender and urban/rural) (n.b. we are using the PEPAM calculation of 10 people for each latrine) Gender Indicator	Z'chor F	5,167	3,315	1,440	1,125	750	-	160	975	1,590	2,540	2,305	7,570	- 2,403
	Z'chor M	5,167	3,315	1,440	1,125	750	-	160	975	1,590	2,540	2,305	7,570	- 2,403
	Sdhu F	5,167	1,625	125	750	750	-	-	25	-	620	450	1,095	4,072
	Sdhu M	5,167	1,625	125	750	750	-	-	25	-	620	450	1,095	4,072
	Kld F	5,167	1,625	125	750	750	-	-	25	-	710	240	975	4,192
	Kld M	5,167	1,625	125	750	750	-	-	25	-	710	240	975	4,192
	Region II & III F	31,000											-	31,000
	Region II & III M	31,000											-	31,000
	Total	**93,000**	**13,130**	**3,380**	**5,250**	**4,500**	**-**	**320**	**2,050**	**3,180**	**7,740**	**5,990**	**19,280**	**73,720**
Component 1: Strengthen participatory governance														
Result 1: Local management of water supply and sanitation strengthened														
1.A: Number of water users' associations (WUAs) in partner communities established and strengthened with project support in the FY (by region)	Z'chor	54	-	-	-	-	-	53	-	-	-	-	53	1
	Sdhu	30	29	29	-	-	-	-	-	18	6	6	30	-
	Kld	30	30	30	-	-	-	-	-	11	10	7	28	2
	Region II	90											-	90
	Region III	90											-	90
	Total	**294**	**59**	**59**	**-**	**-**	**-**	**53**	**-**	**29**	**16**	**13**	**111**	**183**
1.B: Number of village-level water and sanitation plans (PLHAs) completed in partner communities in the FY (by region; village, Rural Community level)	Z'chor : 3*	22	10	10	-	-	-	12	10	-	-	-	22	-
	Sdhu : 10*	4	4	-	-	4	-	-	-	-	-	-	-	4
	Kld : 8*	4	4	-	-	4	-	-	-	-	-	-	-	4
	Region II	4											-	4
	Region III	4											-	4
	Total	**38**	**18**	**10**	**-**	**8**	**-**	**12**	**10**	**-**	**-**	**-**	**22**	**16**

		Targets LoP	Targets FY 2011	FY 2011 Projections				Achievements						Target Balance
				Q1	Q2	Q3	Q4	Total FY 2010	FY11 Q1	FY11 Q2	FY11 Q3	FY11 Q4	Total FY 2010 + 2011	
1.C: Number of WUAs in partner communities that have established maintenance contracts with local service providers in place at the end of the FY (by region)	Z'chor	54	54	19	27	8	-	3	7	-	-	4	14	40
	Sdhu	30	29	-	2	16	11	-	-	-	-	8	8	22
	Kld	30	30	-	1	17	12	-	1	2	2	8	13	17
	Region II	90											-	90
	Region III	90											-	90
	Total	**294**	**113**	**19**	**30**	**41**	**23**	**3**	**8**	**2**	**2**	**20**	**35**	**259**
1.D: Percent of households tested in partner communities with improved WSS whose household water at the time of testing met national quality standards (by region)	Z'chor	1	1	-	1	-	-	-	-	-	-	-	#	1
	Sdhu	1	1	-	-	1	-	-	-	-	-	-	#	1
	Kld	1	1	-	-	1	-	-	-	-	-	-	#	1
	Region II	1												1
	Region III	1												1
	Taux moyen	**1**	**1**		**1**	**1**		**-**	**-**	**-**	**-**	**-**	**# # ###**	**1**
IR 1.1: Community role in making WSS decisions strengthened														
1.1.A: Number of partner community WUAs that held at least three public meetings in this quarter to discuss water use issues and decisions (by region)	Z'chor	54	54	54	54	54	54	49	49	49	43	49	49	5
	Sdhu	30	29	29	29	29	29	-	-	9	16	24	24	6
	Kld	30	30	30	30	30	30	-	-	4	6	22	22	8
	Region II	90	90											90
	Region III	90	90											90
	Total	**294**	**293**	**113**	**113**	**113**	**113**	**49**	**49**	**62**	**65**	**95**	**95**	**199**
1.1.B: Percentage of WUA management positions in partner communities that are held by women (average percentage)	Z'chor	1	1	1	1	1	1	0	0	0	0	0	0	0
	Sdhu	1	1	1	1	1	1	-	0	0	0	0	0	0
	Kld	1	1	1	1	1	1	-	0	0	0	0	0	0
	Region II	-												-
	Region III	-												-
	Taux moyen	**1**	**1**	**1**	**1**	**1**	**1**	**0**	**0**	**0**	**0**	**0**	**0**	**0**
IR 1.2: Transparency of local WSS governance strengthened														
1.2.A: Number of partner community WUAs that recorded minutes (*procès verbal*) from the last three WUA meetings in the quarter (by region)	Z'chor	54	54	54	54	54	54	38	38	38	38	43	43	11
	Sdhu	30	29	29	29	29	29	-	-	-	6	13	13	17
	Kld	30	30	30	30	30	30	-	-	-	1	12	12	18
	Region II	90												90
	Region III	90												90
	Total	**294**	**113**	**113**	**113**	**113**	**113**	**38**	**38**	**38**	**45**	**68**	**68**	**226**
1.2.B: Number of partner community WUAs with recorded minutes from WUA meetings that were published or otherwise made publicly available in the last quarter (by region)	Z'chor	54	54	54	54	54	54	35	44	44	44	46	46	8
	Sdhu	30	29	29	29	29	29	-	-	-	10	13	13	17
	Kld	30	30	30	30	30	30	-	-	-	-	-	-	30
	Region II	90												90
	Region III	90												90
	Total	**294**	**113**	**113**	**113**	**113**	**113**	**35**	**44**	**44**	**54**	**59**	**59**	**235**
IR 1.3: Financial sustainability of local WSS institutions improved														
1.3.A: Number of people in partner communities trained with program support in financial, technical, and/or administrative management for water users' associations (WUAs) in the FY (by region; sex) Gender Indicator	Z'chor F	108	-	-	-	-	-	163	10	-	-	-	173	- 65
	Z'chor M	108	-	-	-	-	-	196	27	-	-	-	223	- 115
	Sdhu F	60	58	58	-	-	-	-	-	29	37	14	80	- 20
	Sdhu M	60	58	58	-	-	-	-	-	44	38	13	95	- 35
	Kld F	60	60	60	-	-	-	-	-	19	44	-	63	- 3
	Kld M	60	60	60	-	-	-	-	-	27	56	-	83	- 23
	Region II & III F	360												360
	Region II & III M	360												360
	Total	**1,176**	**236**	**236**	**-**	**-**	**-**	**359**	**37**	**119**	**175**	**27**	**717**	**459**

		Targets LoP	Targets FY 2011	FY 2011 Projections				Achievements						Target Balance
				Q1	Q2	Q3	Q4	Total FY 2010	FY11 Q1	FY11 Q2	FY11 Q3	FY11 Q4	Total FY 2010 + 2011	
1.3.B: Number of WUAs in partner communities that have adopted financial practices, such as a fee collection system, advocated by USAID/PEPAM, the GoS, and/or key partners (by region)	Z'chor	54	17	52	-	-	-	37	37	37	37	43	43	11
	Sdhu	30	29	-	29	-	-	-	-	-	-	6	6	24
	Kld	30	30	-	30	-	-	-	-	-	2	2	2	28
	Region II	90												90
	Region III	90												90
	Total	**294**	**76**	**52**	**59**	-	-	**37**	**37**	**37**	**39**	**51**	**51**	**243**
Component 2: Increase demand for sustainable water, sanitation, and hygiene services and products														
Program Result 2: Local demand for improved water supply and sanitation increased														
2.A: Number of schools or other public structures that requested improved WSS or hygiene infrastructure in the FY (by region)	Z'chor	1	1	1	-	-	-	-	11	-	-	-	11	- 10
	Sdhu	1	1	1	-	-	-	-	9	-	-	-	9	- 8
	Kld	1	1	1	-	-	-	-	10	-	-	-	10	- 9
	Region II	3											-	3
	Region III	3											-	3
	Total	**9**	**3**	**3**	-	-	-	-	**30**	-	-	-	**30**	- **21**
2.B: Number of latrines requested through PLHAs developed by partner communities in the FY (by region)	Z'chor (Pour 22 PLHA)	27,232	9,077	2,269	2,269	2,269	2,269	23,579	-	-	-	-	23,579	3,653
	Sdhu	24,757	8,252	2,063	2,063	2,063	2,063	-	-	-	-	-	-	24,757
	Kld	33,422	11,141	2,785	2,785	2,785	2,785	-	-	-	-	-	-	33,422
	Region II	-											-	-
	Region III	-											-	-
	Total	**85,411**	**28,470**	**7,118**	**7,118**	**7,118**	**7,118**	**23,579**	-	-	-	-	**23,579**	**61,832**
2.C: Number of hand washing units requested through PLHAs developed by partner communities in the FY (by region)	Z'chor (Pour 12 PLHA)	277	92	23	23	23	23	151	-	-	-	-	151	126
	Sdhu	252	84	21	21	21	21	-	-	-	-	-	-	252
	Kld	340	113	28	28	28	28	-	-	-	-	-	-	340
	Region II	-											-	-
	Region III	-											-	-
	Total	**868**	**289**	**72**	**72**	**72**	**72**	**151**	-	-	-	-	**151**	**717**
IR 2.1: Hygiene knowledge and attitudes improved														
2.1.A: Number of people in partner communities who received training in WSS or proper hygiene techniques and practices with program support in the FY (by region; sex) (n.b. estimate two per village one female and one male) Gender Indicator	Z'chor F	108	108	108	-	-	-	76	-	16	-	-	92	16
	Z'chor M	108	108	108	-	-	-	71	-	41	-	-	112	- 4
	Sdhu F	60	58	19	39	-	-	-	-	9	38	-	47	13
	Sdhu M	60	58	19	39	-	-	-	-	9	38	3	50	10
	Kld F	60	60	20	40	-	-	-	-	-	25	11	36	24
	Kld M	60	60	20	40	-	-	-	-	-	14	9	23	37
	Region II F	180	180										-	180
	Region II M	180	180										-	180
	Region II & III F	360											-	360
	Region II & III M	360											-	360
	Total	**1,536**	**812**	**295**	**157**	-	-	**147**	-	**75**	**115**	**23**	**360**	**1,176**

