# USAID/Millennium Water and Sanitation Program

## *Programme d'Eau Potable et d'Assainissement du Millénaire*

# (USAID/PEPAM)

Annual Report No. 4 – FY 2013

*(October 2012 –September 2013)*

**Cooperative Agreement**
No 685-A-00-09-00006-00

*October 31, 2013*

*This publication was produced for review by the United States Agency for International Development (USAID). It was prepared by RTI International, TetraTech/ARD, Inc., Relief International/EW-VITA, and with input provided by the following local NGO: EVE la Lumière.*

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*The authors' views expressed in this publication do not necessarily reflect the views of the United States Agency for International Development or the United States Government.*

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# Abbreviations

| | | |
|---|---|---|
| ACIEHA | Integrated Community-based approach for water, hygiene, and sanitation | *Approche communautaire intégrée pour l'eau, l'hygiène et l'assainissement* |
| ADY | Association for the Development of Yamakeuy | *Association de Développement du Yamakeuy* |
| 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 de développement régional* |
| ARD, Inc. | Associates in Rural Development, Inc. US 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* |
| AUE | Water Users' Association | *Association des utilisateurs d'eau* |
| BALP | Washing basin with soakway | *Bac à laver puisard* |
| BPF | Wells and boreholes brigade | *Brigades de puits et forages* |
| CARITAS | Local NGO working in water and sanitation | *ONG locale qui travaille sur des projets d'adduction d'eau et d'assainissement* |
| CEM | Middle secondary school | *Collège d'enseignement moyen* |
| CG | Village management committee | *Comité de gestion* |
| CQ | Neighborhood council | *Conseil de quartier* |
| CR | Rural community | *Communauté rurale* |
| CRD | Regional Development Committee | *Comité Régional de Developpement* |
| DAO | Bid and specification documents | *Documents d'appel d'offre* |
| DEEC | Department of the Environment and Classified Natural Resources | *Direction de l'Environnement et des Etablissements Classés* |
| DGP | Development Grants Program | *Programme de Subventions* |
| DGPRE | Water Resources Management and Planning Department | *Direction de Gestion et Planification des Ressources en Eau* |
| DREEC | Regional Department of the Environment and Classified Natural Resources | *Division Régionale de l'Environnement et des Etablissements Classés* |
| EMMP | Environmental Monitoring and Mitigation Plan | *Plan de suivi et d'atténuation des impacts sur l'environnement* |
| ENDA | Environmental Development Action in the Third World | *Environnement et Développement du Tiers Monde* |
| FDAL | End of open-air defecation | *Fin à la défécation à l'air libre* |
| FODDE | Forum for Sustainable, Endogenous Development | *Forum pour un Développement Durable Endogène* |
| FOG | Fixed obligation grant | *Subvention à Obligation Fixe* |
| FY | Fiscal year | *Exercice* |
| GIE | Economic interest group | *Groupement d'intérêt économique* |
| GMS | Grants Management System | *Système de gestion des subventions* |
| GOS | Government of Senegal | *Gouvernement du Sénégal* |
| M&E | Monitoring and evaluation | *Suivi et evaluation* |
| MDG | Millennium Development Goals | *Objectifs de Développement du Millénaire* |
| MeRO | Establishment of responsibility and | *Mise en responsabilité et* |

| | | |
|---|---|---|
| | operationalization | *opérationnalisation* |
| MSA | MS & Associés | *Malick Sow & Associés* |
| MHCH | Ministry of Housing, Construction, and Hydraulics | *Ministère de l'Habitat, de la Construction et de l'Hydraulique* |
| 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* |
| PCV | Peace Corps volunteer | *Voluntaire de la Corps de la Paix américaine* |
| 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* |
| RF | Request for financing | *Requête de financement* |
| RI/EWV | Relief International/ Enterprise Works – Vita; US Subcontractor | *Sous-traitant américain du Program* |
| SUWASA | Sustainable Water and Sanitation in Africa | *Eau et Assainissement durable en Afrique* |
| TCM | Flush-pour toilette | *Toilette à chasse manuelle* |
| UC-PEPAM | PEPAM Coordination Unit | *Unité de Coordination de PEPAM* |
| USAID | US Agency for International Development | *Agence Américaine pour le Développement International* |
| VIP | Ventilated improved pit latrine | *Latrine améliorée à fosse ventilée* |
| 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

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

Senegal has set its 2015 Millennium Development Goals (MDGs) for access to safe drinking water and sanitation. The 2010 PEPAM Coordination Unit (UC-PEPAM) study revealed that the Casamance area in Senegal, which includes the regions of Ziguinchor, Kolda, and Sédhiou, ranks at the bottom of the list for access to potable water. The access rate for sanitation is also lagging (significantly), even in comparison to water supply systems in Casamance (UC-PEPAM, 2010).

Thus in 2009, the US Agency for International Development (USAID) negotiated the Senegal Millennium Water and Sanitation Program (USAID/PEPAM) to intervene in the Casamance regions (Ziguinchor, Sédhiou, and Kolda), Tambacounda, and Dakar, and to contribute to the achievement of the MDGs and indicators for water and sanitation.

RTI International and its partners present to USAID and to the GOS the fourth annual report of USAID/PEPAM for fiscal year (FY) 2013. This report covers the period from October 2012 to September 2013.

# 2 Program Description

USAID/PEPAM is funded by USAID (US$21 million) as part of a bilateral cooperation agreement between the GOS and the US Government. This 5-year program started in July 2009, and the majority of Program activities will end on June 30, 2014. We have prepared a budget and proposal to USAID to extend the Program until December 2014—a "no additional cost extension" to cover the warranty period for large hydraulic infrastructures. During Year 4 (FY 2013), the Program underwent a re-budgeting exercise, and the cooperative agreement with USAID/Senegal was modified at the end of June 2013. As a result, the Program's closing date is currently planned for June 30, 2014 but will be extended to December 2014 to cover the above-mentioned warranty period. Budget items have been realigned to take into account the Program's budget execution and implementation realities in the field.

The purpose of USAID/PEPAM is to improve sustainable access to water supply and sanitation (WSS) and to promote better hygiene in targeted rural, small town, and peri-urban areas of Senegal by working in five integrated components:

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 enterprises 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) and the region of Tambacounda. These intervention regions were chosen upon the recommendations of both USAID/Senegal and the program Oversight and Coordination (Steering) Committee, headed by the Ministry of habitat, Construction, and Hydraulics (MHCH).

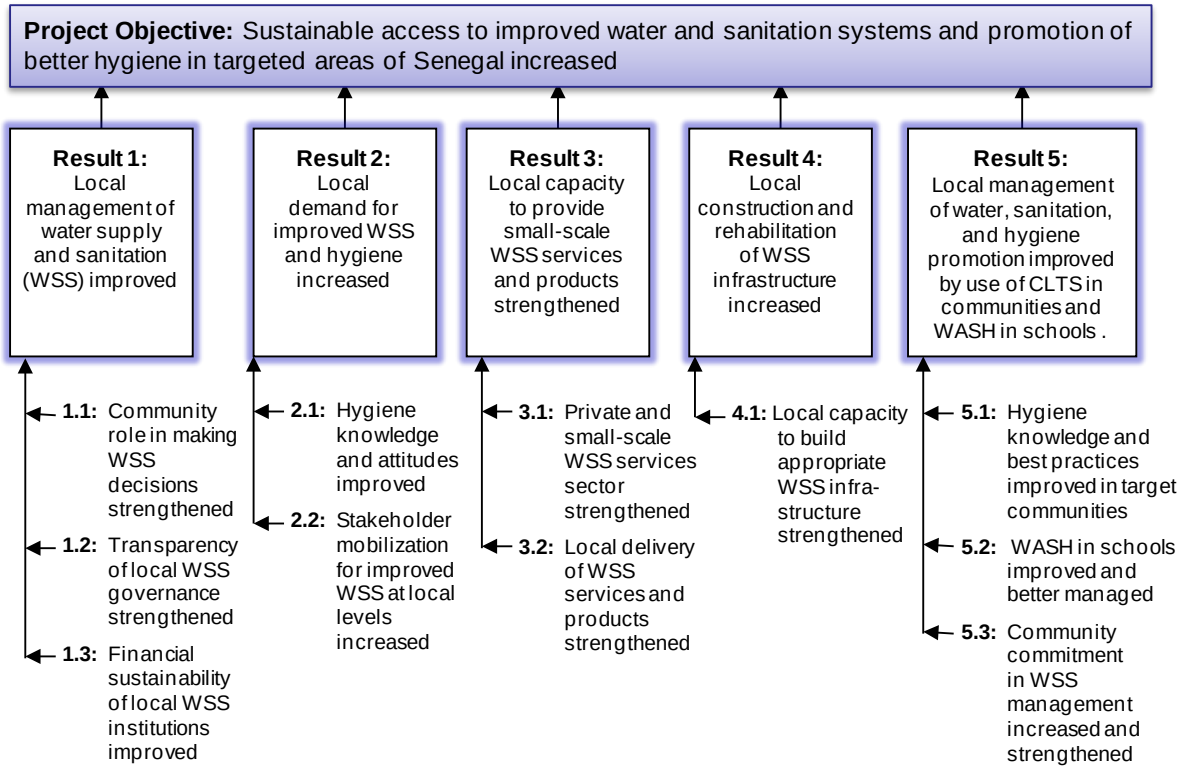
USAID/PEPAM now has five key results that contribute to its five components and, in combination, to the purpose of USAID-funded programs, presented in Figure 1. The Program has established several indicators to track and measure progress on the WSS activities and several indicators to track the CLTS, 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 WSS 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 at the national and local levels
- Capacity building for NGOs and CBOs.

The Program 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. During the fourth year, three partner NGOs collaborated with the consortium and played an important role in project implementation: for CLTS and WADA 2 activities, Kabonketoor was contracted to operate in the Ziguinchor region, CASADES in Sédhiou, and ENDA in Kolda. In the Tambacounda region, the Program identified and selected the NGO EVE La Lumière for collaboration in and implementation of the Program's integrated approach.

*Figure 1. USAID/PEPAM Results Framework*




## 3 Main Achievements during Year 1 to 4 (Aug 2009 to Sep 2013)

USAID/PEPAM is an integrated water, sanitation, and hygiene promotion program.

**Year 1 of the Program (07/2009–09/2010):**

- 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; selecting appropriate technology for water and sanitation infrastructures, especially in rural areas; promoting sustainable, low-cost solutions; and strengthening local capacities in the region of Ziguinchor.

**Year 2 of the Program (10/2010–09/2011):**

- The Program extended this model to the regions of Sédhiou and Kolda and began construction work.
- The Program provided funding for and participated in UC-PEPAM's annual reviews (national level) and the regional review.
- The Program developed contracts for implementing Local Water Supply and Sanitation Plans (PLHAs)—regions of Ziguinchor and Kolda/Vélingara.

**Year 3 of the Program (10/20011–09/2012):**

- The Program extended its model into the Tambacounda region while continuing to respond to the growing demand generated in the Ziguinchor region.
- Program staff promoted CLTS activities through the Water and Development Alliance (WADA) sub-project, supported hygiene promotion campaigns, and promoted WASH education in schools—all through an integrated approach—

demonstrating that these efforts contribute to behavior change and an increase in demand for construction or rehabilitation of water supply sources and sanitation installations.

- The partnerships with the Peace Corps—PROSPERE Project—and SUWASA were better defined and implemented, with more detailed work plans.
- The field office in Ziguinchor was closed, with some staff being transferred to Kolda and Tambacounda. The Program kept a minimal Ziguinchor team in place, housed in the offices of the Governance and Peace Program (PGP), to monitor work on large infrastructures and to ensure monitoring of management committees (CGs) and use of their maintenance funds as well as Water Users' Associations (WUAs).

**Year 4 of the Program (10/2012–09/2013):**

- The Program made advances with its work on large water infrastructures located at seven sites in Casamance. We also rolled out the integrated community-based approach for water, hygiene, and sanitation (ACIEHA) in the Tambacounda region.
- The Program presented results and best practices from our CLTS and hybrid approach at the national meeting of the WASH panel.
- In May 2013, the Program closed the WADA sub-project and disengaged its collaboration with the SUWASA program.
- In April 2013, we completed the activities in the regions of Kolda and Sédhiou, and we closed the Kolda field office; 11 staff members were let go.

Key achievements from Program implementation during Years 1–4, according to the results dated September 30, 2013, are as follows:

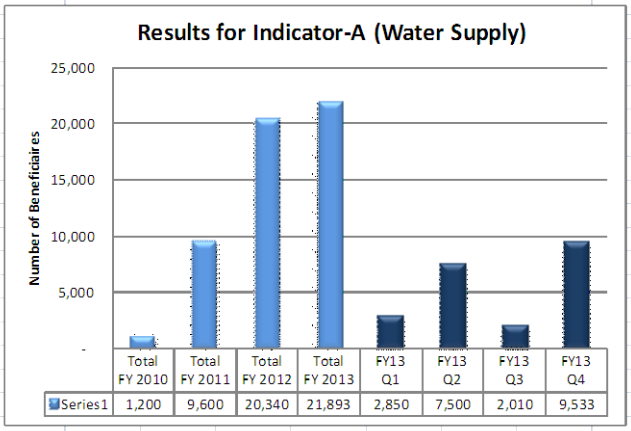
**Table 1. Program PMP results for FY 2013 and Quarter 4, 2013—key data from USAID/PEPAM, five USAID standard indicators for water and sanitation**

| Standard Indicators USAID/PEPAM | Region | Planned for Q4 FY-2013 | Resutls for Q4 FY-2013 | Planned for FY-2013 | Results for FY-2013 | Results from 2010 thru Q4 FY-2013 | % Achieved for LOP |
|---|---|---|---|---|---|---|---|
| A: Number of people gaining access to an improved drinking water source (USAID indicator N° 3.1.8.1-2) | Ziguinchor | 0 | 300 | 5,135 | 8,310 | 24,600 | |
| | Sédhiou | 0 | 300 | 3,081 | 2,850 | 13,650 | |
| | Kolda | 0 | 4,433 | 3,081 | 6,233 | 17,933 | |
| | Tambacounda | 3,240 | 4,500 | 9,243 | 4,500 | 4,500 | |
| | **Total** | **3,240** | **9,533** | **20,540** | **21,893** | **60,683** | **52%** |
| B: Number of people gaining access to an improved sanitation facility (USAID indicator N° 3.1.8.2-2) | Ziguinchor | 1,946 | 40 | 7,947 | 2,920 | 34,196 | |
| | Sédhiou | 1,298 | 0 | 5,298 | 10 | 14,188 | |
| | Kolda | 1,948 | 1,125 | 7,947 | 1,635 | 17,871 | |
| | Tambacounda | 1,298 | 770 | 5,298 | 1,650 | 4,290 | |
| | **Total** | **6,490** | **1,935** | **26,490** | **6,215** | **70,545** | **101%** |
| 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 (USAID/PEPAM indicator N° 3.1.A.) | Ziguinchor | 0 | 0 | 5 | 12 | 329 | |
| | Sédhiou | 0 | 0 | 5 | 4 | 110 | |
| | Kolda | 0 | 0 | 5 | 8 | 143 | |
| | Tambacounda | 5 | 1 | 15 | 60 | 106 | |
| | **Total** | **5** | **1** | **30** | **84** | **688** | **109%** |
| C: Number of rural households benefiting directly from USG interventions (Feed-the-Future indicator N° 9) | Ziguinchor | 0 | 2,282 | 1,755 | 2,875 | 7,148 | |
| | Sédhiou | 0 | 37 | 351 | 144 | 2,684 | |
| | Kolda | 0 | 480 | 702 | 655 | 2,141 | |
| | Tambacounda | 152 | 369 | 702 | 539 | 721 | |
| | **Total** | **152** | **3,168** | **3,510** | **4,213** | **12,694** | **93%** |
| 4.1.C: Number of improved toilets provided in institutional settings (schools and health facilities) (USAID indicator N° 3.1.8.2-3.) | Ziguinchor | 0 | 5 | 0 | 15 | 29 | |
| | Sédhiou | 0 | 5 | 0 | 10 | 10 | |
| | Kolda | 0 | 10 | 0 | 15 | 15 | |
| | Tambacounda | 0 | 0 | 0 | 0 | 0 | |
| | **Total** | **0** | **20** | **0** | **40** | **54** | **92%** |

Source : USAID/PEPAM M&E Data Base - September 30, 2013.