		Targets LoP	Targets FY 2011	FY 2011 Projections				Achievements						Target Balance
				Q1	Q2	Q3	Q4	Total FY 2010	FY11 Q1	FY11 Q2	FY11 Q3	FY11 Q4	Total FY 2010 + 2011	
2.1.B: Number of households in partner communities visited to provide WSS or hygiene IEC with program support this FY (by region)	Z'chor	6,600	4,400	1,100	1,100	1,100	1,100	1,446	56	468	1,762	549	4,281	2,319
	Sdhu	3,900	1,950	488	488	488	488	-	15	278	197	394	884	3,016
	Kld	3,900	1,950	488	488	488	488	-	17	162	118	53	350	3,550
	Region II	11,700											-	11,700
	Region III	11,700											-	11,700
	Total	**37,800**	**8,300**	**2,075**	**2,075**	**2,075**	**2,075**	**1,446**	**88**	**908**	**2,077**	**996**	**5,515**	**32,285**
2.1.C: Number of schools in in target areas visited to provide WSS or hygiene IEC with program support in the FY (by region)	Z'chor	18	9	3	3	3	-	-	-	-	-	-	-	18
	Sdhu	18	6	3	3	-	-	-	-	-	-	-	-	18
	Kld	18	6	3	3	-	-	-	-	-	-	-	-	18
	Region II	18											-	18
	Region III	18											-	18
	Total	**90**	**21**	**9**	**9**	**3**	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**90**
2.1.D: Number of teachers who have received WSS or hygiene IEC materials and training through program activities in the FY (by region; sex) Gender Indicator	Z'chor F	54	27	14	14	-	-	-	-	2	-	-	2	52
	Z'chor M	54	27	14	14	-	-	-	-	2	32	-	34	20
	Sdhu F	54	18	9	9	-	-	-	-	2	-	-	2	52
	Sdhu M	54	18	9	9	-	-	-	-	37	-	-	37	17
	Kld F	54	18	9	9	-	-	-	-	1	-	-	1	53
	Kld M	54	18	9	9	-	-	-	-	20	-	-	20	34
	Region II & III F	108											-	108
	Region II & III M	108											-	108
	Total	**540**	**126**	**63**	**63**	**-**	**-**	**-**	**-**	**64**	**32**	**-**	**96**	**444**
IR 2.2: Stakeholder mobilization for improved WSS at local levels increased														
2.2.A: Number of WUAs where more than half of the households have provided money or in-kind contributions for water access or water users' associations this FY (by region)	Z'chor	54	54	19	27	8	-	41	6	4	-	1	52	2
	Sdhu	30	29	-	2	15	12	-	4	16	6	5	31	- 1
	Kld	30	30	-	1	17	12	-	1	18	4	5	28	2
	Region II	90											-	90
	Region III	90											-	90
	Total	**294**	**113**	**19**	**30**	**40**	**24**	**41**	**11**	**38**	**10**	**11**	**111**	**183**
2.2.B: Number of village public meetings for water and sanitation IEC conducted with program support in the FY (by region)	Z'chor	432	216	54	54	54	54	83	18	228	63	137	529	- 97
	Sdhu	240	116	29	29	29	29	-	104	43	276	277	700	- 460
	Kld	240	120	30	30	30	30	-	52	-	48	1,213	1,313	- 1,073
	Region II	480											-	480
	Region III	480											-	480
	Total	**1,872**	**452**	**113**	**113**	**113**	**113**	**83**	**174**	**271**	**387**	**1,627**	**2,542**	**- 670**
2.2.C: Number of mass media campaigns for water and sanitation IEC reaching targeted areas conducted with program support in the FY (by region; type of campaign)	Z'chor	2,592	1,296	324	324	324	324	498	2,591	-	-	-	3,089	- 497
	Sdhu	1,440	696	174	174	174	174	-	-	-	-	-	-	1,440
	Kld	1,440	720	180	180	180	180	-	-	-	-	-	-	1,440
	Region II	4,320											-	4,320
	Region III	4,320											-	4,320
	Total	**14,112**	**2,712**	**678**	**678**	**678**	**678**	**498**	**2,591**	**-**	**-**	**-**	**3,089**	**11,023**
Component 3: Strengthen the capacity of small-scale service providers, the private sector, and water users' associations														
Program Result 3: Local capacity in improved water and sanitation services strengthened														
3.A: Number of local service providers in WSS who received training or other program support to improve business knowledge, skills, techniques, or other business practices in the FY (by region; type of service)	Z'chor	54	1	-	-	1	-	7	39	-	43	7	96	- 42
	Sdhu	30	3	-	-	3	-	-	16	-	1	6	23	7
	Kld	30	3	-	-	3	-	-	16	-	5	-	21	9
	Region II	90	2			2							-	90
	Region III	90											-	90
	Total	**294**	**9**	**-**	**-**	**9**	**-**	**7**	**71**	**-**	**49**	**13**	**140**	**154**

		Targets LoP	Targets FY 2011	FY 2011 Projections				Achievements						Target Balance
				Q1	Q2	Q3	Q4	Total FY 2010	FY11 Q1	FY11 Q2	FY11 Q3	FY11 Q4	Total FY 2010 + 2011	
3.B: Number of local service providers who received program-supported training in WSS construction or manufacturing in the FY (by region; type of training)	Z'chor	54	12	11	-	1	-	70	60	-	43	22	195	- 141
	Sdhu	30	8	8	-	-	-	-	24	-	2	6	32	- 2
	Kld	30	8	8	-	-	-	-	31	-	5	-	36	- 6
	Region II	90	2	-	-	2	-	-					-	90
	Region III	90						-					-	90
	Total	294	30	27	-	3	-	70	115	-	50	28	263	31
IR 3.1: Private and small-scale WSS service sector strengthened														
3.1.A: USAID Standard Indicator: Number of producer's organizations, water users associations, trade and business associations, and Community-Based Organizations (CBOs) receiving USAID assistance through the USAID/PEPAM program in the FY (by region)	Z'chor	54	17	16	-	1	-	123	68	35	9	24	259	- 205
	Sdhu	30	41	41	-	-	-	-	48	-	3	12	63	- 33
	Kld	30	42	42	-	-	-	-	47	-	11	7	65	- 35
	Region II	90	33	-	-	33	-						-	90
	Region III	90											-	90
	Total	294	133	99	-	34	-	123	163	35	23	43	387	- 93
IR 3.2: Local delivery of WSS services and products strengthened														
3.2.A: Number of program-assisted local private maintenance service providers who have at least one maintenance contract established with a WUA (by region)	Z'chor	54	10	4	5	1	-	-	1	-	12	1	14	40
	Sdhu	30	5	-	-	3	2	-	-	-	1	7	8	22
	Kld	30	5	-	-	3	2	-	-	-	5	9	14	16
	Region II	90											-	90
	Region III	90											-	90
	Total	294	20	4	5	7	4	-	1	-	18	17	36	258
3.2.B: Number of new service contracts established by program-trained or –assisted local providers of WSS services or products in the FY (by region)	Z'chor	54	55	19	29	8	-	20	43	22	55	13	153	- 99
	Sdhu	30	31	-	2	17	12	-	-	6	26	6	38	- 8
	Kld	30	30	-	1	17	12	-	-	4	32	6	42	- 12
	Region II	90											-	90
	Region III	90											-	90
	Total	294	116	19	32	42	24	20	43	32	113	25	233	61
Component 4: Install and rehabilitate improved drinking water and sanitation infrastructure, using a service delivery framework														
Program Result 4: Local capacity to construct or rehabilitate water and sanitation infrastructure strengthened														
4.A: Number of wells constructed in targeted areas in the FY with program support (by region)	Z'chor	40	36	15	18	3	-	6	21	-	-	14	41	- 1
	Sdhu	40	21	-	2	12	7	-	3	-	7	-	10	30
	Kld	40	20	-	1	12	7	-	3	-	9	-	12	28
	Region II	-											-	-
	Region III	-											-	-
	Total	120	77	15	21	27	14	6	27	-	16	14	63	57
4.B: Number of wells rehabilitated in targeted areas in the FY with program support (by region)	Z'chor	30	19	4	10	5	-	-	-	2	-	-	2	28
	Sdhu	14	10	-	-	5	5	-	-	5	-	-	5	9
	Kld	19	10	-	-	5	5	-	-	4	-	1	5	14
	Region II	41						-					-	41
	Region III	41						-					-	41
	Total	145	39	4	10	15	10	-	-	11	-	1	12	133
4.C: Number of peri-urban water and sanitation projects completed in targeted areas in the FY with local and program contributions (by region)	Z'chor	1	1	-	1	-	-	-	-	-	-	-	-	1
	Sdhu	-	-	-	-	-	-	-	-	-	-	-	-	-
	Kld	-	-	-	-	-	-	-	-	-	-	-	-	-
	Region II	1											-	1
	Region III	1											-	1
	Total	3	1	-	1	-	-	-	-	-	-	-	-	3

		Targets LoP	Targets FY 2011	FY 2011 Projections				Achievements						Target Balance
				Q1	Q2	Q3	Q4	Total FY 2010	FY11 Q1	FY11 Q2	FY11 Q3	FY11 Q4	Total FY 2010 + 2011	
4.D: Number of multi-village water supply projects completed in targeted areas in the FY with local and program contributions (by region)	Z'chor	-	-	-	-	-	-	-	-	-	-	-	-	-
	Sdhu	-	-	-	-	-	-	-	-	-	-	-	-	-
	Kld	1	1	-	-	1	-	-	-	-	-	-	-	1
	Region II	1											-	1
	Region III	-											-	-
	Total	**2**	**1**	**-**	**-**	**1**	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**2**
IR 4.1: Local capacity to build appropriate WSS infrastructure strengthened														
4.1.A: Number of hand pumps fabricated locally with program support in the FY (by region)	Z'chor	20	20	5	5	5	5	16	-	-	-	-	16	4
	Sdhu	10	10	-	5	5		-	-	-	-	-	-	10
	Kld	10	10	-	5	5		-	-	-	-	-	-	10
	Region II	20											-	20
	Region III	20											-	20
	Total	**80**	**40**	**5**	**15**	**15**	**5**	**16**	**-**	**-**	**-**	**-**	**16**	**64**
4.1.B: Number of latrines and hand washing units built in targeted areas using program-trained small-scale or other private sector service providers in the FY (by region)	Z'chor	900	559	184	225	150	-	32	195	318	508	461	1,514	- 614
	Sdhu	500	325	25	150	150	-	-	5	-	124	90	219	281
	Kld	500	325	25	150	150	-	-	5	-	142	48	195	305
	Region II	1,900											-	1,900
	Region III	1,900											-	1,900
	Total	**5,700**	**1,209**	**234**	**525**	**450**	**-**	**32**	**205**	**318**	**774**	**599**	**1,928**	**3,772**
4.1.C: Number of public sanitation facilities (*edicules publiques*) built using program-trained small-scale or other private sector service providers in the FY (by region)	Z'chor	1	1	1	-	-	-	-	-	-	1	-	1	-
	Sdhu	2	1	-	-	1	-	-	-	-	-	-	-	2
	Kld	2	1	-	-	1	-	-	-	-	-	-	-	2
	Region II	3											-	3
	Region III	1											-	1
	Total	**9**	**3**	**1**	**-**	**2**	**-**	**-**	**-**	**-**	**1**	**-**	**1**	**8**

[*] Pre-existing PLHAs, prepared without project support

USAID/PEPAM - Senegal Water and Sanitation Program - Results of Performance Indicators - CLTS & WADA Activities - FY-2011

Source : USAID/PEPAM M&E Base de Donnée - 30 Septembre 2011.

Region		ZIGUINCHOR	ZIGUINCHOR	SEHIOU	KOLDA	TOTAL FY-2011
Implementing NGO		WADA I KABONKETOOR-PHASE 1 Oct 2010 to March 2011	WADA I KABONKETOOR-PHASE 2 April 2011 to present	WADA II CASADES	WADA II ENDA	
Number of villages		6	6	6	6	24
DEMOGRAPHIC DATA						
Population	Total	1,861	1,993	1,050	627	5,531
	Men	*964*	*584*	*309*	*146*	2,003
	Women	*897*	*565*	*308*	*149*	1,919
Number of children	Total	867	844	433	332	2,476
	Boys	471	431	226	178	1,306
	Girls	396	413	207	154	1,170
Number of Compounds		34	33	79	43	189
Number of Houses		113	159	82	77	431
Number of Households		207	199	91	77	574
BASELINE DATA						
PM_f : Functional modern well		12	21	5	-	38
FV_f : functional village borehole		2	-	-	-	2
MA_f : Number of households with a functional latrine		59	36	70	-	165
LI_f : Number of individual household latrines that are functional		59	89	72	-	220
IMPACT INDICATOR						
A) Number of villages attaining FDAL status (end of open-air defecation) in six (6) months		6	-	-	-	6
	% of villages FDAL	1	-	-	-	25%
SPECIFIC INDICATORS						
Calculations using the standard multipliers						
B.1.) Number of persons benefitting from a sanitation system within the CLTS program framework	Total	400	660	800	970	2,830
	Men	*200*	*330*	*400*	*485*	1,415
	Women	*200*	*330*	*400*	*485*	1,415
B.2.) Number of persons having improved access to a potable water supply as a result of the CLTS program	Total	900	-	-	-	900
	Men	*450*	-	-	-	450
	Women	*450*	-	-	-	450

Region		ZIGUINCHOR	ZIGUINCHOR	SEHIOU	KOLDA	TOTAL FY-2011
Implementing NGO		WADA I KABONKETOOR-PHASE 1 Oct 2010 to March 2011	WADA I KABONKETOOR-PHASE 2 April 2011 to present	WADA II CASADES	WADA II ENDA	
Calculations using actual numbers of beneficiaries						
B.1.) Number of persons benefitting from a sanitation system within the CLTS program framework	Total	2,446	1,559	958	1,084	6,047
	Men	*1,254*	*1,033*	*585*	*622*	3,494
	Women	*1,192*	*526*	*373*	*462*	2,553
B.2.) Number of persons having improved access to a potable water supply as a result of the CLTS program	Total	1,921	-	-	-	1,921
	Men	*1,024*	-	-	-	1,024
	Women	*897*	-	-	-	897
I) SUPPORT FOR PARTICIPATORY GOVERNANCE						
1-1) Number of CLTS committees established	Total no. de comités	6	6	6	6	24
	Total members	*116*	*122*	*48*	*45*	331
	Women members	*70*	*56*	*26*	*27*	179
1-2) Average percent of women CLTS committee members		1	0	1	1	54%
1-3) Number of CLTS committees trained in hygiene education		6	-	6	6	18
1-4) Number of CLTS committee members trained in hygiene education	Total	32	-	46	46	124
	Men	*17*	-	*20*	*20*	57
	Women	*15*	-	*26*	*26*	67
1-5) Average percent of women CLTS committee members trained in hygiene education		0	0%	1	1	54%
1-6) Number of CLTS committees having developed their quarterly action plans		6	6	6	6	24
1-7) Number of CLTS committees having implemented their quarterly action plans in a satisfactory manner		4	-	6	5	15
	25% at most	-	*1*	-	-	1
	between 26 & 50%	*2*	-	-	-	2
	between 51 & 75%	-	*5*	-	*1*	6
	More than 75%	*4*	-	*6*	*5*	15

Region		ZIGUINCHOR	ZIGUINCHOR	SEHIOU	KOLDA	TOTAL FY-2011
Implementing NGO		WADA I KABONKETOOR-PHASE 1 Oct 2010 to March 2011	WADA I KABONKETOOR-PHASE 2 April 2011 to present	WADA II CASADES	WADA II ENDA	
1-8) Number of leadership workshops in IEC/CLTS conducted	Total	22	53	96	63	234
	ONG	6	34	96	35	171
	CLTS Committees	16	19	84	58	177
1-9) Number of persons sensitized in CLTS/ODF status and hygiene & handwashing practices	Total	1,029	1,382	582	610	3,603
	Men	*663*	*554*	*247*	*149*	1,613
	Women	*517*	*678*	*126*	*241*	1,562
1-10) Average percent of women sensitized in CLTS/ODF status and hygiene & handwashing practices in partner communities		1	1	1	1	84%
1-11) Average percent of children sensitized in hygiene & handwashing practices and enviromental management of the school compound in partner communities		1	1	0	1	63%
II) CONSTRUCTION/REHABILITATION OF INFRASTRUCTURES						
2-1) Number of traditional wells rehabilitated within the CLTS program framework	Total	-	-	6	7	13
	Modern	-	-	-	-	0
	Traditional	-	-	*6*	*7*	13
2-2) Number of mini-boreholes constructed within the CLTS program framework	Total	-	-	-	-	0
	Modern	*6*	-	-	-	6
	Traditional	-	-	-	-	0
2-3) Number of household latrines constructed within the CLTS program framework and equpped with a handwashing device	Total	23	26	24	50	123
	Traditional	*104*	*40*	*24*	*50*	218
	Number of hand washing stations	*23*	*26*	*24*	*50*	123
2-4) Number of household latrines rehabilitated within the CLTS program framework and equpped with a handwashing device	Total	17	40	56	47	160
	Traditional	*63*	*93*	*57*	*47*	260
	Number of hand washing stations	*23*	*40*	*56*	*47*	166

Annex 3: CG and ASUFOR grant contracts (FOGs), with list of project sites (by region and partner)

Status of the Formulation of Requests for Funds (RF) and Signature of Grant Contracts (FOGs) with CGs/ASUFORs									
ZIGUINCHOR REGION									
#	NGO/CBO	RF WATER SUPPLY		RF SANITATION		FOG Contracts WATER SUPPLY		FOG Contracts SANITATION	
		#	Villages	#	Villages	#	Villages	#	Villages
1	ADY	10	Eguilaye (2 RF), Badiouré (2 RF), Niassarang, Takème, Grand Coulaye, Tandouboune, Médiégue et Djilacouda ;	22	Kagnarou (2 RF), Kindieng, Badiouré (2 RF), Bouto (2 RF), Grand Coulaye (2 RF), Médiégué (3 RF), Petit Coulaye (4 RF), Tenghori, Tandouboune, Eguilaye, Kafesse, Niassarang et Takème	13	Eguilaye (2 FOG), Badiouré (2 FOG), Niassarang, Grand Coulaye (4 FOG), Takème, Tandouboune, Djilacounda et Médiégue;	18	Kagnarou (2 FOG), Badiouré (2 FOG), Bouto (2 FOG), Kindieng, Médiégue (2 FOG), Petit Coulaye (3 FOG), Grand Coulaye (2 FOG), Tandouboune, Kafesse, Eguilaye et Tenghory ;
2	AJAC LUKAAL	3	Koudioundou, Boulome et Djifanghor ;	6	Boulome (2 RF), Badiatte Grand (2 RF) et Koundioundou (2 RF)	3	Koudioundou, Boulome et Djifanghor;	6	Boulome (2 FOG), Badiatte Grand (2 FOG) et Koundioundou (2 FOG);
3	AJAEDO	3	CEM Diakène Diola (1 mini forage équipé d'une pompe manuelle), ECOLEM Effoc Kakounoume (1 mini forage équipé d'une pompe manuelle) et Mlomp (Djicomol);	54	Diakène Diola (5 RF), Diakène Ouoloff (4 RF), Effoc Balandiate (3 RF), Effoc Ehinting (4 RF), Effoc Kakounoume (4 RF), Oukout (4 RF), Mlomp (17 RF), Youtou Djibonker (2 RF), Diembéring (7 RF), Youtou Bouhème (2 RF) et Bouyouye (2 RF)	2	CEM Diakène Diola (1 mini forage équipé d'une pompe manuelle) et ECOLEM Effoc Kakounoume (1 mini forage équipé d'une pompe manuelle) ;	41	Diakène Diola (5 FOG), Diakène Ouoloff (3 FOG), Effoc Balandiate (2 FOG), Effoc Kakounoume (3 FOG), Effoc Ehinting (3 FOG), Oukout (4 FOG), Mlomp (11 FOG), Youtou Djibonker, Bouyouye (2 FOG) et Diembéring (7 FOG);
4	PACTE	7	Bouteum (2 RF), Bourofaye Diola, ECOLEM Bourofaye Baïnounck (1 mini forage équipé d'une pompe manuelle), Tobor, Camaracounda (2 RF) ;	30	Bacounoum (3 RF), Bouteum (2 RF), Boutoupa (2 RF), Camaracounda (3 RF), Bourofaye Baïnounck (4 RF), Diagobel (3 RF), Colomba (2 RF), Teubi (3 RF), Tobor (5 RF), Mpack (2 RF) et Bourofaye Diola.	3	Bouteum, Bourofaye Diola et Bourofaye Baïnounck	30	Bourofaye Baïnounck (4 FOG), Bouteum (2 FOG), Diagobel (3 FOG), Colomba (2 FOG), Camaracounda (3 FOG), Boutoupa (2 FOG), Bacounoum (3 FOG), Tobor (5 FOG), Mpack (2 FOG), Teubi (3 FOG) et Bourofaye Diola;
5	WESWA	5	Diouloulou, Dombondir, CEM Badiana (1 bloc sanitaire de 2X7 boxes et 1 mini forage équipé d'une pompe solaire) et Badiana (2 RF).	18	Badiana (2 RF), Bassire (2 RF), Belaye, Dianki, Dombondir (2 RF), Diouloulou (2 RF), Kartiack (3 RF), Séléty (2 RF), Ebinako (2 RF) et Ediamath.	8	Diouloulou (3 FOG), Dombondir (4 FOG) et CEM Badiana (1 bloc sanitaire de 2X7 boxes et 1 mini forage équipé d'une pompe solaire).	17	Bassire (2 FOG), Belaye, Dianki (2 FOG), Dombondir (2 FOG), Diouloulou (2 FOG), Kartiack (2 FOG), Séléty (2 FOG), Ebinako, Ediamath et Badiana (2 FOG).
TOTAL ZIGUINCHOR		28		130		29		112	