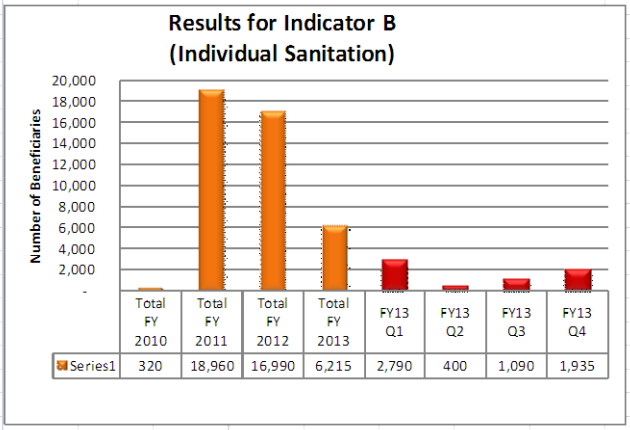
***Figure 2. Graphs of PMP results for key data from USAID/PEPAM, five USAID standard indicators for water and sanitation, from 2010 to the end of September 2013***

**Results for USAID Standard Indicator A: (Water Supply)**
Number of people gaining access to an improved drinking water source



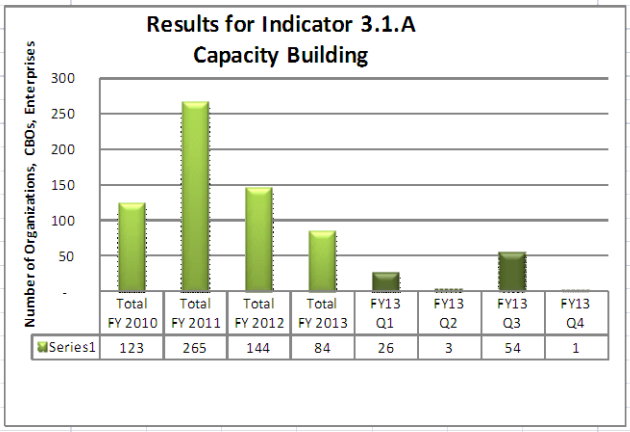

Source : USAID/PEPAM M&E data base - September 30, 2013

**Results for USAID Standard Indicator B: (Individual Sanitation)**
Number of people gaining access to an improved sanitation facility



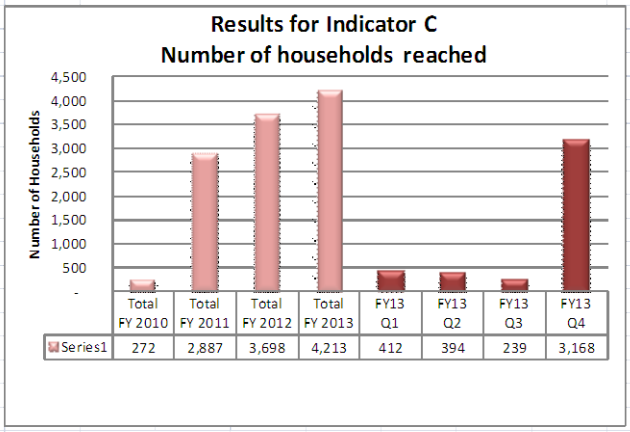

Source : USAID/PEPAM M&E data base - September 30, 2013

**Results for USAID Standard Indicator No. 3.1.A: (Capacity Building)**
Number of producers' organisations, water users' associations, trade and business associations, and community-based organisations (CBOs) receiving USAID assitance through the USAID/PEPAM program



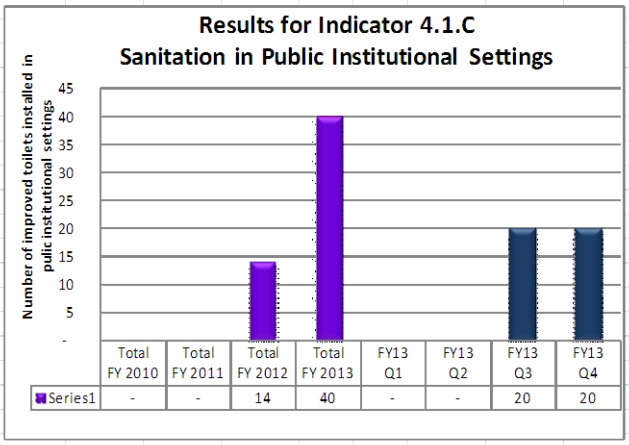

Source : USAID/PEPAM M&E data base - September 30, 2013

**Results for USAID Standard Indicator C:**
Number of rural households benefiting directly from US Government interventions




Source : USAID/PEPAM M&E data base - September 30, 2013

**Results for USAID Standard Indicator No 4.1.C:**
Number of improved toilets in public institutional settings (schools and health facilties)




Source : USAID/PEPAM M&E data base - September 30, 2013

**Table 2. Projections for the five standard indicators—FY 2009 to 2014—including results from the CLTS–WADA sub-program**

| Indicator Statement | Date of Last DQA by USAID | Performance Data | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | FY09 | | FY10 | | FY11 | | FY12 | | FY13 | | FY14 | LOP |
| | | Target | Actual | Target | Actual | Target | Actual | Target | Actual | Target | Actual | Target | Target |
| Number of people gaining access to an improved drinking water source (USAID indicator N° 3.1.8.1-2) | 7-Sep-10 | 1,250 | 0 | 5,531 | 1,200 | 20,600 | 9,600 | 19,958 | 20,340 | 20,540 | 34,596 | 48,011 | **115,890** |
| Number of people gaining access to an improved sanitation facility (USAID indicator N° 3.1.8.2-2) | 7-Sep-10 | 50 | 0 | 2,500 | 320 | 10,130 | 18,960 | 26,000 | 16,990 | 26,490 | 32,580 | 4,375 | **69,545** |
| 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 (USAID/PEPAM indicator N° 3.1.A.) | 7-Sep-10 | 20 | 0 | 114 | 123 | 133 | 265 | 304 | 144 | 30 | 83 | 28 | **629** |
| Number of rural households benefiting directly from USG interventions (Feed-the-Future indicator N° 9) | 7-Sep-10 | 125 | 0 | 553 | 272 | 2,160 | 2,887 | 2,514 | 3,698 | 3,510 | 3,397 | 4,801 | **13,663** |
| Number of improved toilets provided in institutional settings (schools and health facilities) (USAID indicator N° 3.1.8.2-3.) | 7-Sep-10 | 0 | 0 | 45 | 0 | 14 | 0 | 0 | 0 | 0 | 40 | 20 | **59** |

**Source : USAID/PEPAM M&E Database, for Fifth Year Work Plan - September 30, 2013**

## Explication of gaps in the results – targets compared to actual

It is clear that the large and medium-sized infrastructure (L&MI) component has not reached the expected results this year for several reasons:

- Delayed start for L&MI projects: 3 selected locations validated in the first quarter of Year 2, 11 other locations validated in the third quarter of Year 2, and the last location validated in the second quarter of Year 3. This situation was brought about by lengthy procedures for preparing contracts between RTI and USAID.
- The length of time needed to complete L&MI projects is long; it is difficult to complete them in one year. Therefore, projects started at the end of Year 2 will not be completed until Year 4 or 5 of the Program. These projects require a lot of preliminary studies. Added to this is the long participatory process to mobilize cost share from the population and the local governments—between 10% and 15% of the infrastructure costs. Mobilizing beneficiaries' cost share is one of the conditions to progressing to the actual work stage.
- There were multiple requests from USAID to realign the Program's budget, and time was needed to review and approve the budget revisions—review of network extensions for 7 AEP sites, and review and revision of commitments for 8 AEP sites (medium-sized water supply infrastructures).
- Administrative procedures needed to be followed for contributions from the Equipment Maintenance and Operation Department (DEM)—pumping systems and generators.
- The difficult environmental or industrial context for installing boreholes caused by unfavorable hydrogeological conditions at certain sites or the fact that many quality materials must be imported because they are not available locally or even nationally. To import construction materials, a long time is needed to place the order, transport the materials, and clear customs.

Today the most important work is well advanced, and we hope to reach our goal of 50,000 people benefiting from L&MI with the combined achievements of the Program's fourth and fifth years.

For small water supply infrastructure (mini-boreholes and rehabilitation of wells), this year's performance is 85% or 17,460 persons covered compared to the 20,540 planned. For the region of Tambacounda, the current low level of performance is due to the recent start-up of activities, orientation of the local NGO on the Program's methodology, and the time needed for beneficiaries to commit to the Program and mobilize their cost share.

In addition, the water supply points that have not been placed in service (24), due to their failure (not producing) or poor bacteriological water quality, have contributed to a performance reduction in our water supply outcomes.

***B: Number of persons gaining access to improved sanitation***
***(USAID Standard Indicator N° 3.1.8.2-2)***

The overall performance rate in sanitation was 23% in FY 2013. 6,215 persons are being served by rural and peri-urban sanitation compared to the 26,490 persons planned in FY 2013.

This performance is explained by the following:

- Most achievements have occurred in previous years (FY 2011 and FY 2012). If we take the results from 2009 to 2013 and add the results of the WADA/CLTS sub-program, the performance rate is 101%.
- In FY 2013, the Program focused its efforts on completing the WADA/CLTS sub-program and public sanitation facilities in schools.
- The local NGO EVE La Lumière took time to start up sanitation activities and to become familiar with the ACIEHA approach.

As part of our partnership with SUWASA, it was expected that we would serve more than 10,000 people with sanitation activities, through information and awareness-raising activities and establishing a network of latrine pit emptiers to promote mechanized pit emptying. We had planned for another 2,000 beneficiaries through the construction of 200 peri-urban latrines in Dakar. All of these activities have eventually been stopped due to re-programming and re-budgeting by the SUWASA Program and USAID/Washington.

# 4 Results for the Period of Performance (FY 2013) and Planned Activities

## 4.1 Component 1: Strengthen participatory governance

The main objective of this component is to improve village-level governance of water, sanitation, and hygiene services and support the planning, management, installation, and maintenance of infrastructure (i.e., the physical installation/construction of equipment).

Strengthening participatory governance of water and sanitation services is a major component of the USAID/PEPAM Program. This Component implements "soft" social engineering activities (leadership, awareness-raising, organization, training, and monitoring) to encourage greater ownership of the Program (activities and achievements) as well as good equipment management as part of the application of sector-specific regulations. The main activity this year was the training of CGs/ASUFORs in the Program's intervention regions (Ziguinchor, Sédhiou, Kolda, and Tambacounda).

### 4.1.1 Activities achieved

❖ **Organization and training of users' associations (CGs/ASUFORs)**

USAID/PEPAM, in accordance with its objectives of good, participatory governance, supports target communities in establishing a CG at each site. These CGs are responsible for the construction of water, sanitation, and hygiene infrastructure in the village. In addition to their traditional role of managing infrastructure, these independent bodies are also responsible for promoting the use of water and sanitation installations and good hygiene practices while strengthening their own roles and responsibilities.

In support of this, USAID/PEPAM set up and trained CGs in the following intervention regions during its fourth year:

- Ziguinchor: 27 CGs (79 women and 123 men)
- Sédhiou: 22 CGs (59 women and 56 men)
- Kolda: 21 CGs (53 women and 49 men)
- Tambacounda: 49 CGs/ASUFORs (92 women and 144 men)

The gender dimension has always been observed and taken into account in member elections that have taken place in CGs that are already established. Women represent 43.21% of the CG/ASUFOR management members trained in MeRO (Establishment of Responsibility and Operationalization). Several leadership positions, including treasurer and WASH promoter, have frequently been reserved for women, whose energy and commitment are highly valued.

❖ **Orientation workshop on facilitating MeRO training sessions for facilitators from the NGO EVE La Lumière**

All 6 of the NGO's facilitators and coordinators attended the three-day training of trainers on the administration of the MeRO manual and guide as well as on support/coaching measures for sustainability mechanisms to be put in place to better assist CGs/ASUFORs in the Tambacounda region through close monitoring and support.

### 4.1.2 Challenges and solutions

**Justification of gaps between the target and achieved results**

The highly participative and inclusive nature of the USAID/PEPAM Program, which involves all of the stakeholders at every level, often results in significant time constraints. The process of setting up the NGO EVE La Lumière and the responsiveness of beneficiary village communities, from the process of demand generation and formulation to the implementation of infrastructure, were sometimes slow compared to Program progress and objectives. The length of the rainy season (June to October) also causes delays in smoothly rolling out the process, given the fact that agriculture is often the main seasonal and socioeconomic activity of the population in Tambacounda (the Program's third and final intervention region).

**Challenges/constraints in implementing activities**

Establishing autonomous mechanisms and reflexive behaviors for participation and self-management to encourage endogenous development presents a challenge in an area where skills have not yet been transferred to local governments.

Opportunities for creating and consolidating synergies between all stakeholders (relevant technical service units, local governments, local NGOs/CBOs, grassroots organizations, etc.) should always be sought. This will definitely take time, but this cooperative framework should remain in place and always take into account the three dimensions—that the beneficiary village communities have the role of targets, actors, and constraints at the same time.

The USAID/PEPAM Program should propose creating synergies between the USAID sub-projects being implemented in the Tambacounda region to create a joint intervention in one of our local beneficiary communities in order to replicate the success in the Ziguinchor region.

### 4.1.3 Activities planned for the next quarter

**Table 3. Steps for Quarter 1, FY 2014 (Component 1)**

| ACTIVITIES | LOCATION/REGION | RESPONSIBLE PARTIES | DATE |
|---|---|---|---|
| **Establishment and training of users' associations (CGs)** | Tambacounda | USAID/PEPAM, local governments (rural and regional councils), administrative authorities, GOS regional technical services units, local NGOs/CBOs, etc. | Oct 2013–Feb 2014 |
| **Monitoring and support for CGs** | Tambacounda, Kolda, Sédhiou, Ziguinchor | USAID/PEPAM, local governments (rural and regional councils), administrative authorities, GOS regional technical services units, local NGOs/CBOs, etc. | Oct 2013–Feb 2014 |
| **Facilitation of contracting between CGs and pump repairmen** | Kolda, Sédhiou, Ziguinchor | USAID/PEPAM, local governments (rural and regional councils), administrative authorities, GOS regional technical services units, local NGOs/CBOs, etc. | Oct 2013–Feb 2014 |

## 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

### 4.2.1 Activities achieved

❖ **Generation of demand for WSS services**

**Table 4. Status of demand for WSS services**

| Regions | Program area | Total number of potential requests in FY 2013 | Total number of actual requests in FY 2013 | Quotas | Gap |
|---|---|---|---|---|---|
| Ziguinchor | WATER SUPPLY | 4 | 4 | 0 | -(4) |
| Kolda | WATER SUPPLY | 0 | 0 | 19 | 19 |
| Sédhiou | WATER SUPPLY | 4 | 4 | 23 | 19 |
| Tambacounda | WATER SUPPLY | 63 | 52 | 88 | 26 |
| **TOTAL WATER SUPPLY** | | **71** | **60** | **130** | **90** |
| Ziguinchor | SANITATION (PERI-URBAN) | 57 | 57 | 0 | -(57) |
| Kolda | SANITATION | 264 | 0 | 126 | 126 |
| Sédhiou | SANITATION | 0 | 0 | 0 | 0 |
| Tambacounda | SANITATION | 937 | 189 | 311 | 122 |
| **TOTAL SANITATION** | | **1,258** | **246** | **437** | **152** |

Demand generation activities were primarily focused on the Tambacounda region. Using the new ACIEHA approach; 189 new actual requests for latrines were received along with 52 new requests for mini-boreholes **(IR 2.D.2)**.

For peri-urban sanitation, particularly in Ziguinchor, 57 new actual requests were generated this quarter **(IR 2.E.2)**. However, this activity was suspended once the Program's interventions in the region were stopped.

This year, residents mobilized in-kind or cash contributions to access water or sanitation services in 67 partner communities (CGs/villages): 3 in Sédhiou, 12 in Kolda, 2 in Ziguinchor, and 50 in Tambacounda.

The Program supported the organization of 19 public meetings for information, education, and communication (IEC) on water, sanitation, and hygiene promotion, all in the Tambacounda region.

- **Hygiene promotion at the community level**

This year, the Program placed particular emphasis on the construction of enclosures for latrines and the repair/replacement of handwashing devices. It was noted that many communities have no shelters or enclosures for their latrines. For this reason, the Program developed a major social mobilization campaign on the urgent need to build these types of enclosures and to replace damaged handwashing devices. These efforts were primarily concentrated in the Ziguinchor region.

- **Training of CGs on hygiene promotion in the regions of Kolda, Sédhiou, and Tambacounda**

Only 10 CGs in the Tambacounda region participated in this activity. The Program trained 20 members (2 per CG).

- **Training of community hygiene promoters in social marketing and hygiene promotion**

This activity involved 22 people from the nine peri-urban neighborhoods in Tambacounda targeted for sanitation activities by USAID/PEPAM and the Sustainable Water and Sanitation in Africa (SUWASA) program. The neighborhoods are Gouye, Quinzambougou, Gourel Diadjie, Plateau, Pont I, Pont II, Saré Guilèle, Camp Navetane, and Liberté.

The training produced the following activities and results:

- 22 community hygiene promoters trained in social marketing and hygiene promotion approaches, including mechanized latrine emptying
- 6 community hygiene promoters selected to launch social engineering activities for the Program's peri-urban sanitation component in Tambacounda (demand generation, promotion of mechanized latrine emptying, hygiene promotion)
- 12 other community hygiene promoters identified for SUWASA program activities (promotion of mechanized latrine emptying)

The launch of the community hygiene promoters' activities, which was initially scheduled for early April 2013, was cancelled following the elimination of the Program's peri-urban latrine component.

- **Celebration of Global Handwashing Day**

The October 15, 2012 (Q1-FY2013) occurrence of Global Handwashing Day was celebrated in a middle secondary school (CEM) in Tambacounda in collaboration with American Peace Corps volunteers (PCVs). With the presence of the city governor, students, school and education authorities, and development partners (JICA, UNICEF, World Food Program, etc.), the event was an excellent advocacy opportunity.

A video of the event was made and a photo gallery was posted on YouTube, USAID/Senegal's Facebook page, and the Global Handwashing Day website (http://globalhandwashing.org/ghw-day).

*Hand washing demonstrated by a middle-school student and the governor of the Tambacounda region*

- **USAID/PEPAM's participation in World Water Day in Tambacounda**

Every year, World Water Day is celebrated around the world on March 22. At the instigation of the platform of water and sanitation actors, the local water supply services units commemorated the event in Tambacounda. USAID/PEPAM took the opportunity to present the Program and talk about low-cost technology used in Program implementation to bring drinking water to small, rural communities. Emphasis was placed on the partnership among the Program, technical services units, rural communities, and private service providers.

- **Training of PCVs in the Tambacounda region on CLTS and the "hybrid" approach**

The training workshop was held in Tambacounda on November 26–30, 2012. There were **19** participants, including 6 PCVs, 2 technical services unit managers (Hygiene and Sanitation), and 11 natural leaders from the Program's target villages.

The training achieved the following results:

- PCVs acquired knowledge of CLTS and developed skills in implementing the approach in their intervention sites.
- An action plan was developed and implemented in each of the four villages where activities had been launched by natural leaders and local officials.
- USAID/PEPAM developed a monitoring and supervision plan with the support of PCVs and local hygiene and sanitation technical services units to scale up the CLTS approach in target rural communities.

It should be pointed out that the "hybrid" approach is based on lessons learned from experiences with both subsidized and CLTS sites.

Beneficiary populations displayed so much organization and interest in local governance of water and sanitation services that the Program decided to use this new, integrated approach, which is more innovative and gives communities a more central role in water, sanitation, and hygiene management.