SEDHIOU REGION									
#	NGO/CBO	RF WATER SUPPLY		RF SANITATION		FOG Contracts WATER SUPPLY		FOG Contracts SANITATION	
		#	Villages	#	Villages s	#	Villages	#	Villages
1	CARITAS / SEDHIOU	7	Saré Lao, Winsako Yoro, Koudalla, Saré Toumani Mandjaque, Samé Foulayel, Kaolack, Samé Kanta Manjack,	16	Kaolack (4 RF), Koudalla (2 RF), Winsako Yoro (3 RF), Samé Kanta Manjack, Saré Lao (2 RF), Saré Toumani Mandjack et Samé Foulayel (3RF),	4	Saré Lao, Winsako Yoro, Koudalla et Saré Toumani Mandjaque ;	13	Winsako Yoro (2 FOG), Saré Toumani Mandjack, Saré Lao (2 FOG), Koudalla (2 FOG), Kaolack (3 FOG), Samé Kanta Manjack et Samé Foulayel (2 FOG),
2	CASADES / SEDHIOU	2	Diédiély et Ndongane	9	Diédiély (2 RF), Djiragone Diafar (3 RF), Ndongane (2 RF), Ngogname et Kamoghone Antenne,	-		4	Djiragone Diafar, Diédiély (2 FOG) et Ndongane,
3	ENDA Eau Populaire / SEDHIOU	6	Talto, Saré Sara Bouya, Saré Souna Mandjaque, Saré Almamy, Koudjiny et Saré Faring,	27	Koudjiny (4 RF), Saré Faring (6 RF), Saré Yéro Sow (3 RF), Saré Souna Mandjaque (2 RF), Saré Almamy (5 RF), Talto (3 RF), Boussimballo, Saré Sara Bouya (3 RF) ;	4	Saré Souna Mandjaque, Saré Sara Bouya, Talto et Saré Almamy ;	11	Koudjiny (2 FOG), Saré Faring (2 FOG), Saré Souna Mandjaque, Saré Almamy (2 FOG), Saré Yéro Sow, Talto, Boussimballo et Saré Sara Bouya,
4	ENFANCE&PAIX / SEDHIOU	9	Hamdalaye Mandjaque, Sédhiouding, Sonaco, Thiamoulé, Tokodjan, Assoumoul (2 RF), Sincaptilidji, Piriki	13	Hamdalaye Mandjaque (2 RF), Boussoura (2 RF), Sankouya, Sédhiouding, Sonaco, Thiamoulé, Assoumoul, Diambancounda, Piriki, Tokodjian et SincapTilidji	4	Hamdalaye Mandjaque, Sédhiouding, Sonaco et Thiamoulé;	7	Hamdalaye Mandjaque (2 FOG), Boussoura, Sankouya, Sédhiouding, Sonaco et Thiamoulé
TOTAL SEDHIOU		24		65		12		35	

KOLDA REGION									
#	NGO/CBO	RF WATER SUPPLY		RF SANITATION		FOG Contracts WATER SUPPLY		FOG Contracts SANITATION	
		#	Villages	#	Villages	#	Villages	#	Villages
1	CARITAS / KOLDA	9	Saré Hamady, Témento Samba Korasse, Saré Namou, Sinthiang Yéro Djina, Saré Diouba, Saré Kéléfa, Sam Pathé, Saré Botto Mawndé, Nany Demba ;	16	Sam Pathé (2RF), Saré Namou (2RF), Saré Diouba, Sinthiang Yéro Djina (2RF), Saré Mamady (2RF), Nany Demba (2RF), Saré Botto Mawndé (2RF), Saré Kéléfa (2RF), Témento Samba Korasse,	4	Saré Namou, Saré Hamady, Sinthiang Yéro Djina et Témento Samba Korasse,	7	Sam Pathé, Saré Diouba, Saré Mamady, Nany Demba, Saré Botto Mawndé, Saré Namou, Sinthiang Yéro Djina,
2	CASADES / KOLDA	3	Tabandinto, Sinthiang Samba Ouma, Vélingara Pathé	9	Bantankiling Soukouta (2 RF), Sinthiang Samba Ouma (2 RF), Tabandinto (2 RF), Médina Diatta Sabally et Afia Ousmane (2 RF),	1	Tabandinto ;	5	Sinthiang Samba Ouma, Tabandinto, Bantankiling Soukouta (2 FOG) et Médina Diatta Sabally,
3	ENDA Eau Populaire / KOLDA	3	Sinthiang Kourtiba, Sinthiang Daïbatou Oumar et Alexandrie Kananko,	7	Sinthiang Kourtiba, Sinthiang Daibatou Oumar (3 RF) et Alexandrie Kananko (3 RF),	3	Sinthiang Kourtiba, Sinthiang Daïbatou Oumar et Alexandrie Kananko,	4	Sinthiang Kourtiba, Sinthiang Daibatou Oumar et Alexandrie Kananko (2 FOG),
4	FODDE / KOLDA	7	Saré Samballé, Samé Sabaly, Médina Oumar (Marèna), Missirah Samba Niamadio, Dinguiraye El Hadji Dembel (Sounkarou Badion), Lamoye et Médina Samba Diamankha,	13	Médina Samba Diamankha (2 RF), Saré Téning Diao, Missirah Samba Niamadio, Saré Samballé (3 RF), Dinguiraye Elhadji Dembel, Lamoye (2 RF), Same Sabally, Kaniako et Médina Oumar (Maréna) ;	7	Saré Samballé, Samé Sabaly, Médina Oumar (Marèna), Missirah Samba Niamadio, Dinguiraye El Hadji Dembel (Sounkarou Badion), Lamoye et Médina Samba Diamankha	6	Lamoye, Médina Samba Diamankha, Missirah Samba Niamadio, Dinguiraye El Hadji Dembel, Saré Samballé et Saré Téning Diao;
TOTAL KOLDA		22		45		15		22	

TOTAL REGIONS OF ZIGUINCHOR/SEDHIOU/KOLDA	74	240	56	169
GENERAL TOTAL	314		225	

Annex 4: Infrastructures Under Contract – Sanitation & Water Supply – List of project sites by region and implementing partner (30 September 2011)

STATUS OF SANITATION INFRASTRUCTURES INSTALLED OR UNDERWAY (30 Sept. 2011)					
#	NGO/CBO	# Target villages	Quota of latrines/NGO over 3 years	Requests generated in the RFs	% of absorption
ZIGUINCHOR REGION					
1	ADY	15	250	411	164.40
2	AJAC LUKAAL	4	67	82	122.39
3	AJAEDO	14	233	367	157.51
4	PACTE	11	200	399	199.50
5	WESWA	10	167	708	423.95
TOTAL ZIGUINCHOR		54	917	1,967	214.50
SEDHIOU REGION					
1	CARITAS/SEDHIOU	16	119	113	94.96
2	CASADES/SEDHIOU	10	68	61	89.71
3	ENDA Eau Populaire/SEDHIOU	19	136	138	101.47
4	ENFANCE&PAIX/SEDHIOU	20	177	177	100.00
TOTAL SEDHIOU		65	500	489	97.80

KOLDA REGION					
1	CARITAS/KOLDA	22	177	114	64.41
2	CASADES/KOLDA	10	102	62	60.78
3	ENDA Eau Populaire/KOLDA	7	53	71	133.96
4	FODDE/KOLDA	33	168	147	87.50
TOTAL KOLDA		72	500	394	78.80

GENERAL TOTAL	191	1,917	2,850	148.67

SANITATION: **2,850 household latrines**, **01 sanitation bloc**, **and 01 mini-borehole at Badiana middle school with financial cost-share paid and mobilization of in-kind participation underway, for which an RF is formulated.**

STATUS OF WATER SUPPLY INFRASTRUCTURES INSTALLED OR UNDERWAY (30 Sept. 2011)											
#	NGO/CBO	# Target villages	ALLOCATION OF QUOTA/TYPES OF INFRASTRUCTURES			ALLOCATION OF REQUESTS/TYPES OF INFRASTRUCTURES			GAP/TYPES OF INFRASTRUCTURES		
			Quota for mini-borehole (MB)/NGO over 3 years	Quota for rehabilitation (RH)/NGO over 3 years	Quota for large and medium (G&M) infrastructure/ NGO over 3 years	MB completed or underway	RH completed or underway	G&M completed or underway	GAP MB	GAP RH	GAP G&M
ZIGUINCHOR REGION											
1	ADY	15	17	5	1	16	-	2	1	5	1
2	AJAC LUKAAL	4	6	4	-	4	1		2	3	-
3	AJAEDO	14	2	1	1	4			2	1	1
4	PACTE	11	12	3	1	7	1		5	2	1
5	WESWA	10	13	3	2	10		5	3	3	3
6	ATPC/CLTS ZIGUINCHOR (KABONKETOOR)	12	12	-	-	6			6	-	-
TOTAL ZIGUINCHOR		66	62	16	5	47	2	7	15	14	2
SEDHIOU REGION											
1	CARITAS/SEDHIOU	16	11	4	1	7			4	4	1
2	CASADES/SEDHIOU	10	4	2	-	2		1	2	2	1
3	ENDA Eau Populaire/SEDHIOU	19	15	6	1	7	2	2	8	4	1
4	ENFANCE&PAIX/SEDHIOU	20	**15**	**6**	**1**	12	3	1	3	3	1
5	ATPC/CLTS SEDHIOU (CASADES)	6	**6**	**-**	**-**	**-**			6	-	-
TOTAL SEDHIOU		71	51	18	3	28	5	4	23	13	2

KOLDA REGION											
1	CARITAS/KOLDA	22	16	6	1	10		2	**6**	**6**	**2**
2	CASADES/KOLDA	10	9	3	1	4	1		**5**	**2**	**1**
3	ENDA Eau Populaire/KOLDA	7	5	2	1	3			**2**	**2**	**1**
4	FODDE/KOLDA	33	15	7	1	8	3	2	**7**	**4**	**1**
5	ATPC/CLTS KOLDA (ENDA)	6	6	-	-				**6**	**-**	**-**
TOTAL KOLDA		78	51	18	4	25	4	4	26	14	1

GENERAL TOTAL	215	164	52	11	100	11	15	64	41	4

WATER SUPPLY: **A total of 126 water supply infrastructure completed or in progress with equipment: 100 mini-boreholes, 11 rehabilitations of wells and deep mini-boreholes, and 15 G&M infrastructure sites.**

Annex 5: Infrastructure Development Tables – Updated planning tables
Regional Allocation Plan, Beneficiaries, and Infrastructure Costs

USAID/PEPAM - Senegal Water and Sanitation Program

Infrastructure Development Plan

Revised version for third (3rd) Year Annual Work Plan - (Oct 1 2011 thru Sept 30 2012) - Includes Infrastructure for WADA and SUWASA activities where there is leveraging with the USAID/PEPAM program

REGIONAL ALLOCATION PLAN

Facility		Projected Targets all 5 years	Achieved Units Yr 1 + Yr 2	Region 1 Casamance Ziguinchor, Sedhiou, Kolda						Region 2 Peri-urban sanitation, urban CLTS, and SUWASA Dakar, Ziguichor						Region 3 Tambacounda						Total Project Yr1 to Yr5
WATER				Yr1	Yr2	Yr3	Yr4	Yr5	Total	Yr1	Yr2	Yr3	Yr4	Yr5	Total	Yr1	Yr2	Yr3	Yr4	Yr5	Total	
Peri Urban Water System	USAID PEPAM	3	-	-	-	2	-		2						-			-	1	-	1	3
Multi-village Water System	USAID PEPAM	2	-	-	-	1	-		1						-			-	-	1	1	2
Deep Well / Hand Pump	USAID PEPAM	30	-	-	-	10	3		13						-			3	8	6	17	30
Medium Well / Hand Pump	WADA I	-	-	-	-	-	-		-						-			-	-	-	-	-
	WADA II	24	-	-	-	21	3		24						-			-	-	-	-	24
	USAID PEPAM	60	29	2	27	1	-		30						-			5	15	10	30	60
	Sous total M. Well	84	29	2	27	22	3		54						-			5	15	10	30	84
Simple Well / Hand Pump	WADA I	15	6	-	6	6	3		15						-			-	-	-	-	15
	WADA II	28	-	-	-	21	7		28						-			-	-	-	-	28
	USAID PEPAM	270	29	4	25	114	70		213						-			8	25	25	58	271
	Sous total S. Well	313	35	4	31	141	80		256						-			8	25	25	58	314
Rehabilitate Exisiting Well and add Hand Pump	WADA I	12	-	-	-	9	3		12						-			-	-	-	-	12
	WADA II	24	-	-	-	18	6		24						-			-	-	-	-	24
	USAID PEPAM	132	12	-	12	61	29		102						-			5	15	10	30	132
	Sous total Réhab.	168	12	-	12	88	38		138						-			5	15	10	30	168

Comments yellow cells

1- Casamance has three administrative regions, in contrast to Tambacounda. For equitable distribution, the hydraulic quota for Region 2 was assigned to Casamance, since the Region 2 activites are peri-urban sanitation.

2- In addition, the Tambacounda region has already shown some resistance to mini-boreholes, which is no longer the case in Casamance. Indeed, the proceedings have changed significantly, with 44 requests for min-boreholes, 18 potential demands for rehabilitation, and 36 actual demands for mini-boreholes. This justifies the presence in the fourth year in Casamance, including the regions of Sédhiou and Kolda.

3- Thus, taking comment 2 into account, a part of the resources for multi-village water systems (AEMV) in Region 2 was transferred to Tambacounda to promote a better understanding of the program.

4 - The 24 medium wells and hand pumps for the WADA II sites will be installed at primary schools

		Projected Targets all 5 years	Achieved Units Yr 1 + Yr 2	Region 1 Casamance Ziguinchor, Sedhiou, Kolda						Region 2 Peri-urban sanitation, urban CLTS, and SUWASA Dakar, Ziguichor						Region 3 Tambacounda						Total Project Yr1 to Yr5
SANITATION				Yr1	Yr2	Yr3	Yr4	Yr5	Total	Yr1	Yr2	Yr3	Yr4	Yr5	Total	Yr1	Yr2	Yr3	Yr4	Yr5	Total	
Assainissement Peri urbain																						
Latrines VIP or TCM + DLMS		600	-			200			200			200			200				200		200	600
Bloc Latrines (schools or markets)		6	-			2			2			2			2				2		2	6
Assainissement rural / villageois																						
Latrines + DLMS SanPlat, DLV, VIP	WADA I	425	257		257	168			425						-						-	425
	WADA II	-	-						-						-						-	-
	USAID PEPAM	5,275	1,671	32	1,639	610			2,281				1,094	-	1,094			500	700	700	1,900	5,275
	Sous total	5,700	1,928	32	1,896	778	-	-	2,706	-	-	-	1,094	-	1,094	-	-	500	700	700	1,900	5,700
Bloc Latrines (schools or markets)		9	1	-	1	9		-	10	-	-	-	-	-	-	-	-	-	-	-	-	10
Peri-Urban Sanitation (collaboration with SUWASA)																						
Combination Sanitation Systems - with organization of sludge removal at low-income neighborhoods and rennovation of sludge treatment discharge points		3	-						-			1		1	2				1		1	3

Comments yellow cells

5 - The achievement goals (1,493 works) have been exceeded. The planned quota for Region 2 allowed overflow coverage in the Ziguinchor region (547 works). The 481 actual demands mobized in the Ziguinchor region and the rest of the quota for Kolda and Sédhiou (397 works) will be deducted from the works in Region 2.

NB. Sanitation infrastructure at CLTS sites under the WADA 1 and WADA 2 program activities will be counted after triggering, after verification of meeting construction standards, and after a CLTS site reaches FDAL status

NB. In the hygiene promotion campaigns that the project is managing throughout project sites and CLTS sites, the project staff and local NGOs will track and capture data on the beneficiaries' installation of handwashing statiions and upgrading of tranditional latrines; projections are difficult to capture at this point in time.

NB. Combined peri - urban systems will target on the avarage 10,000 beneficiaries

INFRASTRUCTURE INSTALLED BY ENTREPRENEURS TRAINED BY THE PROGRAM (AT SITES OTHER THAN THE PROGRAM SITES)

Simple Well and/or Hand Pump		36	6		15	15	15	11	56			10	5	10	25			5	5	10	20	101
Rehabilitate Exisiting Well and add HP		45			5	10	18	13	46			5	5	14	24			5	5	15	25	95
Latrines & Hand Washing Stations		600				112	200	200	512					200	200						0	712

NB. There are 112 macons that have been trained by the project on sanaitation and handwashing infrrastructure; these 112 macons have each trainined at least 2 additional macons; for project sustainabilithy, we anticipate that each macon will at least build 1 to 2 latrines and handwashing stations over the remaining three years of the program

Facility		Project Units	Achieved Units Yr 1 + Yr 2	Year 1 FY 2010				Year 2 FY 2011				Year 3 FY 2012				Year 4 FY 2013				Year 5 FY 2014				Total Project Yr1 to Yr5			
WATER				Cas	R2	R3	Total	Cas	R2	R3	Total	Cas	R2	R3	Total	Cas	R2	R3	Total	Cas	R2	R3	Total	Cas	R2	R3	Total
Peri Urban Water System		3	0	0	0	0	0	0	0	0	0	2	0	0	2	0	0	1	1	0	0	0	0	2	0	1	3
Multi-village Water System		2	0	0	0	0	0	0	0	0	0	1	0	0	1	0	0	0	0	0	0	1	1	1	0	1	2
Deep Well / Hand Pump		30	0	0	0	0	0	0	0	0	0	10	0	3	13	3	0	8	11	0	0	6	6	13	0	17	30
Medium Well / Hand Pump		84	29	2	0	0	2	27	0	0	27	22	0	5	27	3	0	15	18	0	0	10	10	54	0	30	84
Simple Well / Hand Pump		313	35	4	0	0	4	31	0	0	31	141	0	8	149	80	0	25	105	0	0	25	25	256	0	58	314
Rehabilitate Exisiting Well and add Hand Pump		168	12	0	0	0	0	12	0	0	12	88	0	5	93	38	0	15	53	0	0	10	10	138	0	30	168
SANITATION																											
Peri-Urban Sanitation																											
Latrines VIP or TCM + DLMS		600	0	0	0	0	0	0	0	0	0	200	200	0	400	0	0	200	200	0	0	0	0	200	200	200	600
Bloc Latrines (schools or markets)		6	0	0	0	0	0	0	0	0	0	2	2	0	4	0	0	2	2	0	0	0	0	2	2	2	6
Rural / Villageois																											
Latrines & Hand Washing Stations		5,275	1,671	32	0	0	32	1,639	0	0	1,639	610	0	500	1,110	0	1,094	700	1,794	0	0	700	700	2,281	1,094	1,900	5,275
Bloc Latrines (schools or markets)		9	1	0	0	0	0	1	0	0	1	9	0	0	9	0	0	0	0	0	0	0	0	10	0	0	10
Peri-Urban Sanitation (collaboration with SUWASA)																											
Combination Sanitation Systems - with organization of sludge removal at low-income neighborhoods and rennovation of sludge treatment discharge points		3	0	0	0	0	0	0	0	0	0	0	1	0	1	0	0	1	1	0	1	0	1	0	2	1	3
INFRASTRUCTURE INSTALLED BY ENTREPRENEURS TRAINED BY THE PROGRAM (AT SITES OTHER THAN THE PROGRAM SITES)																											
Simple Well and/or Hand Pump		36	6	0	0	0	0	15	0	0	15	15	10	5	30	15	5	5	25	11	10	10	31	56	25	31	101
Rehabilitate Exisiting Well and add Hand Pump		45	0	0	0	0	0	5	0	0	5	10	5	5	20	18	5	5	28	13	14	15	42	46	24	38	95
Latrines & Hand Washing Stations		600	0	0	0	0	0	0	0	0	0	112	0	0	112	200	0	0	200	200	200	0	400	512	200	200	712