*Presentation of village action plans and group work with PCVs and local populations*

❖ **Training of technical staff from the NGO EVE/La Lumière in the ACIEHA approach**

The ACIEHA training was held in Tambacounda on March 11–15, 2013. **20** participants attended, including **8** members of the NGO's technical staff (facilitators, supervisor, and coordinator), and **12** natural leaders from **6** of the Program's target villages.

The training produced the following results:

- 6 facilitators, 1 supervisor, and 1 coordinator trained in the approach (using both theoretical sessions and practical cases)
- Start-up sessions held in 6 villages in the rural community of Neteboulou
- 6 village action plans validated
- Quarterly action plan and objectives reviewed/validated for targets by staff from the NGO EVE La Lumière and the Program

### 4.2.2 Activities planned for the next quarter

**Table 5. Steps for Quarter 1, FY 2014 (Component 2)**

| ACTIVITIES | DATE | RESPONSIBLE PARTIES |
|---|---|---|
| **Celebration of World Handwashing Day in Tambacounda** | Oct 2013 | USAID/PEPAM, Peace Corps |
| **Training of CGs in Tambacounda in hygiene promotion** | Dec 2013 | USAID/PEPAM, EVE La Lumière |
| **Demand generation for sanitation and water supply infrastructure in the region of Tambacounda** | Nov 2013 | USAID/PEPAM, EVE La Lumière |
| **Release and distribution of the Water, Hygiene, and Sanitation Guide (EHA) for middle secondary teachers in the Program's four intervention regions** | Nov 2013 | USAID/PEPAM, Division of School Medical Inspection (DCMS) |
| **Initial allocation of Aquatabs to 88 villages in the Tambacounda region** | Nov 2013 | USAID/PEPAM, ADEMAS/PSI |
| **Media campaign in collaboration with community radio stations – Radio RTS** | Dec 2013 – Mar 2014 | USAID/PEPAM, CGs, RTS |

## 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 enterprises to meet the demand for improved water and sanitation products and services. This capacity building for local enterprises is oriented toward the following areas:

- Installation of mini-boreholes equipped with manual pumps
- Quality control of installed boreholes and pumps
- Local manufacture and installation of the EROBON manual pump
- Maintenance and repair of manual pumps
- Training of CGs in the management and maintenance of drinking water infrastructure
- Rehabilitation of small-scale water supply infrastructure
- Training and support in business management for enterprises
- Testing of technologies to improve the technological options used for drilling boreholes or pumping water

### 4.3.1 Activities achieved

**Table 6. Summary of Component 3 achievements**

| Description | Achievem'ts in Year 1 2010 | Achievem'ts in Year 2 2011 | Achievem'ts in Year 3 2012 | Achievem'ts in Year 4 2013 | Total achievem'ts 2010 – 2013 | Total Program objectives over 5 years |
|---|---|---|---|---|---|---|
| No. of metalworking shops trained in local manufacture of manual pumps | 2 | 3 | 0 | 0 | **5** | 16 |
| No. of enterprises trained in borehole installation using the jetting method | 4 | 7 | 0 | 1 | **12** | 20 |
| No. of enterprises trained in borehole installation using the percussion method | 4 | 7 | 0 | 1 | **12** | 20 |
| No. of private service providers trained in repair and maintenance | 12 | 18 | 9 | 3 | **42** | 40 |
| Establishment of a supply chain for selling polymer | 0 | 1 | 0 | 0 | **1** | 0 |
| Establishment of a supply chain for importing the India Mark2 pump with PVC pipes | 0 | 1 | 0 | 0 | **1** | 1 |
| Importing and testing of a portable drilling rig for deep boreholes | 0 | 1 | 1 | 0 | **2** | 1 |

| Description | Achievem'ts in Year 1 2010 | Achievem'ts in Year 2 2011 | Achievem'ts in Year 3 2012 | Achievem'ts in Year 4 2013 | Total achievem'ts 2010 – 2013 | Total Program objectives over 5 years |
|---|---|---|---|---|---|---|
| **Installing boreholes with the portable drilling rig** | 0 | 4 | 11 | 29 | **44** | 15 |
| **Training in hydrogeology for drillers and technicians** | 1 | 1 | 0 | 1 | **3** | 2 |
| **No. of private enterprises trained in business management by the Program** | 6 | 9 | 0 | 0 | **15** | 0 |

*Fact-finding visit to select intervention villages (rural community of Néteboulou)*

### ❖ Identification of intervention villages in the Tambacounda region

USAID/PEPAM carried out fact-finding missions in the first and second quarters of FY 2013 to complete and finalize the list of Program intervention villages in the Tambacounda region. Based on requests submitted to the Program and the suggestions or rural council presidents (PCRs), visits were made to villages to evaluate their hydrogeological conditions and water needs in order to determine whether their requests could be fulfilled. The type of technology that would be used and the details and conditions of implementation were explained to village residents. Some immediately expressed their preference for an open well, more suitable, according to them, to their livestock, while others said they would prefer a piped water connection. In most cases, however, villagers expressed the desire to receive assistance from the Program, which proposed a mini-borehole equipped with a manual pump, due to the current precarious condition of water supply.

The following criteria were used to determine which villages would receive small-scale infrastructure:

- Ground conditions favorable to drilling using Program technologies (done manually or using the mini-rig drill)

- Existence of actual need: drinking water needs not sufficiently met or lack of a modern water supply point in the village
- Village size: water supply points equipped with manual pumps are best suited to smaller communities
- Villagers' acceptance of the conditions for implementation: financial contribution of FCFA 150,000, creation of a CG, and agreement to raise funds to maintain the infrastructure

The beneficiaries' financial participation is broken down as follows:

- FCFA 100,000 contributed for infrastructure implementation
- FCFA 50,000 as the first contribution to the CG's maintenance fund

At the end of these missions, 43 new villages were identified to receive Program assistance in the Tambacounda region. Adding this number to the 27 villages identified in 2012, the total number of sites to benefit from small water supply projects has increased to 70—67 receiving a mini-borehole and 3 having their old water supply points that no longer function rehabilitated.

The fact-finding missions also identified 17 potential beneficiary villages where ground conditions appear favorable to manual drilling. These villages are located in the rural communities of Goumbayel, Maka Colibantang, and Nettéboulou.

❖ **Replacement of 13 intervention villages in Tambacounda**

Implementation of the USAID/PEPAM Program is conducted with a participatory approach. The beneficiary communities are involved throughout the process, and their commitment forms the foundation of the Program's success.

This commitment is reflected in the agreement to form a CG for the future water supply point as well as open a bank account and mobilize the cost share necessary to implement the work.

Among the 70 villages selected for small-scale water supply infrastructure, 8 have withdrawn from the Program because they lack the cohesion needed to mobilize village support, despite several awareness-raising missions.

Five other villages in the rural community of Ndame were dropped from the Program to avoid duplicating efforts—these villages were enrolled by Caritas to receive a connection to a multi-village water supply system.

A total of 13 villages needed to be replaced. On the basis of requests submitted to the Program by rural communities and based on existing potential, a fact-finding mission was conducted to identify replacement villages.

In September 2013, the CGs for these replacement villages were established, and they will receive training during the first quarter of FY 2014.

❖ **Mobilization of a drilling workshop and testing of the mini-rig drill in the Tambacounda region**

The Tambacounda region presents soil conditions that, for the most part, are not conducive to low-cost (manual) drilling for boreholes. The Program introduced a mini-rig drill to test the feasibility of using this technology for infrastructures in Program target villages. The mini-rig is composed of a drill equipped with a hydraulic head / drill bit, a hydraulic pump, a sludge pump,

an air compressor, and a set of tube casings, cutting tools, water tanks, and small maintenance tools.

The Program completed 14 demonstration boreholes in the various intervention zones to identify the machine's capabilities and validate the list of intervention villages.

- **Installation of mini-boreholes in the CLTS sites**

As part of Component 5's CLTS activities, once the final villages enrolled in the Program in the three regions of Casamance had achieved open defecation free (ODF) status, they were scheduled to receive 28 mini-boreholes and 4 rehabilitated water supply points. The projects were awarded to local manual drilling enterprises wherever hydrogeological conditions allowed. In the Sédhiou region (rural community of Tankon) and part of the Kolda region (rural community of Badion), ground conditions exceeded the capacities of manual drillers (because of a deep water table and/or very hard soil), so drilling there was completed using the mini-rig drill. The 12 borehole projects in the rural community of Tankon were divided between the enterprise Sara Matériaux and Program staff. Because the water table in this community is very deep (dynamic level between 26 and 55 meters), India pumps were installed at the 2 more shallow boreholes, and Universal pumps were installed for experimental purposes at the 10 other boreholes. All of the projects that were started in the second quarter of FY 2013 were completed.

- **Experimentation with a new pump for deep installations in the Tambacounda and Sédhiou regions**

*Training on the Universal Pump installation, Saré Capitaine, rural community of Tankon*

As part of its search for low-cost solutions for reducing beneficiary communities' maintenance costs for manual pumps, the Program began testing the Universal Pump, which appears to offer many benefits in terms of reliability and ease of maintenance. A total of 15 pumps were installed in the Tambacounda and Sédhiou regions.

A training session on the pump's installation was held for managers of the water supply technical services units in Sédhiou, Kolda, and Ziguinchor; Program agents; and representatives from the enterprise Sara Matériaux, which acts as the manufacturer's local representative. Two specialists from the firm Sovema SA, Mathieu Roque and Vincent Couchet, led the training.

After six months of using the pump, the Program has made the following evaluations:

Advantages:

- The pump is easy to install.
- Worn parts are easy to access (the rods can be disassembled without disassembling the water column, which facilitates maintenance).
- The cost of the pump is very competitive compared to the price of the Vergnet pump currently available on the market.

Disadvantages:

- The pump is difficult to maneuver when the water depth is greater than 35 m (according to users).
- Some sites have experienced rapid wearing of pistons.
- The pump's sealing frame needs to be reinforced to withstand pumping pressure.

*Worn pistons from a Universal Pump*

*Reinforcing the framework for the pump mounting*

Pump breakdowns are mainly related to piston wear and sometimes to the instability of the pump mounting. In the first case, the pistons are replaced, and in the second, the mounting is extracted, reinforced, and placed in concrete. There has been one case of a broken pumping arm.

In general, users find the Universal Pump difficult to use.

To remedy this, the Program decided to replace all of these pumps before the end of the project. The Vergnet Hydro–India HPV 60 pumps will be installed on infrastructure where the water level is between 25 m and 35 m. For infrastructure where the water table is deeper than 35 m, the Vergnet HPV 100 pedal pumps will be installed.

### ❖ Rehabilitation of infrastructures

*Rehabilitation of the pump at Tankoron*

*Rehabilitation of pumps at Thianghaly*

The Program rehabilitated 11 water supply points in various intervention areas during this year. Four open wells were closed with a slab, and an India pump was installed for pumping water. These four wells are located in the CLTS sites of Ouonck (Ziguinchor) and Badion (Kolda). The other rehabilitation activities involved sites where the India II pumps had broken down. In these cases, the Program replaced the pumping column, the cylinder, and used parts.

### ❖ Approval of water supply infrastructures

Upon completion of water supply infrastructures, the Program organizes an approval mission with the technical services units. Provisional approval is issued if defects are detected, and correction of any problems is a condition of final settlement payments to the contractor.

A total of 77 water supply points in various Program regions received approval from the water supply technical services unit this year.

### ❖ Monitoring of infrastructures

Field agents conduct periodic visits to verify that the installed infrastructures are functioning and to raise beneficiaries' awareness on the need to continue raising funds for infrastructure maintenance. The amounts in the bank accounts are also checked periodically, and villagers' attention is drawn to the need to increase their efforts when the account does not have sufficient funds. We have found that in the lean periods, contributions are difficult to raise, due to the lack of the population's financial resources. After the harvest season, the Program will emphasize the need to mobilize a maximum of funds.

### ❖ Training of enterprises in Sédhiou and Kolda on bidding and procurement procedures

To help build the capacity of partner enterprises, as it did in Ziguinchor, the Program organized a training session on bidding and procurement procedures on December 17–21, 2012 for manual drilling enterprises and pump manufacturers in the regions of Sédhiou and Kolda. 15 participants from the two regions attended the training, which was provided by the local Groupement d'Intérêt Economique (GIE).

- **Selection and training of a manual drilling enterprise in Tambacounda**

*Training the well drillers' GIE in Tambacounda on manual drilling techniques*

During fact-finding missions to select intervention villages in the Tambacounda region, the Program was able to find villages with ground conditions suitable for manual drilling. These villages are primarily located in the rural communities of Goumbayel and Nétéboulou. Training a manual drilling team in Tambacounda builds the local capacity to provide low-cost water supply point installation services.

The Program selected the Tambacounda well drillers' economic interest group (GIE) to receive this training due to its experience in the water supply sector and its knowledge of the drilling environment. The training was conducted by Program trainer Assane Diouf from May 6 to June 5, 2013 in three villages in the rural community of Goumbayel: Medina Diouna, Samba Guitta, and Boubou Aissé.

A set of manual drilling equipment was made and provided to the team. The drillers will reimburse the Program for the cost of the equipment after completing their first five boreholes.

- **Training of the manual drilling team in Tambacounda in hydrogeology and hygiene concepts**

*Session on borehole placement in the terrain*

*Training participants*

The goal of this training was to educate members of the drilling team in basic concepts of geology, hydrology, and hygiene so they could install quality drinking water infrastructure. The training was conducted by Arjen Van Der Wal, a manual drilling consultant, on May 12–21, 2013 at the health training center in Tambacounda as a complement to the practical training provided by the Program's trainer. The participants' knowledge and experience in drilling large-diameter wells greatly helped them to assimilate the training content.

- **Selection of two enterprises to receive the Program's two mini-rig drills**

After the experimentation phase to test the Program's mini-rig drills in its different intervention zones, it was suggested that the capacities of two local enterprises be built in order to provide low-cost mechanized drilling services in areas where manual drilling is not possible due to

unfavorable hydrogeological conditions. These areas are primarily located in the regions of Sédhiou, Kolda, and Tambacounda.

After issuing an information notice, the Program received seven applications from partner enterprises within the specified period. A committee then selected two enterprises that met the Program's objectives: the Casapica GIE in Kolda and the Tambacounda well drillers' GIE.

A training session on use of the mini-rig drill was held in July 2013 for the two enterprises. As a result of the training, and additional trainings next fiscal year, the Program will sign contracts with them to install boreholes in the Tambacounda region under the supervision and guidance of the Program's technicians. The cost of the equipment will be subtracted from the cost of the boreholes they will install. At the end of these projects, the contractors will have finished reimbursing the Program and will begin installing boreholes for individuals.

- **Training of two enterprises on drilling techniques with the mini-rig drill**

*Training Casapica GIE on the use of the mini-rig drill*

*Training the Tambacounda well drillers' GIE on the use of the mini-rig drill*

This training session was to strengthen the capacity of the two enterprises selected to receive the mini-rig drills. This was a practical session that complemented the training on manual drilling techniques. Two boreholes were drilled by each of these enterprises, under the supervision of Assane Diouf and Tourmané Diallo, Program technicians.

- **Training on jetting wells for enterprises in Kolda and Sédhiou**

*Preparation of the pipe screen/strainer*

*Installation of a jetting well*

The jetting well is a technology that improves the water production in a large diameter well. It is used in sandy soil and involves driving three to six meters of strainer pipe down into the bottom of the well with a water jet. The pipe screen/strainer is covered with a polyester cloth. This technique is not suited to clay or rocky soil.

The training was held September 18–21, 2013 in Kolda for the manual well drilling enterprises of the region. The Tambacounda well drillers' GIE also participated in this training session.

- **Observations on the Program's training sessions**

The number of artisanal workshop businesses trained in the production of rope pumps was limited to five in the various regions—these providers are able to meet all the needs in their areas. Training more providers would reduce the market share per provider, making this activity less attractive as it becomes less profitable. The Tambacounda region is not conducive to the introduction of the rope pump because of the significant depth of the water table.

The number of enterprises trained on manual drilling techniques has not changed much because the needs in the various Program intervention zones do not exceed the capacity of the enterprises already trained and serving the project. In the Tambacounda region, areas conducive to manual technology are limited, which is the reason only one enterprise was trained.

- **Participation of the Relief International Technical Director and the USAID/PEPAM Component 3 leader in the Third International WaTER Conference**

The Water Technologies for Emerging Regions (WaTER) Center at the University of Oklahoma organized the Third International WaTER Conference in September 2013. One of the conference's main themes was water technologies for developing countries. Nearly 200 participants from various disciplines, coming from all over the world, shared experiences and established contacts for future exchanges. The presentations were organized by theme and grouped into sessions. USAID/PEPAM presented our experience, the theme of which was "Building low-cost local well drilling capacity in Senegal," in the session titled "Ground Water Resources and Well-drilling Challenges."

In a side workshop, participants demonstrated various technologies—the Biosand water filtration system, a type of ecological latrine, low-cost drilling technologies using the LS 100 mini-rig drill, and percussion drilling technologies presented by Water4.

*Manual drilling method—Water4*

*Tools for the Water4 manual drilling method*

*LS 100 mini-rig drill*

*Demonstration of the use of the LS 100 by Hosanna Institute of the Sahel*

- **Assessment at the end of the conference**

USAID/PEPAM's approach is an innovative approach that will foster sustainability of the types of technical interventions and a way of working, even after the Program is finished. This continuity is due to the capacity building of local actors who have been empowered to carry out the implementation process themselves.

The approach of using low-cost technology is increasingly in demand, as wells as the search for solutions to water supply issues—an approach that allows the greatest number people to be reached across developing countries (Ethiopia, Kenya, Zambia, Niger).

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

### 4.4.1 Water supply sub-component – large and medium-sized water supply infrastructures

The objective of this portion of the USAID/PEPAM's Component 4 is to install water supply infrastructure jointly with Components 1 and 2 in accordance with demands expressed by the targeted village communities. As a reminder, this sub-component covers all of the Program's drinking water supply projects using running (piped) water systems.

#### 4.4.1.1 Objective

The Program had the following objectives for this sub-component in FY 2013:

- **Project management activities**

Two studies were planned: (1) design of the mini-AEP specifications and studies and (2) the water supply point inventory and access rate calculation for the 7 AEP systems (characterization). Enterprises were to be consulted to install the infrastructure for the 8 mini-AEPs.

This sub-component's activities also included conducting all project inspection, monitoring, and approval activities.

- **Installation of water supply infrastructure**

Two major objectives were planned:

- Finalizing work on the 7 peri-urban or multi-village AEP systems
- Building infrastructure for the 8 mini-AEP systems

- **Placing AEP systems into service**

A system should be placed into service as and when an AEP system's entire infrastructure is completed and approved.

- **Training of actors responsible for operating the AEP systems**

This training is intended for ASUFOR members and borehole operators at the 15 AEP sites (7 large sites and 8 mini-AEP sites).

- **Capitalization and transfer of infrastructure to the State of Senegal**

Capitalization consists of developing the validated profile documentation and specifications for an AEP system following final approval of all the AEP's infrastructure. The transfer is the act by which the AEP system permanently becomes national water supply property. A record of approval is written to this effect, and the technical-financial file for the AEP system is annexed to the record.

#### 4.4.1.2 Activities achieved and results obtained

**Project management**

Since the installation of large- and medium-scale water supply infrastructure was started, 15 contracts have been awarded to 5 enterprises, all of which are located in Casamance. The total

price of these contracts, including their amendments, is **FCFA 563,863,074** from the grants budget.

For this fiscal year, new commitments were made in the form of new contracts with a total value of **FCFA 62,280,137 excluding value-added tax (VAT)** and amendments totaling **60,620,228 excluding VAT**. The details are provided below.

- **New contracts**

The contract for the construction and rehabilitation of the equipment rooms/pump houses at four sites, awarded to the economic interest group (GIE) KALOGEN in FY 2012, was signed during the first quarter.

The value of the contract is **FCFA 36,039,075 F excluding VAT.**

For the equipment rooms/pump houses in Ebinako and Marsassoum, the contract was directly awarded to the enterprise KAMAANO/GICOTEC because of the similarities between the work on the water towers that it is already contracted for and these proposed equipment rooms/pump houses.

The total value of the contract extension for the water towers to include installation of the equipment rooms/pump houses is **FCFA 22,079,800**.

As part of the environmental management plan for large-scale water supply infrastructure, two contracts were signed with the following:

- The enterprise KALOGEN, for the reconstruction of livestock buildings and realignment of land parcels in Mampatim, for a value of **FCFA 1,459,259 excluding VAT**
- The Enterprise KAMAANO/GICOTEC, for the construction of an enclosure wall for re-parceled land in Ebinako, for a value of **FCFA 2,702,003 excluding VAT**

- **Contract amendments and their signature**

In the course of implementing projects, the Program received several requests from beneficiaries or encountered technical difficulties in the field, leading to the development of four contract amendments for the six AEP systems under construction:

- Amendment to network contracts—5 contracts—for a total value of **FCFA 34,581,550**
- Amendment to a borehole contract—1 contract—for a total value of **FCFA 18,907,550**
- Amendment to the contract for mini-AEP boreholes—1 contract—for a total value of **FCFA 2,862,500**
- Amendment to the contract for water towers—1 contract—for a total value of **FCFA 2,015,028**

**Project management, inspection, and approval of infrastructure work**

- **Studies**

Two studies were planned for FY 2013:

- Execution study for the 8 mini-AEPs in Casamance: This study was suspended due to financial difficulties and the subsequent re-budgetization process. However, a budgeted action plan identifying tasks and those responsible for carrying them out was produced.

- Inventories of existing and potential water supply points and the calculation of access and coverage rates for the 15 projects. The results are shown in the tables below.

**Table 7. Large AEP sites – status of access, coverage, and inventory for water supply points**

| | AEP system | Population | | | Water connections | | Other existing water supply points, newly installed or rehabilitated | | | Total coverage rate | Coverage rate by connection |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | | Affected by the AEP | Serviced by the AEP | Percentage reached by the AEP | Potential for the network in place | Installed | Public water taps | Pumping station | Watering trough | | |
| 1 | Kartiack | 3,297 | 3,297 | 100% | 279 | 190 | 5 | 1 | 1 | 132% | 86% |
| 2 | Bassire | 1,784 | 1,784 | 100% | 125 | 84 | 0 | 1 | 1 | 71% | 71% |
| 3 | Ebinako | 7,836 | 6,682 | 85% | 522 | 0 | 2 | 1 | 1 | 8% | 0% |
| 4 | Diouloulou | 6,961 | 5,281 | 76% | 464 | 264 | 2 | 1 | 1 | 66% | 75% |
| 5 | Marsassoum | 10,300 | 9,162 | 89% | 687 | 0 | 13 | | 1 | 38% | 0% |
| 6 | Salikégné | 4,683 | 4,433 | 95% | 312 | 40 | 6 | 1 | 1 | 51% | 14% |
| 7 | Mampatim | 8,755 | 6,280 | 72% | 584 | 3 | 12 | 1 | 2 | 42% | 1% |
| | **Total** | **43,616** | **36,919** | **85%** | **2,973** | **581** | **40** | **6** | **8** | **56%** | **24%** |

**Table 8. Mini AEP sites – projected access, coverage, and inventory for water supply points**

| # | Mini-AEP system | Population | | Other existing water supply points, newly installed or rehabilitated | | | Coverage rate of public water taps |
|---|---|---|---|---|---|---|---|
| | | Serviced by the AEP | Percentage reached by the AEP | Public water taps | Pumping station | Watering trough | |
| 1 | Selety | 3,558 | 100% | 8 | 1 | | 100% |
| 2 | Dombondir | 2,265 | 100% | 4 | 1 | 1 | 100% |
| 3 | Médiègue | 1,376 | 100% | 5 | 1 | 1 | 100% |
| 4 | Djibabouya | 2,047 | 100% | 4 | 1 | | 100% |
| 5 | Boudié Mar | 1,554 | 100% | 3 | 1 | 1 | 100% |
| 6 | Djiragone | 1,299 | 100% | 5 | 1 | | 100% |
| 7 | Médina Passy | 1,763 | 100% | 4 | 1 | 1 | 100% |
| 8 | Saré Samba Cissé | 1,763 | 100% | 3 | 1 | 1 | 100% |
| | **Total** | **15,625** | **100%** | **36** | **8** | **5** | **100%** |

### ❖ Inspection and approval activities

Several partners are engaged in conducting these activities:

- The Joël Gandois consulting firm (BEJG) is responsible for the monitoring, inspection, and approval of all construction works. Specifically, BEJG was responsible for monitoring the concrete work for the water towers, defining standards and evaluation criteria for all of the work, and producing the DAO (bid and specification documents) for the lightning rods and painting of the existing water towers.
- The consultant Daouda Kamara focused mainly on the inspection and approval of all construction works in Mampatim due to the site's remote location.
- The firm SENELABO.btp is responsible for taking samples and conducting resistance testing on fresh and hardened concrete at the laboratory for work on the water towers. The firm conducted a total of 20 visits, took 240 samples, and carried out several

concrete slump tests during the concrete pour for two water towers. All the tests indicated that the quality of the concrete used was satisfactory.

- The firm APAVE is responsible for technical inspections of studies and work on the water towers. During FY 2013, APAVE conducted 6 site visits and produced 10 reports on the technical inspections of the studies, materials, and works.
- Dr. Courfia Diawara from the University of Ziguinchor and the Hygiene Brigades from the three administrative regions of Casamance conducted various analyses of the water quality in the 7 completed boreholes.

Program and technical services unit staff supervised these actors and provided them with technical and operational support whenever necessary.

#### 4.4.1.3 Challenges and solutions

- **Suspension of work on the 8 mini-AEPs**

  Financial difficulties led to the suspension of the mini-AEP project, and currently, the new Program budget's approval has not made it possible to lift the suspension. And we are regularly questioned about the situation by the target villages and regional technical services, as demonstrated by correspondence regarding this matter from the regional water supply division in Sédhiou. We believe that these projects must be completed in addition to the comprehensive study of technological options, which is scheduled for FY 2014.

- **Significant delays in approving contracts and amendments**

  Significant delays in approving contracts and amendments have had a negative impact on the completion of work. They have led to work either being started at the worst possible time or to work being stopped, requiring remobilization to be started up again. A procurement plan has been agreed upon to reduce these delays.

- **Technical difficulties**

  The low productivity of the aquifers in Ebinako and Bassire has made it necessary to install a second back-up borehole at each site to meet demand and ensure water production.

  In Marsassoum, the private enterprise contracted by the State was not able to rehabilitate the existing borehole due to a blockage found 20 meters underground. Staff from the Program and the water supply maintenance unit in Ziguinchor were eventually able to clear the blockage and rehabilitate the borehole. In return, the enterprise will install a second borehole to ensure water production in the medium term.

  Finally, some sites have failed to comply with safety standards (no lightning rod, pumping equipment insufficiently protected, etc.) or do not have pumping management facilities. Necessary actions have been identified and planned for FY 2014 to ensure the sustainability of the systems.

- **The need to meet participative approach requirements for AEP projects**

  Our AEP projects have relied heavily on a participative and inclusive approach, which has made it possible to mobilize cost share estimated at a minimum of FCFA 70 million. As part of this approach, network excavations, pumping equipment, and water supply points are the responsibility of local actors (national government, local governments, beneficiaries).

Although this approach has fostered consensus and support for projects, it also takes more time to implement and requires greater equity in water supply methods (individual connections or public water taps). Several changes have been gradually introduced to respond to these requirements and according to available funds, but they have also resulted in delivery delays.

To increase the demand for water supply connections, an action plan was developed and is currently being implemented. It includes advocating with local actors to develop a communication campaign and give our projects sites priority when it comes to local investments. The Program will also install water supply points for demonstration purposes.

#### 4.4.1.4 Planning and budgeting for FY 2014 activities

The fourth quarter of FY 2013 was used to plan and evaluate actions for FY 2014. The activities planned fall under the following general categories:

- Installation of infrastructure for AEP sites: **FCFA 160,470,000 excluding VAT**
- Environmental management actions: **FCFA** 7,**900,000 excluding VAT**
- Consultant services: **FCFA 11,250,000 excluding VAT**
- Training of ASUFORs and similar management bodies: **FCFA 28,089,960 excluding tax**, including consultants

**Table 9. Steps for Quarter 1, FY 2014 (Component 4, Water Supply)**

| ACTIVITIES | LOCATION | TARGET | DATE |
|---|---|---|---|
| **Conduct studies on the mini-AEPs** | Casamance | 8 AEP systems | Oct – Dec 2013 |
| **Continue construction/rehabilitation of water supply infrastructure** | Casamance | 5 AEP systems | Oct – Dec 2013 |
| **Consolidate results** | Casamance | 5 AEP systems | Oct 2013 – Mar 2014 |
| **Scale up results** | Casamance | 5 AEP systems | Oct 2013 – Mar 2014 |
| **Train ASUFORs, inspection commissions, and borehole operators** | Casamance, Tambacounda, Fatick | 15 AEP systems | Oct 2013 – Jun 2014 |
| **Transfer infrastructure to the State of Senegal** | Casamance | 7 AEP systems | After final approvals |

### 4.4.2 Sanitation sub-component

The objective of USAID/PEPAM's sanitation sub-component is to implement infrastructures based on the demand in village communities, as generated by Component 2 and coordinated with partner NGOs together with CGs.

The specific objective of the sanitation sub-component is the construction of the following:

- Household sanitation infrastructures constructed by local, Program-trained masons
- Public sanitation facilities constructed by local enterprises

These infrastructures are constructed at the request of households and village communities or schools.

For FY 2013, USAID/PEPAM's Component 4 – Sanitation focused on the following:

- Completing construction of household latrines in the regions of Ziguinchor, Sédhiou, and Kolda
- Constructing 9 school sanitation blocks in the regions of Ziguinchor, Kolda, and Sédhiou
- Launching peri-urban sanitation activities in peri-urban neighborhoods in Tambacounda, in partnership with SUWASA
- Introducing the Integrated Community-Based Approach for Water, Hygiene, and Sanitation (ACIEHA) in target villages in the Tambacounda region with sanitation facilities implemented by communities as part of the CLTS approach

#### 4.4.2.1 Activities achieved

❖ **Construction of household latrines**

This year, the Program constructed **471** household latrines, bringing the total number of structures built since the start of the Program to **4,128** **(IR 4.1B)**—4,047 in rural areas and 81 in two peri-urban neighborhoods in Ziguinchor. The latrines were subsidized by USAID/PEPAM following requests from CGs/ASUFORs in the Program's target communities in the regions of Tambacounda, Kolda, Sédhiou, and Ziguinchor.

In Tambacounda, local Program-trained masons constructed the latrines, working under the effective supervision of facilitators from partner NGO EVE La Lumière and Program staff. These infrastructures were constructed at the request of households and village communities.

Also of note for this activity is the successful partnership between USAID/PEPAM and the PCVs from the PROSPERE project. Since it began in 2012, this collaboration has been carried out in 12 villages and is responsible for 249 of the 421 sanitation infrastructures constructed in the Tambacounda region.

Achievements were limited in the three Casamance regions (Sédhiou, Kolda, and Ziguinchor), consisting primarily of completing work that had begun before the regional offices closed.

The table below shows the distribution of sanitation infrastructures built since the start of the Program:

**Table 10. Distribution of latrines built in the Program's intervention regions**

| | Objectives | | | Achievements | | |
|---|---|---|---|---|---|---|
| Zone | Quotas for life of project | Objective FY-2013 | Objective Q 4 FY 2013 | Number achieved Q 4 FY 2013 | Cumulative total since start of Program | Population covered |
| Ziguinchor | | | | | | |
| Bignona (partnership with ADY) | 250 | 0 | 0 | 0 | 409 | 4,090 |
| Ziguinchor (partnership with AJAC) | 67 | 0 | 0 | 0 | 84 | 840 |
| Oussouye (partnership with AJAEDO) | 233 | 6 | 0 | 0 | 350 | 3,500 |
| Ziguinchor Bignona (partnership with PACTE) | 200 | 0 | 0 | 0 | 401 | 4,010 |

| | Objectives | | | Achievements | | |
|---|---|---|---|---|---|---|
| **Zone** | **Quotas for life of project** | **Objective FY-2013** | **Objective Q 4 FY 2013** | **Number achieved Q 4 FY 2013** | **Cumulative total since start of Program** | **Population covered** |
| Bignona (partnership with WESWA) | 167 | 279 | 4 | 4 | 969 | 9,690 |
| **Subtotal** | **917** | **285** | **4** | **4** | **2,213** | **22,130** |
| **Peri-urban Ziguinchor** | | | | | | |
| Djibock | 75 | 50 | 0 | 0 | 21 | 210 |
| Kandjialang Ouest | 75 | 50 | 0 | 0 | 60 | 600 |
| **Subtotal** | **150** | **100** | **0** | **0** | **81** | **810** |
| **Sédhiou** | | | | | | |
| Partnership with Caritas | 119 | 0 | 0 | 0 | 137 | 1,370 |
| Partnership with CASADES | 68 | 1 | 0 | 0 | 76 | 760 |
| Partnership with ENDA | 136 | 0 | 0 | 0 | 152 | 1,520 |
| Partnership with Enfance et Paix | 177 | 0 | 0 | 0 | 206 | 2,060 |
| **Subtotal** | **500** | **1** | **0** | **0** | **571** | **5,710** |
| **Kolda** | | | | | | |
| Partnership with Caritas | 177 | 50 | 0 | 0 | 241 | 2,410 |
| Partnership with CASADES | 102 | 1 | 0 | 0 | 106 | 1,060 |
| Partnership with ENDA | 53 | 0 | 0 | 0 | 107 | 1,070 |
| Partnership with FODDE | 168 | 0 | 0 | 0 | 366 | 3,660 |
| Partnership with PCV | 0 | 0 | 0 | 0 | 22 | 220 |
| **Subtotal** | **500** | **51** | **0** | **0** | **842** | **8,420** |
| **Tambacounda** | | | | | | |
| Partnership with EVE La Lumière and PCV | 1,305 | 311 | 69 | 69 | 421 | 4,210 |
| **Subtotal** | **1,305** | **311** | **69** | **69** | **421** | **4,210** |
| | | | | | | |
| **Total** | **3,372** | **748** | **73** | **73** | **4,128** | **41,280** |

### ❖ Construction of school sanitary blocks

To support WASH efforts in schools, the Program decided to build 9 school sanitary blocks in the regions of Kolda, Sédhiou, and Ziguinchor (3 per region). The following sites were selected in collaboration with school authorities:

- In the Kolda region:
  - PK 12 Elementary School
  - Manda Douane Middle Secondary School
  - Diaobé 4 Elementary School
- In the Sédhiou region:
  - Manécounda Elementary School
  - Médina Wandifa High School
  - Nioroky Elementary School
- In the Ziguinchor region:
  - TT4 Elementary School
  - Baraf Elementary School
  - Ahoumousselle Elementary School

Contracts for the construction of the 9 sanitary blocks were awarded to 8 local enterprises, and their work was supervised by the regional sanitation service units and the Program's Component 4 team leaders for sanitation infrastructure. This fiscal year, 8 of the sanitary blocks were completed and received final approval. Including the Badiana facility, we have constructed 54 sanitation units **(USAID Indicator N° 3.1.8.2-3)**.

Construction of the Médina High School sanitary block is still not completed due to the fault of the enterprise in charge of the work. Following several reminders and a summons issued by a court official, we terminated the contract and contracted another enterprise, which has restarted construction in order to complete work by late October 2013.

### ❖ Launch of peri-urban sanitation activities in Tambacounda

With the aim of implementing a peri-urban sanitation system and in anticipation of the SUWASA program's intervention in the Tambacounda commune, many activities were carried out in the commune over a period of two months. All of the stakeholders (local elected officials; regional environmental, hygiene, and sanitation technical services units; CBOs; and communities), through site visits, were included in the process of selecting the three neighborhoods. The Program also identified and trained liaisons in IEC and social marketing. Awareness-raising activities were conducted in neighborhoods, and neighborhood councils (CBOs) were revitalized.

This process was suspended due to budgetary constraints on the part of both SUWASA and USAID/PEPAM.