USAID/PEPAM - Senegal Water and Sanitation Program

Infrastructure Development Plan - Infrastructure Units and Number of Targeted Beneficiaries

Revised version for third (3rd) Year Annual Work Plan - (Oct 1 2011 thru Sept 30 2012) - Includes infrastructure & beneficiaries for WADA and SUWASA activities where there is leveraging with the USAID/PEPAM program

R1 - Casamance	Ziguinchor, Sedhiou, Kolda
Region 2	Dakar & Ziguinchor
Region 3	Tambacounda

Facility	Projected Targets LoP	Projected Number of Beneficiaries LoP	Units Achieved Year 1 &2	No of Beneficiaries Year 1 & 2	Project Year	Year 1 Projections from Yr 1 Work Plan		Year 2		Year 3		Year 4		Year 5		Total Project Year3 to Year 5		Total for all Years Yr1 Yr5	
					Fiscal Year	FY09-FY10		FY11		FY12		FY13		FY14					
						Units	Benef	Units	Benef	Units	Benef	Units	Benef	Units	Benef	Units	Benef	Units	Benef
WATER																			
Peri Urban Water System	3	30,000	0	0		0	0	0	0	2	20,000	1	10,000	0	0	3	30,000	3	30,000
Multi-village Water System	2	10,000	0	0		0	0	0	0	1	7,500	0	0	1	2,500	2	10,000	2	10,000
Deep Well / Hand Pump	30	9,000	0	0		0	0	0	0	13	3,900	11	3,300	6	1,800	30	9,000	30	9,000
Medium Well / Hand Pump	84	25,200	29	8,700		2	600	27	8,100	27	8,100	18	5,400	10	3,000	55	16,500	84	25,200
Simple Well / Hand Pump	313	46,950	35	5,250		4	600	31	4,650	149	22,350	105	15,750	25	3,750	279	41,850	314	47,100
Rehabilitate Exisiting Well / Hand Pump	168	25,200	12	1,800		0	0	12	1,800	93	13,950	53	7,950	168	25,200	314	47,100	326	48,900
Sub-Total Water	**600**	**146,350**	**76**	**15,750**		**6**	**1,200**	**70**	**14,550**	**285**	**75,800**	**188**	**42,400**	**210**	**36,250**	**683**	**154,450**	**759**	**170,200**
SANITATION																			
PERI URBAIN - USAID/PEPAM activities																			
Latrines VIP ou TCM +DLMS	600	6,000	0	0		0	0	0	0	400	4,000	200	2,000	0	0	600	6,000	600	6,000
Blocs sanitaires (ecoles ou marches)	6	1,800	0	0		0	0	0	0	4	1,200	2	600	0	0	6	1,800	6	1,800
PERI URBAIN - USAID/PEPAM in collaboration with SUWASA																			
Combination sanitation systems	3	30,000	0	0		0	0	0	0	1	10,000	1	10,000	1	10,000	3	30,000	3	30,000
RURAL / VILLAGES																			
Latrines & Hand Washing Stations	5,275	52,750	1,928	19,280		32	320	1,896	18,960	1,278	12,780	1,794	17,940	700	7,000	3,772	37,720	5,700	57,000
School / Market Public Facilities	9	2,700	1	300		0	0	1	300	9	2,700	0	0	0	0	10	2,700	11	3,000
Sub-Total Sanitation	**5,893**	**93,250**	**1,929**	**19,580**		**32**	**320**	**1,897**	**19,260**	**1,692**	**30,680**	**1,997**	**30,540**	**701**	**17,000**	**4,391**	**78,220**	**6,320**	**97,800**
INFRASTRUCTURE INSTALLED BY ENTREPRENEURS TRAINED BY THE PROGRAM (AT SITES OTHER THAN THE PROGRAM SITES)																			
Simple Well and/or Hand Pump	36	5,400	6	900		0	0	15	2,250	30	4,500	25	3,750	31	4,650	101	15,150	107	16,050
Rehabilitate Exisiting Well / Hand Pump	45	6,750	0	0		0	0	5	750	20	3,000	28	4,200	42	6,300	95	14,250	95	14,250
Sub-Total Other Water	**81**	**12,150**	**6**	**900**				**20**	**3,000**	**50**	**7,500**	**53**	**7,950**	**73**	**10,950**	**196**	**29,400**	**202**	**30,300**
Latrines & Hand Washing Unit	600	6,000	0	0		0	0	0	0	112	1,120	200	2,000	400	4,000	712	7,120	712	7,120
TOTAL WATER BENEFICIARIES		**158,500**	**82**	**16,650**		**6**	**1,200**	**90**	**17,550**	**335**	**83,300**	**241**	**50,350**	**283**	**47,200**	**879**	**183,850**	**961**	**200,500**
TOTAL SANITATION BENEFICIARIES		**93,250**	**1,929**	**19,580**		**32**	**320**	**1,897**	**19,260**	**1,804**	**31,800**	**2,197**	**32,540**	**1,101**	**21,000**	**5,103**	**85,340**	**7,032**	**104,920**

USAID/PEPAM - Senegal Water and Sanitation Program

Infrastructure Development Plan - Projected Costs of Infrastructure

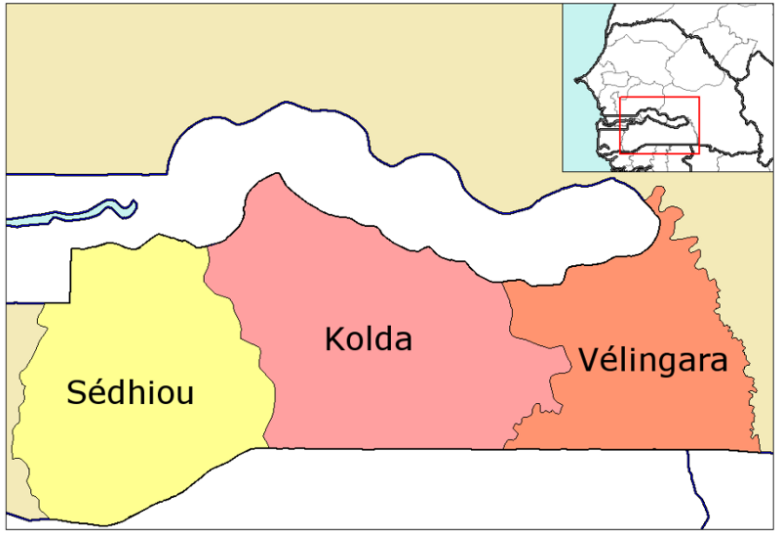
Revised version for third (3rd) Year Annual Work Plan - (Oct 1 2011 thru Sept 30 2012) - Includes infrastructure & beneficiaries for WADA and SUWASA activities where there is leveraging with the USAID/PEPAM program

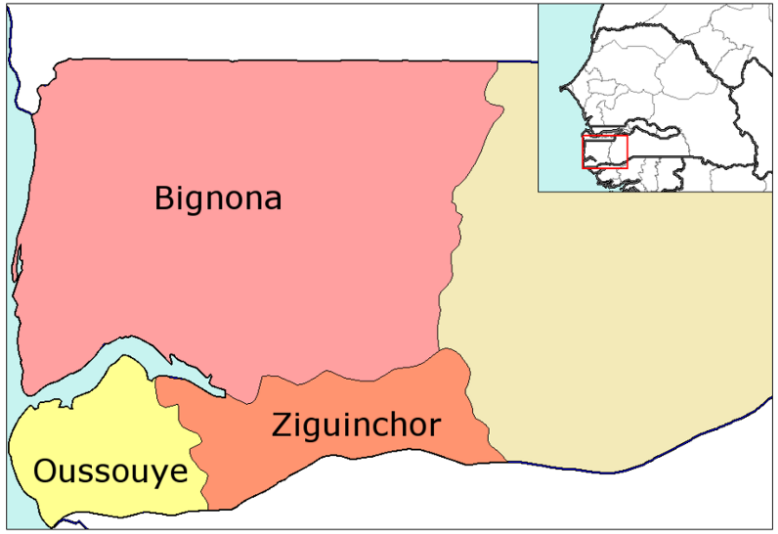
Revised Costs as of September 2011 Costs in CFA / XOF		R1 - Casamance Region 2 Dakar & Zig. Region 3 Tamba																		
Type of Facility - Infrastructure	Projected Targets LoP	Project Year	Spent Year 1			Spent Year 2			Year 3			Year 4			Year 5			Total Project Year 3 to Year 5			Total Project Year 1 to Year 5		
		Fiscal Year	FY09-FY10			FY11			FY12			FY13			FY14								
			Units		Cost	Units		Cost	Units		Cost	Units		Cost	Units		Cost	Units		Cost	Units		Cost
WATER																							
Peri Urban Water System	3		0			0	XOF	-	2	XOF	179,450,000	1	XOF	89,725,000	0	XOF	-	3	XOF	269,175,000	3	XOF	269,175,000
Multi-village Water System	2		0			0	XOF	-	1	XOF	425,000,000	0	XOF	-	1	XOF	110,000,000	2	XOF	535,000,000	2	XOF	535,000,000
Deep Well / Hand Pump	30		0			0	XOF	-	13	XOF	145,015,000	11	XOF	122,705,000	6	XOF	66,930,000	30	XOF	334,650,000	30	XOF	334,650,000
Medium Well / Hand Pump	69		2	XOF	3,610,000	27	XOF	48,735,000	27	XOF	48,735,000	18	XOF	32,490,000	10	XOF	18,050,000	55	XOF	99,275,000	84	XOF	151,620,000
Simple Well / Hand Pump	270		4	XOF	6,672,000	31	XOF	51,708,000	149	XOF	248,532,000	105	XOF	175,140,000	25	XOF	41,700,000	279	XOF	465,372,000	314	XOF	523,752,000
Rehabilitate Exisiting Well / Hand Pump	130		0			12	XOF	11,640,000	93	XOF	90,210,000	53	XOF	51,410,000	168	XOF	162,960,000	314	XOF	304,580,000	326	XOF	316,220,000
Hydrology at Schools (Badiana)			1	XOF	5,200,000																		
SubTotal Water	**504**		**6**	**XOF**	**15,482,000**	**70**	**XOF**	**112,083,000**	**285**	**XOF**	**1,136,942,000**	**188**	**XOF**	**471,470,000**	**210**	**XOF**	**399,640,000**	**753**	**XOF**	**2,008,052,000**	**759**	**XOF**	**2,130,417,000**
SANITATION																							
PERI URBAIN - USAID/PEPAM activities																							
Latrines VIP ou TCM +DLM5	600		0	XOF	-	0	XOF	-	400	XOF	140,000,000	200	XOF	70,000,000	0	XOF	-	600	XOF	210,000,000	600	XOF	210,000,000
Blocs sanitaires (ecoles ou marches)	6		0	XOF	-	0	XOF	-	4	XOF	16,000,000	2	XOF	8,000,000	0	XOF	-	6	XOF	24,000,000	6	XOF	24,000,000
PERI URBAIN - USAID/PEPAM in collaboration with SUWASA																		0			0		
Combination sanitation systems	3		0	XOF	-	0	XOF	-	1	XOF	75,175,000	1	XOF	75,175,000	1	XOF	75,175,000	3	XOF	225,525,000	3	XOF	225,525,000
RURAL / VILLAGES																							
Latrines and Hand Washing Stations	5,700		32	XOF	3,734,400	1,896	XOF	221,263,200	1,278	XOF	149,142,600	1,794	XOF	209,359,800	700	XOF	81,690,000	3,772	XOF	440,192,400	5,700	XOF	665,190,000
School / Market Public Facilities	10	Yr 1 = Badiana	1	XOF	6,300,000	3	XOF	6,000,000	3	XOF	6,000,000	2	XOF	4,000,000	1	XOF	2,000,000	6	XOF	12,000,000	10	XOF	24,300,000
Subtotal Sanitation	**6,319**		**33**	**XOF**	**10,034,400**	**1,899**	**XOF**	**227,263,200**	**1,686**	**XOF**	**386,317,600**	**1,999**	**XOF**	**366,534,800**	**702**	**XOF**	**158,865,000**	**4,387**	**XOF**	**911,717,400**	**6,319**	**XOF**	**1,149,015,000**
TOTAL - CFA				**XOF**	**25,516,400**		**XOF**	**339,346,200**		**XOF**	**1,523,259,600**		**XOF**	**838,004,800**		**XOF**	**558,505,000**		**XOF**	**2,919,769,400**		**XOF**	**3,279,432,000**
TOTAL - US $$				**$**	**52,611**		**$**	**699,683**		**$**	**3,140,741**		**$**	**1,727,845**		**$**	**1,151,557**		**$**	**6,020,143**		**$**	**6,761,715**