*Debriefing session on the neighborhood selection process in the Tambacounda mayor's office*

### ❖ Implementation of the ACIEHA approach

The second quarter of FY 2013 was dedicated to the launch of ACIEHA implementation, which combines the benefits of the subsidized and non-subsidized approaches.

The strategy for this integrated approach is broken down into two phases:

Phase 1: Implementation of the traditional CLTS approach for 2–3 months:

- Identify villages that meet the CLTS selection criteria
- Establish a baseline in each village (collect baseline data on water, sanitation, and the health profile)
- Conduct pre-launch activities (identify and orient natural leaders)

Phase 2: Introduction of subsidies as soon as households are ready to construct their own latrine:

- Conduct social marketing to encourage households to adopt the sanitation and water supply technology options supported by the Program (SanPlat, DLV, and VIP latrines; mini-boreholes with India, Vergnet, and Universal manual pumps)
- Conduct IEC for hygiene promotion
- Provide guidance/support/technical inspection throughout implementation

After 3 to 4 months of using this hybrid approach, we have seen communities that are highly motivated and are mobilizing around sanitation issues, particularly in the following areas:

- Building their own latrines
- Village sanitation
- Water sanitation
- Hand washing with soap at 5 critical times

This approach was implemented in 41 villages in the Tambacounda region. Despite the rainy season, which occupies the village's able-bodied residents and brings with it the lean economic period, we have seen a strong commitment and participation in a variety of activities on the part of communities:

- An investment of time in organizing the disposal of household waste an average of twice per month
- The mobilization of cost share in two months or less to construct mini-boreholes—69 villages mobilized the cost share in addition to maintenance funds.
- The mobilization of in-kind and cash contributions for latrine construction (82 latrines built)
- Enclosures for latrines and the installation of tippy taps (handwashing devices)
- Hand washing with soap

The head nurses at the area's health centers have unanimously agreed on the benefits of this strategy. They have noted a reduced morbidity from diarrhea and malaria in the ACIEHA villages.

Implementing the hybrid strategy has made it possible to reduce sanitation subsidies from 67.7% to 52%.

*Meeting to validate the action plan in the village of Saré Guedado, Tambacounda region*

#### 4.4.2.2 Constraints

The major challenges encountered this year were as follows:

- **Delays in the approval of household latrines**: This situation is due to insecurity related to armed conflict in Casamance. The heads of the sanitation services units in the regions of Ziguinchor, Kolda, and Sédhiou have been officially prohibited from traveling within the region. The number of latrines still not been approved is 1,489 in Ziguinchor, 572 in Kolda, and 375 in Sédhiou. The Program and the national Sanitation Director agreed on a strategy to address this problem. The new strategy involved sampling to reduce the time that state agents need to spend in these insecure areas. The proposed sampling rate of 10% was raised to 25% at the suggestion of the heads of the services units, who are still delaying implementation of this measure.
- **Low demand for peri-urban sanitation:** The economic situation of the population in peri-urban areas of Ziguinchor constitutes a major obstacle to increasing the demand for sanitation infrastructure. These neighborhoods are home to poor, indigenous populations and receive most of the refugees who come to the region. Despite the significant potential for demand, it has been difficult to generate actual requests in this area because the majority of the population sees the monetary contribution of FCFA 25,275 as out of reach. To increase demand, Component 2 developed a microcredit strategy with women in the Kandjalang Ouest neighborhood. The credit is through a neighborhood bank, to be repaid over 10 months. As a result of this strategy, 26 requests were generated in this neighborhood in the span of one week.
- **Difficulty digging in bedrock:** Rocky soil at the school sanitary block site in the village of Manda Douanes (department of Vélingara, Kolda region) led to a prolonged stoppage in completing excavations for pits, footings, and wells. Manual digging is virtually impossible at this site. The Program took over from the enterprise to contract with a builder who has a jackhammer that can be used for mechanical digging.
- **Lack of intervention coordination among sanitation actors in the Tambacounda region**: This lack of coordination leads to duplication of actors in some locations, but with different strategies. This is the case in the rural community of Koussanar, where PEPAM-ADB is in the process of enrolling 6 of the villages where we are currently implementing the ACIEHA approach. We encountered the same situation in the Ndame rural community, where Caritas is planning a sanitation and water supply project. Each time this has occurred, USAID/PEPAM has withdrawn from the location to look for other rural communities, which is one of the reasons for the delay in generating demand and building sanitation infrastructure. USAID/PEPAM mentioned this constraint at the Annual Joint Review (an important forum for discussion between GOS and technical and financial partners). UC-PEPM has promised to revive and/or create regional platforms to better coordinate projects at the regional level.
- **The economic situation of communities:** The lack of financial resources and food in villages, particularly in the period before and during the rainy season, considerably slowed the mobilization of financial cost share for latrine construction. The Program therefore asked its partner NGO to postpone this activity until a more favorable time (marketing of agricultural products).
- **The lack of professionalism among local construction contractors:** The delay in the construction of the Médina Wandifa High School sanitary block is due to a lack of

organization within the enterprise entrusted to complete the work. Despite being issued a summons by a court official to urgently complete construction, the enterprise was still unable to comply. We finally terminated the contract and awarded the project to another enterprise, which has agreed to deliver the sanitation block by late October 2013. We also recruited a consultant to provide technical monitoring of construction for 21 days.

#### 4.4.2.3 Sanitation activities planned for the next two quarters

**Table 11. Steps for Quarters 1 and 2, FY 2014 (Component 4, Sanitation)**

| ACTIVITIES | DATE | RESPONSIBLE PARTIES |
|---|---|---|
| **Training of natural community leaders in hygiene promotion** | Oct 2013 | Program heads of sanitation infrastructure, field agents, NGOs, CGs/ASUFORs |
| **Orientation of school CG members on the operation and maintenance of the sanitary facilities** | Oct – Nov 2013 | Program heads of sanitation infrastructure, head teachers |
| **Construction of latrines in rural areas of the Tambacounda region** | Oct 2013 – Feb 2014 | Program heads of sanitation infrastructure, field agents, NGOs, regional sanitation services units, CGs/ASUFORs |
| **Field agent to monitor and coordinate finalization of the Médina Wandifa school sanitary block** | Oct 2013 | Program heads of sanitation infrastructure, Grants Manager |
| **Finalization of construction of the Médina Wandifa school sanitary block** | Oct 2013 | Program heads of sanitation infrastructure, consultant |
| **Identification and training of masons for the construction of sanitary blocks at health centers in Tambacounda** | Nov 2013 | Program heads of sanitation infrastructure, field agents, regional sanitation services units |
| **Supervision of NGO and other sanitation activities – Tambacounda** | Oct – Nov 2013 | Program heads of sanitation infrastructure, Deputy Chief of Party |
| **Final approval of the Médina Wandifa school sanitary block – regional technical services unit** | Nov 2013 | Program heads of sanitation infrastructure, contractor, school principal |
| **Final approval of latrines constructed in Tambacounda** | Nov 2013 – Feb 2014 | Program heads of sanitation infrastructure, field agents, NGOs, regional sanitation services units, CGs/ASUFORs |
| **Monitoring visit for the final 36 CLTS villages that achieved open defecation free (ODF) status under the WADA 2 project** | Jan 2014 | Program heads of sanitation infrastructure, NGOs, CGs |
| **Construction of latrines in health outposts and health centers in the Tambacounda region** | Nov 2013 – Jan 2013 | Program heads of sanitation infrastructure, Regional Medical Officer, District Medical Officer |
| **Evaluation mission for the 108 CLTS villages that achieved ODF status under the WADA 2 project** | Feb 2014 | Program heads of sanitation infrastructure, NGOs, CGs |
| **Workshop on the use and distribution of the DCMS manual on water, sanitation, and hygiene in collaboration with the Ministry of Education and technical services units** | Dec 2013 | Program heads of sanitation infrastructure, DCMS, head teachers |

## 4.5 Component 5: WADA / community-led total sanitation (CLTS)

The CLTS component seeks to change the behavior of the population so that they implement the sanitation infrastructures themselves, without any subsidies. 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.

The activities of Component 5 are mainly dedicated to the WADA project, which supports the construction and rehabilitation of household latrines, hand-washing devices, and mini-boreholes equipped with manual pumps in the region of Casamance. Through the evolution of the program and capitalization of best practices from the CLTS/WADA program, the Program has evolved its approach to establish the Integrated Community Approach for Water, Hygiene, and Sanitation (ACIEHA) in the Tambacounda region.

The CLTS and ACIEHA activities combine the open defecation free (ODF) strategy, the construction of improved latrines without subsidies or with reduced subsidies, protection of water quality (through household water treatment), the management of household waste, and the promotion of innovative economic actions that support WASH initiatives.

With a large number of Program villages having attained ODF status, the objective now is to have these communities sustain their results through their commitment and creativity to further improve the environmental and health conditions in their communities.

### 4.5.1 CLTS/WADA activities achieved

The WADA project closed at the end of April 2013, and the final report was delivered to the Global Environment and Technology Foundation (GETF), Coca-Cola (The Coca-Cola Africa Foundation), and USAID at the end of June 2013.

The WADA program, in partnership with the USAID/PEPAM Program, significantly improved access to drinking water, sanitation, and hygiene promotion services in three regions of Casamance.

Thanks to the WADA program, more than 11,110 people in 68 villages—along with 4,493 students and teachers in 24 schools (in various sites in the 68 CLTS villages)—now have sustained access to good quality drinking water.

108 villages achieved ODF status and maintain good hygiene practices.

1,800 students and 275 teachers in 10 schools in the three regions now have access to improved sanitation through the construction of school sanitary blocks.

Moreover, 24,050 people from 108 CLTS villages enrolled in the program also have access to improved sanitation services and thanks to WADA 1 and USAID/PEPAM funding, 4,250 people have access to improved sanitation services through the construction of 450 subsidized household latrines. Thus the project has supported 28,300 beneficiaries to obtain access to improved sanitation.

The program helped to strengthen the local economy by training and using 9 local enterprises to install mini-boreholes in target villages. The program also trained 67 village committees in the administrative and financial management of water supply points. These committees were trained in hygiene promotion activities, which continue to highlight the importance of good practices—

hand washing, maintaining ODF status, and participating in the improvement of village environmental conditions.

### 4.5.2 Measures that the USAID/PEPAM Program has taken to build on WADA's investment

CLTS sites of the leveraged WADA and USAID/PEPAM partnership performed better than those with subsidies, and they demonstrated better community engagement and a willingness to sustain results.

CLTS sites and communities are having a visible impact on neighboring villages and subsidized sites.

A hybridized approach is proving effective—CLTS alone is not enough.

Using local NGOs and women (who are immersed in the community and know the local culture) as community liaisons ensures success in implementation and long-term sustainability.

Rigorous evaluation will help policymakers to promote CLTS as a viable approach that contributes to reaching MDGs. It is necessary to take advantage of the WADA 2 and USAID/ PEPAM data and M&E reporting, and use the data for advocacy and dissemination of the program results and best practices.

Create partnerships with local and international partners working in the water and sanitation sector by disseminating USAID/EPAM's hybrid CLTS approach.

Advocate with the GOS to integrate CLTS into a national sanitation strategy.

Support community beneficiaries to sustain results and develop their own economic activities that will help them improve their latrines and their hygiene and sanitation conditions.

Reinforce collaboration with the Peace Corps and other USAID projects in the education, health, nutrition, and agriculture sectors to broaden the hybrid CLTS program. USAID expressed interest that the water/sanitation and hygiene promotion activities be linked with and collaborate with rural health centers and health workers.

During the closeout activities, an advocacy day event for CLTS and the WADA hybrid approach to rural water and sanitation was held in the Sédhiou region. Implementing partners (NGOs), the local government authorities and technical services units, and other donors that work in the Casamance region convened to share results and best practices. World Vision, Global Sanitation Fund, JICA, UNICEF, and AGETIP are all implementing some form of CLTS activities and have taken a particular interest in the USAID/PEPAM–WADA approach and best practices. The project is working with national agencies to revise the sanitation sector and establish a set of standards to ensure that all development partners and stakeholders use a similar approach at their sites. The local government authorities and technical services units are also very much involved in searching for new partners to scale up the CLTS approach using the USAID/PEPAM and WADA model in other regions of the country.

The National Sanitation Directorate and the UC-PEPAM national coordination unit, in collaboration with the Ministry of Hydrology and Sanitation, are in the process of revising the rural sanitation strategy and technological options, and have decided to integrate CLTS with subsidized sanitation in rural and peri-urban areas to meet MDGs.

See ***Annex 02*** for tables presenting WADA results over the life of the project.

### 4.5.3 CLTS hybrid (ACIEHA) activities for Quarter 1, FY 2014

***Verification and field visits to build on the CLTS/WADA program's achievements***

USAID/PEPAM will build on the CLTS/WADA program's achievements through field visits and inspections at intervention sites. A sample of 108 villages will be selected for a survey of site status and an assessment of the sustainability of activities and achievements, functionality of sanitation systems and boreholes installed by the Program, as well as beneficiary needs.

***Continue to roll out the ACIEHA approach in 40 sites in the Tambacounda region***

The strategy for this integrated approach is rolled out in two phases, with Component 4 (see Section 4.4.2.1 for details).

# 5 Environmental Monitoring and Mitigation Plan (EMMP): Compliance and Activities

During the formulation of the USAID/PEPAM Program, USAID initiated an initial environmental evaluation. Taking into account the recommendations of this evaluation, an Environmental Monitoring and Mitigation Plan (EMMP) was developed by the Program on April 30, 2010 and approved by USAID.

Through this component, the Program aims to ensure the following:

- Monitoring and oversight of environmental effects associated with the implementation of USAID/PEPAM activities
- Mitigation of adverse effects of activities on the biophysical surroundings (water, air, and soil)

The activities included in our EMMP cover three main areas: (1) the protection of water resources, (2) the preservation of vegetation, and (3) the maintenance of the environmental health.

This year, the principle activities were as follows:

- Held validation workshops for environmental evaluation reports
- Trained members of regional technical committees in environmental monitoring
- Monitored mitigation actions included in the EMMP in Tambacounda, Kolda, Sédhiou, and Ziguinchor

## 5.1 Activities

### 5.1.1 Validation of environmental audits and evaluations

At the request of Senegalese authorities in charge of the environment, USAID/PEPAM conducted an audit of completed infrastructures and a strategic environmental assessment for upcoming activities. After first being reviewed by the Department of the Environment and Classified Natural Resources (DEEC), the consultants' reports were sent to regional technical committees, which met and validated the reports. However, the technical committee in the Ziguinchor region wished to hold a closed meeting before issuing a certificate of compliance, to determine if the consultant had integrated the observations from the committee meeting into the

report. After several communications and reminders, we are still waiting for the DEEC's Division of Environmental Impact Studies to convene this meeting.

We are also still waiting for the DEEC to issue certificates of environmental compliance for Program activities in Sédhiou, Kolda, and Tambacounda.

### 5.1.2 Training of regional environmental technical committee members in strategic environmental assessment

During the report validation meetings, the committees in Kolda, Sédhiou, and Tambacounda strongly recommended that their own members receive capacity building in environmental evaluation and monitoring. The Program agreed to this request and arranged for a consultant to conduct this training. Three workshops (one per region) were organized.

The main outcomes expected from these workshops were as follows:

- The targeted actors should have their capacities strengthened in environmental monitoring in general, and particularly in strategic environmental assessments.
- Regional Program stakeholders will have a clear understanding of environmental and social issues related to water and sanitation projects.
- The training sessions will contribute to the consideration and integration of environmental and social aspects in projects dealing with water and sanitation infrastructure and facilities.

A total of 48 regional leaders (heads of regional technical services, representatives of regional development agencies in the three regions, local elected officials) were trained in environmental monitoring.

The following recommendations were made at the end of the workshops:

- Increase the length of the training, given the importance of the subject and the level of responsibility that committee members are taking on.
- Provide awareness-raising for and involve more medical regions in environmental and social management issues in general and more specially in environmental issues concerning medical facilities.
- Consider raising public awareness on the existence and presence of a regional environmental service able to support them in finding solutions to their environmental problems.
- Strengthen decentralized technical services units' capacity to conduct environmental audits and risk assessments.
- Provide institutional support (computer equipment, monitoring equipment such as GPS, and other measurement instruments) to regional technical services units.
- Expand training on other environmental issues.
- Disseminate the environmental evaluation at the rural community level.
- Decentralize these workshops down to the rural community level.
- Organize workshops for the PCRs and mayors.
- Advocate with authorities for a PEPAM-wide strategic environmental assessment which would harmonize various donors' interventions in environmental and social management.

- Continue to strengthen the capacity of regional technical services units by offering additional training modules on the issue of climate change.
- Organize training sessions for the technical services units on USAID's toolkits.

### 5.1.3 Monitoring of EMMP mitigation actions in Tambacounda, Kolda, Sédhiou, and Ziguinchor

The table below provides information on the effects of program activities and mitigation actions taken:

**Table 12. Implementation of mitigation measures against the Program's negative effects during FY 2013**

| Negative impacts | Indicators | Mitigation measures |
|---|---|---|
| **Groundwater contamination due to poor construction methods (mini-boreholes)** | Periodic technical monitoring and checks of borehole construction by technical field staff<br>Application of construction standards | 13 drilling enterprises were trained by the Program (2 in Tambacounda, 5 in Ziguinchor, 3 in Kolda, and 3 in Sédhiou)<br>Use of 2 mini-rig drills by Program staff and one enterprise<br>The 49 new boreholes in Kolda (7), Sédhiou (12), Ziguinchor (15), and Tambacounda (15) as well as 6 rehabilitations in Kolda (3) and Ziguinchor (3) will be cleaned and disinfected before being placed into service. |
| **Depletion of the water table and increased salinity caused by drawing water at the water supply points** | Site selection informed by the hydrogeological data from the applicable State services (Water Resources Management and Planning Department [DGPRE]) | All the villages equipped with water supply infrastructures were chosen in collaboration with the regional water supply departments. There is evidence that the amount of water taken by our mini-boreholes is marginal compared to the water table level. |
| **Groundwater contamination due to poor site preparation for boreholes and latrines** | Infrastructure installation sites selected in accordance with applicable standards | - **89 household latrines** have been installed by committee. The installation records are filed in our offices in Tambacounda and Dakar.<br>- **61 mini-boreholes**—in Tambacounda (13), Kolda (11), Ziguinchor (18), and Sédhiou (19)—have been installed in the presence of the Regional Water Divisions of Tambacounda, in accordance with all regulations. |
| | Water quality inspected by the Hygiene Services Unit or the University of Ziguinchor laboratory before boreholes are placed into service | - Water from 72 mini-boreholes was analyzed by the Hygiene Brigades of Tambacounda (16), Kolda (11), Ziguinchor (26), and Sédhiou (19). The water quality for these infrastructures was judged good. However, we have noted a fairly high iron content level in 15 mini-boreholes in the Tambacounda region.<br>- 77 mini-boreholes received approval from the regional Water Supply |

| Negative impacts | Indicators | Mitigation measures |
|---|---|---|
| | | Divisions in Tambacounda (16), Ziguinchor (29), Sédhiou (19), and Kolda (13). |
| **Groundwater contamination due to poorly applied coating, causing the surface water to drain into the borehole** | Installation workers (craftsmen) inspected in a timely manner by the Water Supply Services Unit and Program field agents<br>Training of craftsmen in manual drilling and masonry | - For the 79 mini-boreholes installed this year:<br>o 56 mini-boreholes were installed by drillers trained by the Program with close supervision by USAID/PEPAM field agents.<br>o 23 mini-boreholes were installed with the mini-rig drill by enterprises, under Program supervision. |
| **Proliferation of waterborne diseases linked to poor operation of latrines and improper drainage systems** | Periodic maintenance activities by Program staff with beneficiaries on the operation and maintenance of latrines and on emptying techniques for full latrine pits | NGO facilitators, supported by Program field staff, regularly conduct IEC sessions with the beneficiaries of sanitation facilities in the villages. Topics include latrine operation and maintenance.<br>We have not yet encountered full latrines; however, we have requested that the facilitators teach beneficiaries the co-composting techniques set out in the Program sanitation guide. |
| **Groundwater contamination due to the lack of proper enclosures or barriers separating unsuitable activities from water supply points** | Periodic checks of water supply points by Program field agents and the CGs/ASUFORs | A protected area is systematically established around all water supply points. Within this boundary, no farming or domestic activities, such as washing laundry or dishes or dumping solid or liquid waste are allowed.<br>Of the 79 mini-boreholes installed this year, 28 are enclosed and 6 are within a school enclosure.<br>Enclosures are underway for the remaining 51. |

For large water supply infrastructures, the environmental clauses in the interim reports on the strategic environmental assessments have been included in the DAOs (tender documents), and the heads of the Regional Departments of the Environment and Classified Natural Resources (DREECs) in the Kolda, Sédhiou, and Ziguinchor regions have conducted monitoring visits at the large infrastructure worksites. The monitoring performed by Program staff has led to implementation of the actions presented in the table below.

**Table 13. Negative impacts and mitigation measures for large water supply infrastructures**

| Sites | Findings | Mitigation measures |
|---|---|---|
| Mampatim | The route for the discharge pipe runs through some parcels of land for residential use and a pig and chicken coop. | Reconstruction of the pigpen on another site assigned by the municipal council<br>Realignment of 5 parcels crossed by the discharge pipe to clearly identify (1) the route covered by the pipe as well as (2) the land compensated by the municipal council for the 5 parcels crossed by the route<br>Extension and perimeter enclosure around the old borehole. |
| Kartiack | Felling mango trees on the water tower site | The Program has a plan for compensatory reforestation. This activity will be conducted in partnership with the regional Departments of Water and Forestry.<br>Compulsory wearing of helmets in the security perimeter |
| Diouloulou | Felling cashew trees on the drilling site<br>Risk of accidents during pour operations for the water tower | |
| Salikégné | Damage to neem tree roots at the drilling site | |
| Ebinako | Risk of accidents during pour operations for the water tower | Security perimeter marked and compulsory wearing of helmets in the security perimeter during pour operations |
| Marsassoum | Various nuisances caused by working on the network | Installation of road signs for work that interferes with traffic |
| Bessire | Risk of accidents during operations to erect posts | Helmets are compulsory for staff on the drilling site |

### 5.1.4 Water quality analyses

To verify the quality of water available to beneficiaries, the hygiene technical services units in various Program intervention regions carry out physicochemical and bacteriological analyses of water from all new infrastructures. Compliance with implementation criteria and hygiene regulations during implementation of these infrastructures has minimized the risk of contaminating water supply points.

The hygiene technical services units analyzed water from a total of 72 water supply points in the Ziguinchor, Sédhiou, Kolda, and Tambacounda regions.

**Table 14. Results of water analyses carried out by regional hygiene technical services units in Ziguinchor, Kolda, Sédhiou, and Tambacounda (FY 2013)**

| Region | No. of mini-boreholes installed in FY 2013 | No. of boreholes analyzed | No. of boreholes analyzed with water of poor quality |
|---|---|---|---|
| **Ziguinchor** | 30 | 26 | 0 |
| **Kolda** | 14 | 11 | 0 |
| **Sédhiou** | 19 | 19 | 0 |
| **Tambacounda** | 16 | 16 | 0 |
| **Total** | **79** | **72** | **0** |

### 5.1.5 Other activity

The Chief of Party, the M&E Officer, and the head of EMMP participated in the training workshop for USAID/Senegal partners on the theme "Compliance with environmental legislation, design, and management over the life of the project." Mr. Benjamin Opoku and Mr.

Daniel Whyner from USAID/West Africa's Regional Office of Environment and Climate Change Response, and Ms. Oumou Ly from USAID/Senegal facilitated the workshop.

### 5.1.6 Constraints

- **Delay due to administrative bottlenecks:** The process of implementing the strategic environmental assessment of Program activities has experienced many delays from administrative procedures. It was necessary for the USAID Economic Growth Office to intervene in order to expedite the proceedings. We have been waiting for more than six months for environmental compliance certificates.
- **Weak operational capacity of State services in charge of environmental monitoring at the regional level:** In confirmation of this deficiency, regional technical committee members attending validation meetings for the strategic environmental assessment reports have strongly requested capacity building support for environmental monitoring. In part, this situation has come about because they have not taken the initiative to become involved in Program implementation. To remedy this deficiency, the Program has organized training workshops on strategic environmental assessments for environmental stakeholders in the Kolda, Sédhiou, and Tambacounda regions.
- **Insecurity in the Ziguinchor, Kolda, and Tambacounda regions**: This situation has delayed water analysis campaigns for mini-boreholes before they are placed into service. It is always necessary to wait for lulls in the conflict to carry out water analyses.

## 5.2 Activities planned for the next quarter

**Table 15. Steps for Quarter 1, FY 2014 (EMMP)**

| ACTIVITIES | DATE | RESPONSIBLE PARTIES |
|---|---|---|
| Water quality analyses for boreholes in Tambacounda, Sédhiou, and Kolda | Oct 2013 – Feb 2014 | Head of Component 3,<br>Head of Component 4-EMMP, Hygiene Brigades |
| Compensatory reforestation for 7 large infrastructure sites with and 2 schools | Oct 2013 | Head of Component 4-Water Supply, Head of Component 4-EMMP, Regional Departments of Water and Forestry |
| Conduct monitoring missions in the regions of Ziguinchor, Sédhiou, Kolda, and Tambacounda | Nov 2013 – Feb 2014 | Head of Component 4-EMMP, DREEC |
| Monitor water quality | Oct 2013 – Jun 2014 | Head of Component 3 and 4-EMMP, Hygiene technical services units |
| Supervision of 7 large infrastructure sites by regional environmental committees | Oct 2013 – Mar 2014 | Head of Component 4-EMMP, DREEC |
| Supervision of activities for small water supply and sanitation in Tambacounda by the regional environmental committees | Oct 2013 – Feb 2014 | Head of Component 4-EMMP, DREEC, NGOs, Agents de Terrain Polyvalent |
| Security enclosures around drilling sites | Oct – Nov 2013 | Head of Component 4-Water Supply, Head of Component 4-EMMP, PCRs |
| Realignment & re-designation of land parcels and transfer of connector boxes | Oct – Nov 2013 | Head of Component 4-Water Supply, Head of Component 4-EMMP, PCRs |
| Reconstruction of buildings affected | Oct – Nov 2013 | Head of Component 4-Water Supply, Head of Component 4-EMMP, PCRs |

| ACTIVITIES | DATE | RESPONSIBLE PARTIES |
|---|---|---|
| Planning for water run-off catchment channels, bayous | Oct – Nov 2013 | Head of Component 4-Water Supply, Head of Component 4-EMMP, PCRs, Regional Water Supply Division (DRH), ASUFORs |
| Installation of piezometers | Oct – Nov 2013 | Head of Component 4-Water Supply, DRH |
| Purchase and delivery of 2 Potalabs + reagents for the Tambacounda Regional Hygiene Brigade and the DGPRE | Oct 2013 | Head of Component 4-EMMP |
| Training on the USAID toolkits (environmental evaluation and integration of the environment in the design and management of development activities) for regional environmental committees and elected officials from the rural communities | Dec 2013 | Head of Component 4 EMMP, DREEC, Consultant |
| Training workshops for regional environmental committees and elected officials from the rural communities on climate change impacts on water, sanitation, and hygiene promotion projects | Feb 2014 | Head of Component 4 EMMP, DREEC, Consultant |

# 6 Program Grant Activities and Grants Management

The aim of the grants portion of the Program is to provide financial support for Program implementation through funding for activities and subsidies, to support beneficiaries of direct USAID grants through the Development Grant Program (DGP), and to mobilize and document beneficiary contributions—cost share.

## 6.1 Activities achieved

During this fourth year of implementation, the Program has focused on evaluating NGO partners' activities in Kolda and Sédhiou, closing out WADA/CLTS activities in Casamance, starting up activities in Tambacounda, and collecting and recording cost share.

### 6.1.1 Evaluation of NGOs' performance in Kolda and Sédhiou

As in Ziguinchor, the Program evaluated the NGO partners' performances in the Sédhiou and Kolda regions for the grants portion of USAID/PEPAM and the CLTS portion. The NGOs evaluated were as follows: FODDE, Caritas, CASADES, ENDA, and Enfance et Paix for the USAID/PEPAM Program—completed on March 31, 2013; and CASADES, ENDA, and Kabonketoor for the WADA/CLTS sub-program—completed on April 30, 2013.

The evaluation criteria were as follows:

- Understanding of the mission assigned to the NGO
- Pro-active NGO that anticipates difficulties and communicates them effectively
- Responsiveness of the NGO in adapting to challenges and responding appropriately
- Performance in submitting deliverables

- Quality of deliverables
- Good resource management
- Quality personnel
- Reasonable costs
- Financial reports submitted on time
- Reports and administrative documents furnished in a timely manner

The performance evaluation files for these NGOs are archived with the Program and were shared with USAID in adherence to the USAID Forward policy, a policy of sustainability for activities and programs through local NGOs.

### 6.1.2 Selection and orientation of the local NGO for implementing and monitoring activities in the Tambacounda region

To diversify its intervention, the Program contracted with a local NGO, EVE La Lumière, following a selection process. This NGO will take into account the Program's new, integrated approach to the technology package offered (CLTS, sanitation, hygiene, water supply). The implementation involves 88 villages in the rural communities of Maka Colibantang, Koussanar, Sinthiou Maléme, Dialacoto, Nétéboulou, Goumbayel, Koar, Sinthiou Bocar Aly, Balla, Bamba Thialéne, Ndoga Babacar, Maléme Niani, and Kouthiaba.

With the ACIEHA approach in Tambacounda, the system of financing latrines through fixed obligation grants (FOGs) will still be in use. The Grants Manager designed a new form that has been made available to the Tambacounda office staff. The staff were given initial training on how to fill out these documents, which will save time in developing the FOG financial files.

### 6.1.3 Mobilization of cost share

USAID/PEPAM's philosophy for cost share is to help people ultimately take responsibility themselves in financing all or part of the costs for infrastructures. This will be achieved through mobilization of their own funds or by mobilizing alternative financing. The population's contributions for infrastructure construction is in kind (sand, gravel, digging, water, etc.) or in cash—10% to 15% of the infrastructure's value.

The Program's NGO partners contribute by taking charge, in part, of operating costs.

USAID/PEPAM made significant efforts to collect cost share by exploring various possibilities that exist in the following areas:

- Large and medium-sized infrastructures
- Collaboration with GOS technical services units
- Infrastructures in Tambacounda
- Etc.

In total, taking into account the support of subcontractors Relief International and TetraTech ARD, the cost share mobilized and documented by the Program through September 30, 2013 is US$702,560.

The table detailing cost share mobilization is presented in ***Annex 7.***

### 6.1.4 USAID-DGP grantees

There were five local NGOs that received direct grants from USAID through the DGP—CREPA, WAMEE, RADI, Caritas, and GADEC. All of these NGOs have already closed out their activities and programs. USAID/PEPAM provided multifaceted support to the DGP grantees:

- Review and inputs on work plans
- Review of technical reports
- Help in understanding the indicators and the calculation method
- Technical guidance on types of infrastructure and construction standards
- Design and review of the EMMP
- Capacity strengthening for personnel

Under USAID's DGP 3, only Caritas was selected to conduct water and sanitation activities. The Caritas program will have interventions in the following three areas:

- Karthiack (Ziguinchor) where we are already working
- Saré Bidji (Kolda) near our sites
- Ndame (Tambacounda)

USAID/PEPAM is currently providing technical advice and support to Caritas for the start-up of activities, especially in the areas of developing terms of reference (TDRs), reviewing technological options, and selecting sites, and the Program is offering guidance on local enterprises that are capable of being contracted for project work. Numerous meetings have already occurred in the field, and a national meeting with USAID is planned to better understand roles and responsibilities as well as to outline our support on this new program.

## 6.2 Monitoring activities for grants, DGP grantees, NGO partners, and cost share during FY 2014

**Table 16. Steps for FY 2014 (Grants)**

| ACTIVITIES | DATE | RESPONSIBLE PARTIES |
|---|---|---|
| Monitoring of grantees – CGs and FOG grantees, and the NGO EVE La Lumière<br>• Financial and contractual monitoring<br>• Monitoring of deliverables and payments<br>• Visits and monitoring in the field | Oct 2013 – Apr 2014 | Subcontractors, Grants Manager |
| Monitoring and recording of contributions from beneficiaries and Program partners—cost share | Oct 2013 – Apr 2014 | USAID/PEPAM staff and Grants Manager |
| Technical guidance and support for DGP grantee Caritas | Oct 2013 – Apr 2014 | Caritas, Grants Manager |

# 7 Data Collection, Monitoring and Evaluation (M&E) Activities, and Performance Management Plan (PMP)

## 7.1 M&E and PMP

This year was marked by the resignation of the M&E Officer and the recruitment of his successor. Also, all USAID/PEPAM databases were verified to confirm consistency between the databases and the data submitted in the various reports. In addition to these activities, M&E has focused of four major activities during FY 2013: (1) data collection, processing, and reporting; (2) revision of the PMP; (3) capacity strengthening for grassroots stakeholders in M&E information management and archiving verification means for indicators; and (4) quality control of the collected data.

### 7.1.1 Data collection, processing, and reporting

***Data collection***

Data collection was completed on time at the end of each quarter of FY 2013. It was carried out in various Program intervention locations by the following actors:

- Ziguinchor, Sédhiou, and Kolda: by the M&E assistant
- Tambacounda: by Program facilitators and agents from the NGO EVE La Lumière during each quarter

These actors collected information under the supervision of the M&E Officer. Other Program staff have also periodically inspected the accuracy of information received before entry into or updating of the database.

***Processing of collected data***

The automated system for M&E information (MONDABA) generates timely information about the indicators for the grants portion of the Program. At the end of September 2013, the Program PMP included 43 indicators for the grants program. Also, all the M&E dashboards are produced regularly, on time, and shared with Program staff and other stakeholders.

***Information reporting***

- **Internally**

The Program technical coordination meetings were key events to share the M&E information contained in periodic performance reports with staff members and to make decisions based on that information.

- **To UC-PEPAM**

UC-PEPAM uses a form called the “Operation Form” as its main means to learn about the achievements of its partners. To support this, USAID/PEPAM updated this sheet during the first quarter of FY 2013. These updates were transmitted to UC-PEPAM so that information on the Program’s contribution to meeting water and sanitation MDGs is current.

- **To USAID**

Program results were presented to USAID at the end of each quarter during FY 2013. These presentations are always followed by useful discussions and recommendations from USAID/Senegal to ensure better management and greater efficiency in the Program.

### 7.1.2 Revisions to the PMP

The Program's PMP was revised during FY 2013, with changes to targets.

These changes to the targets came about for three main reasons:

- Addition of WADA 2 results to those of USAID/PEPAM, with USAID approval
- Elimination of latrines in peri-urban areas and the three SUWASA neighborhoods
- Reduction in the number of sites in Tambacounda for water supply and sanitation activities, due to Program evolution and changes in the number of beneficiaries for small and medium-sized infrastructures

Note that these changes have affected only the five standard USAID indicators. The following table provides information on the target revisions.

**Table 17. Target revisions in the Program PMP**

| | No. of persons gaining access to safe drinking water | Apr to Sep 2013 | 2014 | No. of persons gaining access to improved sanitation | Apr to Sep 2013 | 2014 | Observations |
|---|---|---|---|---|---|---|---|
| Results from Program start to March 2013 | 43,890 | | | 39,660 | | | |
| Results from WADA 2 to add | 11,100 | 11,100 | | 23,810 | 23,810 | | 99% of 24,050 beneficiaries and 2,405 latrines were constructed in compliance with JMP* standards |
| Additional results starting in June 2013 | 17,700 | 10,800 | 6,900 | 4,500 | 1,250 | 3,250 | For the Tambacounda sites: 59 water supply sites; 34 sanitation sites, of which 10 are in negotiations<br>20 rescheduled rehabilitation sites will be recorded in the Year 5 numbers |
| Public sanitation facilities | | | | 1,575 | 1,575 | | 9 public facilities (3 per region), 5 stalls per latrine = 45 stalls x 9 = 1,575 |
| GMI† – additional results | 33,800 | 33,800 | | | | | |
| Mini AEP | 9,400 | | 9,400 | | | | |
| **TOTAL – Revisions proposed in June 2013** | **115,890** | **55,700** | **16,300** | **69,545** | **26,635** | **3,250** | |
| **Existing targets** | **129,700** | | | **89,700** | | | |
| **% of expected results** | **89%** | | | **78%** | | | |
| **Difference** | **-13,810** | | | **-20,155** | | | |

* JMP = Joint Monitoring Programme, UNICEF

† GMI = large and medium-sized infrastructure

### 7.1.3 Capacity strengthening in M&E information management

A USAID/PEPAM mission, consisting of the M&E Officer, the M&E assistant, and the archivist, worked with the Tambacounda Regional Coordination Office to establish a local system for physically and electronically archiving documentation for performance indicators.