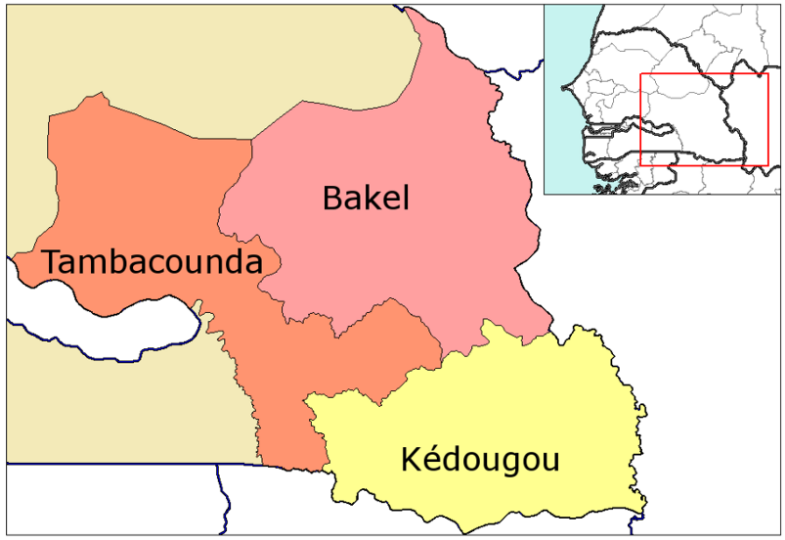
AVERAGE UNIT COSTS of INFRASTRUCTURE		
Average Cost of 3 Types of Latrines (rural & villageois)	XOF	116,700
Average cost of peri-urban latrines (VIP and pour flush) with soak-away pits & hand washing stations	XOF	350,000
Cost of One (1) Peri-Urban Sanitation System	XOF	75,175,000
Cost of One Bloc Latrine facility (6 stalls + hand washing) Rural / villageois	XOF	2,000,000
Cost of One Bloc Latrine facility (8 stalls + hand washing) Urban and peri-urban settings	XOF	4,000,000
Peri-Urban Water Supply System	XOF	89,725,000
Multi-village Water Supply System	XOF	252,200,000
Deep Well & Hand Pump	XOF	11,155,000
Medium Well & Hand Pump	XOF	1,805,000
Simple Well & Hand Pump	XOF	1,668,000
Rennovation of Well & Pump	XOF	970,000
1 USD =	XOF	485 (CFA)

NB Costs are for materials only and do not include the cost share contributions of the beneficiaries or the CGs or ASUFORs

Annex 6: Site Location Maps – Project Intervention Regions







Annex 7: USAID/PEPAM's Subcontractors and Sub-Grantees

Organization By Location *Organisation par lieu*	Principal Role and Expertise *Rôle principal et expertise*	Component 1 Governance *Governance*	Component 2 Demand *Demande*	Component 3 Entrepreneurs	Component 4 Infrastructure
INTERNATIONAL					
Enterprise Works/VITA	Development and support to entrepreneurs on appropriate water technology *Appui aux entrepreneurs sur des technologies hydrauliques appropriées*			•	•
ARD, Inc.	Development and support to entrepreneurs on appropriate sanitation technology and subsidies *Appui aux entrepreneurs sur des technologies d'assainissement appropriées et les subventions*			•	•
NATIONAL					
ADEMAS	Social marketing on hygiene and sanitation *Marketing social sur l'hygiène et l'assainissement*		•		
MANOBI	Data storage, national water and sanitation database, part of the PLHA process, specifically for data storage and reporting to PEPAM *Stockage de données, base de données nationale sur l'eau et l'assainissement, partie du processus PLHA, spacialement pour le stockage de données et la production de rapports pour le PEPAM*	•		•	•
ENDA-EAU	Local governance, support to community associations, microfinance, peri-urban projects *Gouvernance local, appui aux associations communautaires, microfinance, projets périurbains*	•		•	•
CARITAS-Senegal	Long-standing local NGO working in several sectors: primarily in water and sanitation, governance issues surrounding water, cost sharing, and social mobilization *ONG local de longue date travaillant dans divers secteurs : eau et assainissement, question de gouvernance liées à l'eau, partage de frais, et mobilisation social*	•	•	•	•
MSA	Engineering, PLHAs, construction supervision *Ingénieurie, PLHA, supervision des constructions*			•	•
Gandois Consulting	Engineering, PLHAs, construction supervision *Ingénieurie, PLHA, supervision des constructions*			•	•
ZIGUINCHOR					
ADY	Development Association: WSS, health, education (mostly targeted to women) *Association de développement : WSS, santé et éducation (principalement ciblant les femmes)*	•	•	•	•

Organization By Location *Organisation par lieu*	Principal Role and Expertise *Rôle principal et expertise*	Component 1 Governance *Governance*	Component 2 Demand *Demande*	Component 3 Entrepreneurs	Component 4 Infrastructure
AJAC-Lukaal	Young Farmers Associations established in the Department of Ziguinchor: active in micro finance, economic development projects, WSS *Association de jeunes Agriculteurs etablie dans le departement de Ziguinchor. Est active dans la microfinance, les projets de développement économique, l'eau et l'assainissement*	•	•	•	•
AJAEDO	Young Farmers Associations established in the Department of Oussouye: active in microfinance, economic development projects, WSS *Association de jeunes Agriculteurs etablie dans le departement d'Oussouye. Est active dans la microfinance, les projets de développement économique, l'eau et l'assainissement*	•	•	•	•
PACTE	Long-standing local NGO working in several sectors: primarily in water and sanitation, governance issues surrounding water, cost sharing, and social mobilization *ONG local de longue date travaillant dans divers secteurs : eau et assainissement, question de gouvernance liées à l'eau, partage de frais, et mobilisation social*	•	•	•	•
WESWA	Water and Environmental Sanitation for West Africa (WESWA), an autonomous local branch of a West African NGO with headquarters in Kafountine, Ziguinchor: active in coastal environment, water, and sanitation *WESWA est une branche autonome locale d'une ONG couvrant l'Afrique de l'Ouest et dont le siège est à Kafountine, région de Ziguinchor. Est active dans l'environnement côtier, l'eau et l'assainissement*	•	•	•	•
KABONKETOOR	Women's NGO established in Ziguinchor with some activities in the Sédhiou region: active in peace education, conflict management, community hygiene, and soap artisanal fabrication *ONG de femmes, établie dans la région de Ziguinchor avec quelques activités dans le département de Sédhiou.* *Elle est active dans l'éducation à la paix, la gestion de conflits, l'hygiène en milieu communautaire et la fabrication de savon artisanal*	•	•		
SÉDHIOU/KOLDA					
ENDA Bukol	Local branch of parent NGO ENDA will act for ENDA-EAU. ENDA-Bukol is active in WSS, governance conflict resolution, social marketing, youth employment, revenue generation projects for women (only cursory contacts) *Branche locale de ENDA-Senegal agissant pour le departement ENDA-EAU. ENDA-Bukol est active dans l'eau, l'assainissement, la résolution de conflit, le marketing social, l'emploi des jeunes, la génération de revenus pour les femmes*	•	•	•	•

Organization By Location *Organisation par lieu*	Principal Role and Expertise *Rôle principal et expertise*	Component 1 Governance *Governance*	Component 2 Demand *Demande*	Component 3 Entrepreneurs	Component 4 Infrastructure
CARITAS-Diocèse de Kolda	Local Branch of CARITAS-Senegal, a long-standing local NGO working in several sectors: primarily in water and sanitation, governance issues surrounding water, cost sharing, and social mobilization *Branche local de CARITAS-Senegal, ONG local de longue date travaillant dans divers secteurs : eau et assainissement, question de gouvernance liées à l'eau, partage de frais, et mobilisation social*	•	•	•	•
Enfance et Paix	WSS, health and nutrition, rural entrepreneurship, environment, conflict management (only cursory contacts) *WSS,santé et nutrition, entreprenariat rural, environnement, gestion de conflit (uniquement des contacts brefs)*	•	•	•	•
FODDE	Forum pour le Durable Endogène (FODDE), active in KOLDA: intervenes in areas such as hydraulics, hygiene, sanitation, health, agriculture, and capacity building of local organizations *L'ONG FODDE est active dans la région de Kolda. Elle intervient dans les secteurs tels que l'hydraulique, l'hygiène, l'assainissement, la sante, l'agriculture et le renforcement des capacités*	•	•	•	•
CASADES	Comité d'appui et de soutien au développement économique et social (CASADES), working in Kolda and Sédhiou: includes areas of conflict management, peace, governance, democracy, and natural resources management including water. *CASADES travaille à Sédhiou et Kolda dans des domaines tels que la gestion des conflits, la paix, la gouvernance, et la gestion des ressources naturelles y compris l'eau*	•	•	•	•

Annex 8: List of Private Enterprises Trained in Low-cost Manual Drilling and List of Private Enterprises Trained in EROBON Pump Manufacturing and Repairs

List of Private Enterprises Trained in Low-cost Manual Drilling

No	Name of enterprise or GIE	Personnel	Role	Location	Contact	Training Date
1	**GIE Assukatène Water**	Cheik Idrissa Abba Diedhiou	Chef d'équipe	Ziguinchor	77 442 1737	Du 24 Jan au 3 février 2010
		Mansaly Sadio	Foreur	Ziguinchor		
		Goudiabi Ansoumana	Foreur	Ziguinchor		
		Diatta Ibrahim	Foreur	Ziguinchor		
		Diedhiou Moustapha	Foreur	Ziguinchor	77 457 6123	
2	**GIE Diaminda Service**	Cissé Abidine	Chef d'équipe	Ziguinchor	77 558 8036	Du 24 Jan au 3 février 2011
		Sankare Abdoulaye	Foreur/Maçon	Ziguinchor	77 570 4519	
		Konate Sadio	Foreur	Ziguinchor		
		Diarra Bekaye	Foreur	Ziguinchor		
		Diarra Moussa	Foreur	Ziguinchor		
3	**Entreprise Sagna**	N'Deye Marie Sagna	Chef d'équipe	Ziguinchor	77 549 2183	Du 10 au 20 février 2010
		Tamba Kanté	Foreur	Ziguinchor		
		Ousmane Diallo	Foreur	Ziguinchor		
		Daniel Diatta	Foreur	Ziguinchor		
		Mamoudou Diatta	Foreur	Ziguinchor		
4	**Entreprise Mballo & Fils**	Mamadou Mballo	Chef d'équipe	Ziguinchor	77 655 9555	Du 10 au 20 février 2010
		Leonce Dasilva	Foreur	Ziguinchor		
		Salif Manga	Foreur	Ziguinchor		
		Alpha Oumar Diallo	Foreur	Ziguinchor		
		Samba Baldé	Foreur	Ziguinchor		

No	Name of enterprise or GIE	Personnel	Role	Location	Contact	Training Date
5	**GIE SOWkunda**	Oumar Sow	Chef d'équipe	Kolda	77 172 4288	Du 4 au 16 Octobre 2010
		Tidiane Seydi	Foreur	Kolda		
		Malick Baldé	Foreur	Kolda	77 661 1200	
		Boubacar Ndouye	Foreur	Kolda	77 202 8914	
		Ousmane Niagado	Foreur	Kolda		
6	**Entreprise HBM (Baldé)**	Cheik Diao	Chef d'équipe	Kolda	77 780 0655	Du 4 au 16 Octobre 2010
		Bassirou Diao	Foreur	Kolda	77 970 5934	
		Abdoulaye Baldé	Foreur	Kolda	77 618 4297	
		Bakary Diao	Foreur	Kolda		
		Souleymane Sabaly	Foreur	Kolda		
7	**GIE APAS**	Denis Sagna	Chef d'équipe	Sedhiou	77 440 7898	Du 19 au 30 Octobre 2011
		Assane Seydi	Foreur	Sedhiou	77 690 2727	
		Souaro Drame	Foreur	Sedhiou	77 159 5129	
		Algassoum Traoré	Foreur	Sedhiou	77 227 3613	
		Edouard Diatta	Foreur	Sedhiou	77 611 9033	
8	**GIE Koutokoye**	Saibo Cissoko	Chef d'équipe	Sedhiou	77 694 6483	Du 19 au 30 Octobre 2011
		Fode Traoré	Foreur	Sedhiou		
		Mamoudou Tounkara	Foreur	Sedhiou		
		Roger Diatta	Foreur	Sedhiou	76 480 0187	
		Nfa Karamo Dramé	Foreur	Sedhiou	76 753 2264	
9	**GIE Kedebaye**	MAMADOU LAMINE DJITTE	Président	Sedhiou	77 939 70 78	Du 14 au 30 Juin 2011
		Djibril Keita	Chef d'équipe	Sedhiou		
		Oumar Camara	Technicien	Sedhiou		
		Assane Sané	Puisatier	Sedhiou		
		Yancouba Mané	Puisatier	Sedhiou		
		MAmady Dabo	Puisatier	Sedhiou		

No	Name of enterprise or GIE	Personnel	Role	Location	Contact	Training Date
10	**GIE Casapica**	Cheick Guirassy	Président	Kolda	77 103 49 49	Du 14 au 30 Juin 2011
		Falilou Bâ	Chef d'équipe	Kolda		
		Sékouna Dao	Foreur maçon	Kolda		
		Alpha Oumar Bâ	Foreur	Kolda		
		Serigne Guèye	Foreur	Kolda		
		Cheikh Guèye	Foreur	Kolda		
11	**GIE Kolamba**	Mamadou Keita	Président	Ziguinchor	77 642 59 94	Du 14 au 30 Juin 2011
		Omar Sané	Technicien	Ziguinchor		

List of Private Enterprises trained in EROBON Pump Manufacturing and Repairs

No	Name of enterprise or GIE	Personnel	Role	Location	Contact	Date
1	**Atelier Adama Diedhiou**	Adama Diedhiou	Chef D'atelier	Ziguinchor	70 100 0913	Du 10 au 16 Octobre 2009
		Almami Diedhiou	Apprentis			
		Ibrahim Diedhiou	Apprentis			
		Abass badji	Apprentis			
2	**Atelier Abdoulaye Lo**	Abdoulaye LO	Chef d'atelier	Bignona	77 584 3452	Du 2 au 7 Decembre 2009
		Bacari Sane	Apprentis			
		AbdoulKarim Diedhiou	Apprentis			
		FernandoLingué	Apprentis			
3	**Atelier Omar Sane**	Omar sane	Chef d'atelier	Kolda	77 564 5437	24 Novem au 4 Dec 2010
		Sissao Sane	Apprentis		77 459 8319	
		Bakary Dieme	Apprentis		77 164 0923	
		Hamady Diao	Apprentis			
4	**Atelier Etienne Mar**	Etienne Mar	Chef d'atelier	Sedhiou	77 281 4166	5 au 16 Decembre 2010
		Emile Etienne Mar	Apprentis		77 227 1514	
		San Diassy	Apprentis		77 421 5813	
		Ousseinou Sagna	Apprentis		77 958 3149	
5	**Kelountang SAGNA**	Kelountang Sagna	Chef d'atelier	Kolda		15 au 19 Mars 2011

Annex 9: List of Training Events of the Regional Technical Services Units

Capacity Building of Regional Civil Servants – Technical Services Units

Structures	Nbre d'agents formés	Fonction des agents	Durée	Thèmes de formation	Période
Service Régional de l'Hygiène de Kolda	01	Chef de Sous Brigade de Medina Yoro Foula	6 jours (8h30 - 17 h chaque jour)	ATPC/CLTS	7 au 8 Février 2011
Service Régional de l'hygiène de Sédhiou	01	Chef de brigade Régionale de Ziguinchor	6 jours (8h30 - 17 h chaque jour)	ATPC/CLTS	10 au 11 Février 2011
Service Régional de l'assainissement de Kolda	01	Chef de Service	10 jours (8h30 - 17 h chaque jour)	Formation en construction des latrines	24 Novembre au 3 Décembre 2011
Service Régional de l'assainissement de Sédhiou	01	Chef de service	10 jours (8h30 - 17 h chaque jour)	Formation en construction des latrines	6 au 14 Décembre 2011
Service Régional de l'Hygiène de Sédhiou	01	Chef de service	10 jours (8h30 - 17 h chaque jour)	Formation en construction des latrines	6 au 14 Décembre 2011
Service Régional de l'Hygiène de Kolda	01	Chef de service	10 jours (8h30 - 17 h chaque jour)	Formation en construction des latrines	24 Novembre au 3 Décembre 2011
Service Régional de l'hygiène de Sédhiou	01	Chef de service	5 jours (8h30 - 17 h chaque jour)	Formation en hydrogéologie	20 au 24 Juin 2011
Service Régional de l'Hygiène de Kolda	01	Chef de service	5 jours (8h30 - 17 h chaque jour)	Formation en hydrogéologie	20 au 24 Juin 2011
Brigade des Puits et Forage Ziguinchor	01	Chef de service	5 jours (8h30 - 17 h chaque jour)	Formation en hydrogéologie	20 au 24 Juin 2011
Brigade des Puits et Forage Sédhiou	01	Chef de service	5 jours (8h30 - 17 h chaque jour)	Formation en hydrogéologie	20 au 24 Juin 2011
Brigade des Puits et Forage Kolda	01	Chef de service	5 jours (8h30 - 17 h chaque jour)	Formation en hydrogéologie	20 au 24 Juin 2011
Service Régional de l'Hygiène de Tambacounda	01	Chef de service	5 jours (8h30 - 17 h chaque jour)	Formation en hydrogéologie	20 au 24 Juin 2011
Direction Régionale de l'hydraulique Rurale de Kolda	01	Technicien	8 Jours de (8h30 -18h00 chaque jour	Formation en installation de mini forage	4 au 11 Octobre 2010
Direction Régionale de l'hydraulique Rurale de Sédhiou	01	Chef de service	5 jours (8h30 - 17 h chaque jour)	Formation en hydrogéologie	17-21 Mai 2010
Direction Régionale de l'hydraulique Rurale de Kolda	01	Chef de service	5 jours (8h30 - 17 h chaque jour)	Formation en hydrogéologie	17-21 Mai 2010

Structures	Nbre d'agents formés	Fonction des agents	Durée	Thèmes de formation	Période
Direction Régionale de l'hydrologie	01	Chef de service	5 jours (8h30 - 17 h chaque jour)	Formation en hydrogéologie	17-21 Mai 2010
Inspection de l'Enseignement Elémentaire Ziguinchor, Kolda et Sédhiou	23	Inspecteurs	9 jours (9h-17h)	Formation en assainissement et hygiène scolaire	
Inspection de l'Enseignement Elémentaire Ziguinchor, Kolda et Sédhiou	114	Instituteurs	9 jours (9h-17h)	Formation en assainissement et hygiène scolaire	