This mission accomplished the following:

- Established an inventory of data archiving
- Oriented and educated all the Regional Office staff on archiving
- Archived, physically and electronically, all verification documentation for indicators that were on site, and set up boxes for archiving missing pieces
- Trained three field agents from the Tambacounda office to use a multipage scanner

In addition, it was recommended that field staff collect and archive (physically and electronically) all missing supporting documentation no later than January 11, 2013 (copies of partnership agreements, minutes from informational workshops with PCRs, reports, the MeRO manual and training guide plus attendance sheets, report on hygiene promotion training and attendance sheets for the village of Koussanar, cost share forms for water and sanitation, etc.).

In July 2013, the M&E team organized a field visit to Tambacounda to promptly correct errors that had been made in filling out data collection forms and, at the same time, offer refresher training to Program staff and agents from the NGO EVE La Lumiére. This visit was also an opportunity to review the archiving of supporting documentation as well as the status of missing pieces.

All documents are now archived by village. In addition, the M&E assistant scanned all the documents to electronically archive them and made the necessary copies. The original supporting documentation will now be filed in Dakar.

The Program's archiving system has been completely redesigned. The changes deal with the classification method, which is now filed by village and by NGO. This exercise was also an opportunity to take inventory to verify the existence of all supporting documents. At the writing of this report, several supporting documents are still missing. These are in the process of being collected.

### 7.1.4 Data quality control and archiving verification means

The quality of collected data was rigorously analyzed at the end of each quarter during FY 2013. All of the M&E data were systematically examined for validity, reliability, integrity, accuracy, and precision for the reporting period. The data collected were satisfactory this year.

## 8 Collaboration with SUWASA and Peri-urban Activities

Despite the Program's best efforts between August 2012 and March 2013 to plan activities and a partnership with the SUWASA program, this partnership has not led to a common goal. As directed by USAID, we stopped collaboration with SUWASA, including peri-urban activities planned in the cities of Tambacounda and Dakar. This change in partnership has had an impact on our performance indicators; we have had to change/decrease targets for the number of beneficiaries having access to an improved sanitation system.

# Annexes

# Annex 1: Performance Indicators – FY 2013 Results

| | | Targets LoP | Targets FY 2013 | Planned & Programmed for FY 2013 | | | | Realization | | | | | | | | | | Remaining Targets |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | Q1 | Q2 | Q3 | Q4 | Total FY 2010 | Total FY 2011 | Total FY 2012 | Total FY 2013 | FY13 Q1 | FY13 Q2 | FY13 Q3 | FY13 Q4 | WADA results | Total FY 2010 thru FY 2013 Q4 | |
| Program Objective: Sustainable access to improved water and sanitation systems and promotion of better hygiene in targeted areas of Senegal increased | | | | | | | | | | | | | | | | | | |
| A: Number of people gaining access to an improved drinking water source (USAID Standard Indicator) (Gender Indicator) | Z'chor F | 14,486 | 2,568 | 1,000 | 1,000 | 568 | - | 600 | 2,625 | 3,570 | 4,155 | 150 | 3,750 | 105 | 150 | 1,350 | 12,300 | 2,186 |
| | Z'chor M | 14,486 | 2,568 | 1,000 | 1,000 | 568 | - | 600 | 2,625 | 3,570 | 4,155 | 150 | 3,750 | 105 | 150 | 1,350 | 12,300 | 2,186 |
| | Sdhu F | 8,692 | 1,541 | 500 | 500 | 541 | - | - | 975 | 3,150 | 1,425 | 675 | - | 600 | 150 | 1,275 | 6,825 | 1,867 |
| | Sdhu M | 8,692 | 1,541 | 500 | 500 | 541 | - | - | 975 | 3,150 | 1,425 | 675 | - | 600 | 150 | 1,275 | 6,825 | 1,867 |
| | Kld F | 8,692 | 1,541 | 500 | 500 | 541 | - | - | 1,200 | 3,450 | 3,117 | 600 | - | 300 | 2,217 | 1,200 | 8,967 | (275) |
| | Kld M | 8,692 | 1,541 | 500 | 500 | 541 | - | - | 1,200 | 3,450 | 3,117 | 600 | - | 300 | 2,217 | 1,200 | 8,967 | (275) |
| | R3-TMB F | 26,075 | 4,622 | 1,000 | 1,000 | 1,000 | 1,620 | | | - | 2,250 | - | - | - | 2,250 | - | 2,250 | 23,825 |
| | R3-TMB M | 26,075 | 4,622 | 1,000 | 1,000 | 1,000 | 1,620 | | | - | 2,250 | - | - | - | 2,250 | - | 2,250 | 23,825 |
| | **Total** | **115,890** | **20,540** | **6,000** | **6,000** | **5,300** | **3,240** | **1,200** | **9,600** | **20,340** | **21,893** | **2,850** | **7,500** | **2,010** | **9,533** | **7,650** | **60,683** | **55,207** |
| B: Number of people gaining access to an improved sanitation facility (USAID Standard Indicator) (Gender Indicator) | Z'chor F | 17,386 | 3,974 | 1,000 | 1,000 | 1,000 | 973 | 160 | 7,410 | 2,440 | 1,460 | 1,080 | 150 | 210 | 20 | 5,628 | 17,098 | 288 |
| | Z'chor M | 17,386 | 3,974 | 1,000 | 1,000 | 1,000 | 973 | 160 | 7,410 | 2,440 | 1,460 | 1,080 | 150 | 210 | 20 | 5,628 | 17,098 | 288 |
| | Sdhu F | 6,955 | 2,649 | 1,000 | 500 | 500 | 649 | - | 1,095 | 1,755 | 5 | - | 5 | - | - | 4,239 | 7,094 | (140) |
| | Sdhu M | 6,955 | 2,649 | 1,000 | 500 | 500 | 649 | - | 1,095 | 1,755 | 5 | - | 5 | - | - | 4,239 | 7,094 | (140) |
| | Kld F | 6,955 | 3,974 | 1,000 | 1,000 | 1,000 | 974 | - | 975 | 2,980 | 630 | 230 | 25 | - | 375 | 4,163 | 8,748 | (1,793) |
| | Kld M | 6,955 | 3,974 | 1,000 | 1,000 | 1,000 | 974 | - | 975 | 2,980 | 1,005 | 230 | 25 | - | 750 | 4,163 | 9,123 | (2,169) |
| | R3-TMB F | 3,477 | 2,649 | 1,000 | 500 | 500 | 649 | | | 1,320 | 825 | 85 | 20 | 335 | 385 | - | 2,145 | 1,332 |
| | R3-TMB M | 3,477 | 2,649 | 1,000 | 500 | 500 | 649 | | | 1,320 | 825 | 85 | 20 | 335 | 385 | - | 2,145 | 1,332 |
| | **Total** | **69,545** | **26,490** | **8,000** | **6,000** | **6,000** | **6,490** | **320** | **18,960** | **16,990** | **6,215** | **2,790** | **400** | **1,090** | **1,935** | **28,060** | **70,545** | **(1,000)** |
| C: Number of rural households benefiting directly from USG interventions (USAID Standard Indicator) | Z'chor | 6,832 | 1,755 | 500 | 500 | 755 | - | 272 | 2,323 | 999 | 2,875 | 203 | 390 | - | 2,282 | 679 | 7,148 | (317) |
| | Sdhu | 2,733 | 351 | 200 | - | 151 | - | - | 274 | 1,755 | 144 | 28 | 1 | 78 | 37 | 511 | 2,684 | 49 |
| | Kld | 2,733 | 702 | 200 | 350 | 152 | - | - | 290 | 762 | 655 | 135 | 3 | 37 | 480 | 434 | 2,141 | 592 |
| | R3-TMB | 1,366 | 702 | 200 | 200 | 150 | 152 | - | | 182 | 539 | 46 | - | 124 | 389 | - | 721 | 645 |
| | **Total** | **13,663** | **3,510** | **1,100** | **1,050** | **1,208** | **152** | **272** | **2,887** | **3,698** | **4,213** | **412** | **394** | **239** | **3,168** | **1,624** | **12,694** | **969** |
| D: Number of school children gaining access to an improved drinking water source through USAID/PEPAM (Gender Indicator) | Z'chor F | 505 | - | - | - | - | - | | | 938 | 462 | - | 438 | - | 24 | 652 | 2,052 | (1,547) |
| | Z'chor G | 621 | - | - | - | - | - | | | 1,167 | 538 | - | 502 | - | 36 | 786 | 2,491 | (1,870) |
| | Sdhu F | 825 | - | - | - | - | - | - | | 633 | 426 | 426 | - | - | - | 885 | 1,944 | (1,119) |
| | Sdhu G | 927 | - | - | - | - | - | - | | 711 | 680 | 680 | - | - | - | 1,070 | 2,461 | (1,534) |
| | Kld F | 336 | - | - | - | - | - | - | | 420 | 64 | 32 | - | 32 | - | 498 | 982 | (646) |
| | Kld G | 336 | - | - | - | - | - | - | | 459 | - | - | - | - | - | 602 | 1,061 | (725) |
| | R3-TMB F | | 672 | - | 672 | - | - | - | | - | - | - | - | - | - | - | - | - |
| | R3-TMB G | | 672 | - | 672 | - | - | - | | - | - | - | - | - | - | - | - | - |
| | **Total** | **3,550** | **1,344** | **-** | **1,344** | **-** | **-** | **-** | | **4,328** | **2,170** | **1,138** | **940** | **32** | **60** | **4,493** | **10,991** | **(7,441)** |
| E: Number of school children gaining access to an improved sanitation facility through USAID/PEPAM (Gender Indicator) | Z'chor F | 544 | - | - | - | - | - | | | 217 | - | - | - | - | - | 350 | 567 | (23) |
| | Z'chor G | 528 | - | - | - | - | - | | | 361 | - | - | - | - | - | 675 | 1,036 | (508) |
| | Sdhu F | 684 | 504 | - | 504 | - | - | | | - | 65 | - | - | 18 | 47 | 175 | 240 | 444 |
| | Sdhu G | 645 | 504 | - | 504 | - | - | | | - | 94 | - | - | 24 | 70 | 350 | 444 | 201 |
| | Kld F | 224 | 504 | - | 504 | - | - | | | - | 172 | - | - | 100 | 72 | 175 | 347 | (123) |
| | Kld G | 224 | 504 | - | 504 | - | - | | | - | 218 | - | - | 112 | 106 | 350 | 568 | (344) |
| | R3-TMB F | | - | - | - | - | - | | | - | - | - | - | - | - | - | - | - |
| | R3-TMB G | | - | - | - | - | - | | | - | - | - | - | - | - | - | - | - |
| | **Total** | **2,849** | **2,016** | **-** | **2,016** | **-** | **-** | | | **578** | **549** | **-** | **-** | **254** | **295** | **2,075** | **3,202** | **(353)** |

| | | Targets LoP | Targets FY 2013 | Planned & Programmed for FY 2013 | | | | Realization | | | | | | | | | | Remaining Targets |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | Q1 | Q2 | Q3 | Q4 | Total FY 2010 | Total FY 2011 | Total FY 2012 | Total FY 2013 | FY13 Q1 | FY13 Q2 | FY13 Q3 | FY13 Q4 | WADA results | Total FY 2010 thru FY 2013 Q4 | |
| ***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 trained with project support | Z'chor | 54 | 14 | 14 | - | - | - | 53 | - | 2 | 23 | 12 | 11 | - | - | 25 | 103 | (49) |
| | Sdhu | 30 | - | - | - | - | - | - | 30 | 5 | 4 | - | - | 4 | - | 36 | 75 | (45) |
| | Kld | 30 | 2 | - | 2 | - | - | - | 28 | 29 | 12 | 4 | - | 8 | - | 32 | 101 | (71) |
| | R3-TMB | 90 | 78 | 38 | 14 | 13 | 13 | | | 18 | 58 | 14 | 1 | 42 | 1 | - | 76 | 14 |
| | **Total** | **204** | **94** | **52** | **16** | **13** | **13** | **53** | **58** | **54** | **97** | **30** | **12** | **54** | **1** | **93** | **355** | **(151)** |
| 1.B: Number of village-level water and sanitation plans (PLHAs) completed in partner communities | Z'chor | 22 | - | - | - | - | - | 12 | 10 | 3 | - | - | - | - | - | - | 25 | (3) |
| | Sdhu | 4 | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | 4 |
| | Kld | 4 | - | - | - | - | - | - | - | 18 | 9 | - | - | - | - | - | 27 | (23) |
| | R3-TMB | 4 | - | - | - | - | - | | | - | - | - | - | - | - | - | - | 4 |
| | **Total** | **34** | **-** | **-** | **-** | **-** | **-** | **12** | **10** | **21** | **9** | **-** | **-** | **-** | **-** | **-** | **52** | **(18)** |
| 1.C: Number of WUAs in partner communities that have established maintenance contracts with local private service providers in place | Z'chor | 54 | 51 | 37 | 14 | - | - | - | 14 | 2 | 61 | - | 61 | - | - | | 77 | (23) |
| | Sdhu | 30 | 41 | 21 | 21 | - | - | - | 8 | 13 | - | - | - | - | - | | 21 | 9 |
| | Kld | 30 | 28 | 14 | 14 | - | - | - | 13 | 18 | - | - | - | - | - | | 31 | (1) |
| | R3-TMB | 90 | 48 | 12 | 12 | 12 | 12 | | | | 1 | - | - | 1 | - | - | 1 | 89 |
| | **Total** | **204** | **168** | **84** | **61** | **12** | **12** | **-** | **35** | **33** | **62** | **-** | **61** | **1** | **-** | **-** | **130** | **74** |
| 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 | 95% | 80% | 0% | 80% | 0% | 0% | 0% | 0% | 0% | 0% | 0% | 0% | 0% | 0% | 0% | 0% | 95.00% |
| | Sdhu | 95% | 80% | 0% | 0% | 80% | 0% | 0% | 0% | 0% | 0% | 0% | 0% | 0% | 0% | 0% | 0% | 95.00% |
| | Kld | 95% | 80% | 0% | 0% | 80% | 0% | 0% | 0% | 0% | 0% | 0% | 0% | 0% | 0% | 0% | 0% | 95.00% |
| | R3-TMB | 95% | 80% | 0% | 0% | 0% | 80% | 0% | 0% | 0% | 0% | 0% | 0% | 0% | 0% | 0% | 0% | 95.00% |
| | **Taux moyen** | **95%** | **80%** | **0%** | **20%** | **40%** | **20%** | **0%** | **0%** | **0%** | **0%** | **0%** | **0%** | **0%** | **0%** | **0%** | **0%** | **95%** |
| **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 each quarter to discuss water use issues and decisions | Z'chor | 54 | 268 | 67 | 67 | 67 | 67 | 44 | 5 | - | - | - | - | - | - | - | 49 | 5 |
| | Sdhu | 30 | 264 | 66 | 66 | 66 | 66 | - | 24 | 12 | - | - | - | - | - | - | 36 | (6) |
| | Kld | 30 | 252 | 63 | 63 | 63 | 63 | - | 22 | 27 | - | - | - | - | - | - | 49 | (19) |
| | R3-TMB | 90 | 120 | 12 | 24 | 36 | 48 | | | 2 | - | - | - | - | - | - | 2 | 88 |
| | **Total** | **204** | **904** | **208** | **220** | **232** | **244** | **44** | **51** | **41** | **-** | **-** | **-** | **-** | **-** | **-** | **136** | **68** |
| 1.1.B: Percentage of WUA management positions in partner communities that are held by women (Gender Indicator) | Z'chor | 50% | 50% | 50% | 50% | 50% | 50% | 45% | 44% | 43% | 43% | 43% | 43% | 43% | 43% | 48% | 45% | 5.46% |
| | Sdhu | 50% | 50% | 50% | 50% | 50% | 50% | | 47% | 47% | 47% | 47% | 47% | 47% | 47% | 55% | 49% | 1.08% |
| | Kld | 50% | 50% | 50% | 50% | 50% | 50% | | 47% | 46% | 47% | 47% | 47% | 47% | 47% | 50% | 47% | 2.65% |
| | R3-TMB | 0% | 50% | 50% | 50% | 50% | 50% | | | 43% | 42% | 43% | 42% | 41% | 41% | - | 42% | -42.36% |
| | **Taux moyen** | **50%** | **50%** | **50%** | **50%** | **50%** | **50%** | **45%** | **46%** | **45%** | **45%** | **45%** | **45%** | **44%** | **44%** | **38%** | **46%** | **-8%** |
| **IR 1.2: Transparency of local WSS governance strengthened** | | | | | | | | | | | | | | | | | | |
| 1.2.B: Number of partner community WUAs from which the recorded minutes (procès-verbal) from the three WUA meetings per quarter (12 planned per year) were published or otherwise made publicly available | Z'chor | 54 | 268 | 67 | 67 | 67 | 67 | 31 | 15 | - | - | - | - | - | - | - | 46 | 8 |
| | Sdhu | 30 | 264 | 66 | 66 | 66 | 66 | - | 13 | 8 | - | - | - | - | - | - | 21 | 9 |
| | Kld | 30 | 252 | 63 | 63 | 63 | 63 | - | - | 17 | - | - | - | - | - | - | 17 | 13 |
| | R3-TMB | 90 | 120 | 12 | 24 | 36 | 48 | | | - | - | - | - | - | - | - | - | 90 |
| | **Total** | **204** | **904** | **208** | **220** | **232** | **244** | **31** | **28** | **25** | **-** | **-** | **-** | **-** | **-** | **-** | **84** | **120** |

| | | Targets LoP | Targets FY 2013 | Planned & Programmed for FY 2013 | | | | Realization | | | | | | | | | | Remaining Targets |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | Q1 | Q2 | Q3 | Q4 | Total FY 2010 | Total FY 2011 | Total FY 2012 | Total FY 2013 | FY13 Q1 | FY13 Q2 | FY13 Q3 | FY13 Q4 | WADA results | Total FY 2010 thru FY 2013 Q4 | |
| **IR 1.3: Financial sustainability of local WSS institutions improved** | | | | | | | | | | | | | | | | | | |
| 1.3.A: Number of WUA members in partner communities trained with program support in financial, technical, and/or administrative management (Gender Indicator) | Z'chor F | 108 | 670 | 168 | 168 | 168 | 168 | 174 | - | - | 44 | - | 44 | - | - | - | 218 | (110) |
| | Z'chor M | 108 | 670 | 168 | 168 | 168 | 168 | 215 | 8 | 10 | 75 | - | 75 | - | - | - | 308 | (200) |
| | Sdhu F | 60 | 660 | 165 | 165 | 165 | 165 | - | 80 | 27 | - | - | - | - | - | - | 107 | (47) |
| | Sdhu M | 60 | 660 | 165 | 165 | 165 | 165 | - | 95 | 28 | - | - | - | - | - | - | 123 | (63) |
| | Kld F | 60 | 630 | 158 | 158 | 158 | 158 | - | 63 | 32 | - | - | - | - | - | - | 95 | (35) |
| | Kld M | 60 | 630 | 158 | 158 | 158 | 158 | - | 83 | 45 | - | - | - | - | - | - | 128 | (68) |
| | R3-TMB F | 180 | 300 | 30 | 60 | 90 | 120 | | | - | 149 | 36 | 20 | 91 | 2 | - | 149 | 31 |
| | R3-TMB M | 180 | 300 | 30 | 60 | 90 | 120 | | | - | 223 | 44 | 29 | 147 | 3 | - | 223 | (43) |
| | **Total** | **816** | **4,520** | **1,040** | **1,100** | **1,160** | **1,220** | **389** | **329** | **142** | **491** | | **168** | **238** | **5** | **-** | **1,351** | **(535)** |
| 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 | 268 | 67 | 67 | 67 | 67 | 37 | 11 | 1 | - | - | - | - | - | - | 49 | 5 |
| | Sdhu | 30 | 264 | 66 | 66 | 66 | 66 | - | 6 | 7 | - | - | - | - | - | - | 13 | 17 |
| | Kld | 30 | 252 | 63 | 63 | 63 | 63 | - | 2 | 18 | - | - | - | - | - | - | 20 | 10 |
| | R3-TMB | 90 | 120 | 12 | 24 | 36 | 48 | | | - | 1 | 1 | - | - | - | - | 1 | 89 |
| | **Total** | **204** | **904** | **208** | **220** | **232** | **244** | **37** | **19** | **26** | **1** | **1** | **-** | **-** | **-** | **-** | **83** | **121** |
| ***Component 2: Increase demand for sustainable water, sanitation, and hygiene services and products*** | | | | | | | | | | | | | | | | | | |
| **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 | Z'chor | 1 | - | - | - | - | - | 44 | 17 | 8 | 2 | - | - | - | 2 | - | 71 | (70) |
| | Sdhu | 1 | - | - | - | - | - | - | 11 | 4 | 3 | 2 | - | - | 1 | - | 18 | (17) |
| | Kld | 1 | - | - | - | - | - | - | 3 | 18 | 2 | - | - | 2 | - | - | 23 | (22) |
| | R3-TMB | 3 | - | - | - | - | - | | | 21 | 2 | - | - | - | 2 | - | 23 | (20) |
| | **Total** | **6** | **-** | **-** | **-** | **-** | **-** | **44** | **31** | **51** | **9** | **2** | **-** | **2** | **5** | **-** | **135** | **(129)** |
| 2.B: Number of latrines requested through PLHAs developed by partner communities | Z'chor (LOP calculations inspired by 22 PLHA) | **27,232** | - | - | - | - | - | 14,854 | - | 8,725 | - | - | - | - | - | - | 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 |
| | R3-TMB | - | - | - | - | - | - | | | - | - | - | - | - | - | - | - | - |
| | **Total** | **85,411** | **19,393** | **4,848** | **4,848** | **4,848** | **4,848** | **14,854** | **-** | **8,725** | **-** | **-** | **-** | **-** | **-** | **-** | **23,579** | **61,832** |
| 2.C: Number of hand-washing units requested through PLHAs developed by partner communities (by region) | Z'chor (LOP calculations inspired by 22 PLHA) | **277** | - | - | - | - | - | 151 | - | - | - | - | - | - | - | - | 151 | 126 |
| | Sdhu | 252 | 84 | 21 | 21 | 21 | 21 | - | - | - | - | - | - | - | - | - | - | 252 |
| | Kld | 340 | 113 | 28 | 28 | 28 | 28 | - | - | - | - | - | - | - | - | - | - | 340 |
| | R3-TMB | - | - | - | - | - | - | | | - | - | - | - | - | - | - | - | - |
| | **Total** | **869** | **197** | **49** | **49** | **49** | **49** | **151** | **-** | **-** | **-** | **-** | **-** | **-** | **-** | **-** | **151** | **718** |
| 2.D.1: Number of water infrastructure potentially requested | Z'chor | 125 | - | - | - | - | - | | 49 | 85 | 4 | 2 | 2 | - | - | - | 138 | (13) |
| | Sdhu | 112 | 23 | 23 | - | - | - | | 30 | 40 | 3 | 3 | - | - | - | - | 73 | 39 |
| | Kld | 120 | 19 | 19 | - | - | - | | 33 | 49 | - | - | - | - | - | - | 82 | 38 |
| | R3-TMB | 135 | 88 | 12 | 26 | 25 | 25 | | | 24 | 63 | 12 | - | 38 | 13 | - | 87 | 48 |
| | **Total** | **492** | **130** | **54** | **26** | **25** | **25** | | **112** | **198** | **70** | **17** | **2** | **38** | **13** | **-** | **380** | **112** |
| 2.D.2: Number of water infrastructure which have been actually requested | Z'chor | 125 | - | - | - | - | - | | 28 | 71 | 4 | 2 | 2 | - | - | - | 103 | 22 |
| | Sdhu | 112 | 23 | 23 | - | - | - | | 21 | 31 | 4 | 4 | - | - | - | - | 56 | 56 |
| | Kld | 120 | 19 | 19 | - | - | - | | 24 | 39 | - | - | - | - | - | - | 63 | 57 |
| | R3-TMB | 135 | 88 | 12 | 26 | 25 | 25 | | | 5 | 52 | 6 | 7 | 32 | 7 | - | 57 | 78 |
| | **Total** | **492** | **130** | **54** | **26** | **25** | **25** | | **73** | **146** | **60** | **12** | **9** | **32** | **7** | **-** | **279** | **213** |

| | | Targets LoP | Targets FY 2013 | Planned & Programmed for FY 2013 | | | | Realization | | | | | | | | | | Remaining Targets |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | Q1 | Q2 | Q3 | Q4 | Total FY 2010 | Total FY 2011 | Total FY 2012 | Total FY 2013 | FY13 Q1 | FY13 Q2 | FY13 Q3 | FY13 Q4 | WADA results | Total FY 2010 thru FY 2013 Q4 | |
| 2.E.1: Number of household latrines potentially requested | Z'chor | 900 | - | - | - | - | - | 2,781 | - | 455 | 1 | 1 | - | - | - | - | 3,237 | (2,337) |
| | Sdhu | 500 | - | - | - | - | - | | 572 | 377 | - | - | - | - | - | - | 949 | (449) |
| | Kld | 500 | 126 | 63 | 63 | - | - | | 429 | 466 | 264 | 264 | - | - | - | - | 1,159 | (659) |
| | R3-TMB | 1,900 | 311 | 100 | 100 | 111 | - | | | 471 | 937 | 532 | - | 295 | 110 | - | 1,408 | 492 |
| | **Total** | **3,800** | **437** | **163** | **163** | **111** | **-** | **2,781** | **1,001** | **1,769** | **1,202** | **797** | **-** | **295** | **110** | **-** | **6,753** | **(2,953)** |
| 2.E.2: Number of household latrines which have been actually requested | Z'chor | 900 | - | - | - | - | - | | 1,954 | 276 | 57 | 57 | - | - | - | - | 2,287 | (1,387) |
| | Sdhu | 500 | - | - | - | - | - | | 448 | 175 | - | - | - | - | - | - | 623 | (123) |
| | Kld | 500 | 126 | 63 | 63 | - | - | | 395 | 500 | - | - | - | - | - | - | 895 | (395) |
| | R3-TMB | 1,900 | 311 | 100 | 100 | 111 | - | | | 266 | 189 | 63 | - | 86 | 40 | - | 455 | 1,445 |
| | **Total** | **3,800** | **437** | **163** | **163** | **111** | **-** | | **2,797** | **1,217** | **246** | **120** | **-** | **86** | **40** | **-** | **4,260** | **(460)** |
| **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 (Gender Indicator) | Z'chor F | 108 | 28 | 35 | - | - | - | 63 | 29 | 18 | - | - | - | - | - | 226 | 336 | (228) |
| | Z'chor M | 108 | 28 | 35 | - | - | - | 67 | 45 | 22 | - | - | - | - | - | 238 | 372 | (264) |
| | Sdhu F | 60 | - | - | - | - | - | - | 47 | 23 | - | - | - | - | - | 167 | 237 | (177) |
| | Sdhu M | 60 | - | - | - | - | - | - | 50 | 21 | - | - | - | - | - | 130 | 201 | (141) |
| | Kld F | 60 | 4 | - | 5 | - | - | - | 36 | 71 | - | - | - | - | - | 216 | 323 | (263) |
| | Kld M | 60 | 4 | - | 5 | - | - | - | 23 | 80 | - | - | - | - | - | 221 | 324 | (264) |
| | R3-TMB F | 180 | 156 | 95 | 35 | 33 | 33 | | | 9 | 5 | 5 | - | - | - | - | 14 | 166 |
| | R3-TMB M | 180 | 156 | 13 | - | - | - | | | 25 | 5 | 5 | - | - | - | - | 30 | 150 |
| | **Total** | **816** | **376** | **178** | **45** | **33** | **33** | **130** | **230** | **269** | **10** | **10** | **-** | **-** | **-** | **1,198** | **1,837** | **(1,021)** |
| 2.1.B: Number of visits conducted in households in partner communities to provide WSS or hygiene IEC with program support | Z'chor | 6,600 | 151 | 60 | 59 | 31 | - | 1,088 | 3,193 | 1,680 | - | - | - | - | - | - | 5,961 | 639 |
| | Sdhu | 3,900 | 141 | 33 | - | 108 | - | - | 884 | 1,654 | - | - | - | - | - | - | 2,538 | 1,362 |
| | Kld | 3,900 | 111 | 61 | 33 | 16 | - | - | 350 | 775 | - | - | - | - | - | - | 1,125 | 2,775 |
| | R3-TMB | 11,700 | 155 | 24 | 57 | 37 | 37 | | | 23 | 19 | - | 6 | - | 13 | - | 42 | 11,658 |
| | **Total** | **26,100** | **557** | **178** | **149** | **192** | **37** | **1,088** | **4,427** | **4,132** | **19** | **-** | **6** | **-** | **13** | **-** | **9,666** | **16,434** |
| 2.1.C: Number of schools in target areas visited to provide WSS or hygiene IEC with program support | Z'chor | 18 | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | 18 |
| | Sdhu | 18 | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | 18 |
| | Kld | 18 | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | 18 |
| | R3-TMB | 18 | - | - | - | - | - | | | - | - | - | - | - | - | - | - | 18 |
| | **Total** | **72** | **-** | **-** | **-** | **-** | **-** | **-** | **-** | **-** | **-** | **-** | **-** | **-** | **-** | **-** | **-** | **72** |
| 2.1.D: Number of teachers who have received WSS or hygiene IEC materials and training through program activities (Gender Indicator) | Z'chor F | 54 | - | - | - | - | - | - | 2 | - | - | - | - | - | - | - | 2 | 52 |
| | Z'chor H | 54 | - | - | - | - | - | - | 34 | - | - | - | - | - | - | - | 34 | 20 |
| | Sdhu F | 54 | - | - | - | - | - | - | 2 | - | - | - | - | - | - | - | 2 | 52 |
| | Sdhu H | 54 | - | - | - | - | - | - | 37 | - | - | - | - | - | - | - | 37 | 17 |
| | Kld F | 54 | - | - | - | - | - | - | 1 | - | - | - | - | - | - | - | 1 | 53 |
| | Kld H | 54 | - | - | - | - | - | - | 20 | - | - | - | - | - | - | - | 20 | 34 |
| | R3-TMB F | 54 | - | | - | - | - | - | | - | - | - | - | - | - | - | - | 54 |
| | R3-TMB M | 54 | - | | - | - | - | - | | - | - | - | - | - | - | - | - | 54 |
| | **Total** | **432** | **-** | **-** | **-** | **-** | **-** | **-** | **96** | **-** | **-** | **-** | **-** | **-** | **-** | **-** | **96** | **336** |
| 2.1.E: Liters of drinking water potentially treated with program-supported methods for point-of-use application as a result of USG assistance through USAID/PEPAM | Z'chor | 1,850,618,438 | 335,580,324 | 83,895,081 | 83,895,081 | 83,895,081 | 83,895,081 | | | 416,220 | - | - | - | - | - | 12,000 | 428,220 | 1,850,190,218 |
| | Sdhu | 1,110,371,063 | 335,580,324 | 83,895,081 | 83,895,081 | 83,895,081 | 83,895,081 | | | 444,240 | - | - | - | - | - | - | 444,240 | 1,109,926,823 |
| | Kld | 1,110,371,063 | 335,580,324 | 83,895,081 | 83,895,081 | 83,895,081 | 83,895,081 | | | 458,620 | - | - | - | - | - | 24,000 | 482,620 | 1,109,888,443 |
| | R3-TMB | 1,998,667,913 | 604,044,583 | 151,011,146 | 151,011,146 | 151,011,146 | 151,011,146 | | | - | - | - | - | - | - | - | - | 1,998,667,913 |
| | **Total** | **6,070,028,475** | **1,610,785,556** | **402,696,389** | **402,696,389** | **402,696,389** | **402,696,389** | | | **1,319,080** | **-** | **-** | **-** | **-** | **-** | **36,000** | **1,355,080** | **6,068,673,395** |

| | | Targets LoP | Targets FY 2013 | Planned & Programmed for FY 2013 | | | | Realization | | | | | | | | | | Remaining Targets |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | Q1 | Q2 | Q3 | Q4 | Total FY 2010 | Total FY 2011 | Total FY 2012 | Total FY 2013 | FY13 Q1 | FY13 Q2 | FY13 Q3 | FY13 Q4 | WADA results | Total FY 2010 thru FY 2013 Q4 | |
| **IR 2.2: Stakeholder mobilization for improved WSS at local levels increased** | | | | | | | | | | | | | | | | | | |
| 2.2.A: Number of partner communities where the residents have provided money or in-kind contributions for water or sanitation access (by region) | Z'chor | 54 | 7 | 2 | 2 | 3 | - | 43 | 9 | 40 | 2 | - | - | - | 2 | 18 | 112 | (58) |
| | Sdhu | 30 | 27 | 23 | - | 3 | 1 | - | 31 | 24 | 3 | 2 | - | 1 | - | 30 | 88 | (58) |
| | Kld | 30 | 23 | 20 | 1 | 2 | - | - | 28 | 36 | 12 | - | - | 12 | - | 31 | 107 | (77) |
| | R3-TMB | 90 | 89 | 12 | 27 | 25 | 25 | - | | 16 | 50 | 4 | 8 | 34 | 4 | - | 66 | 24 |
| | **Total** | **204** | **146** | **57** | **30** | **33** | **26** | **43** | **68** | **116** | **67** | **6** | **8** | **47** | **6** | **79** | **373** | **(169)** |
| 2.2 B: Number of village public meetings for water and sanitation IEC conducted in with program support | Z'chor | 432 | 288 | 67 | 67 | 67 | 67 | 396 | 133 | 154 | 1 | 1 | - | - | - | 911 | 1,595 | (1,163) |
| | Sdhu | 240 | 264 | 66 | 66 | 66 | 66 | - | 700 | 1,081 | - | - | - | - | - | 515 | 2,296 | (2,056) |
| | Kld | 240 | 252 | 63 | 63 | 63 | 63 | - | 1,313 | - | - | - | - | - | - | 659 | 1,972 | (1,732) |
| | R3-TMB | 480 | 120 | 12 | 24 | 36 | 48 | - | | 31 | 38 | 4 | 16 | 10 | 8 | - | 69 | 411 |
| | **Total** | **1,392** | **904** | **208** | **220** | **232** | **244** | **396** | **2,146** | **1,266** | **39** | **5** | **16** | **10** | **8** | **2,085** | **5,932** | **(4,540)** |
| 2.2.C: Number of mass media campaigns for water and sanitation IEC reaching targeted areas conducted with program support | Z'chor | 2,592 | - | - | - | - | - | 56 | 3,033 | - | - | - | - | - | - | - | 3,089 | (497) |
| | Sdhu | 1,440 | 852 | 426 | 426 | - | - | - | - | - | - | - | - | - | - | - | - | 1,440 |
| | Kld | 1,440 | 948 | 474 | 474 | - | - | - | - | - | - | - | - | - | - | - | - | 1,440 |
| | R3-TMB | 4,320 | 2,160 | 540 | 540 | 540 | 540 | | | - | - | - | - | - | - | - | - | 4,320 |
| | **Total** | **9,792** | **3,960** | **1,440** | **1,440** | **540** | **540** | **56** | **3,033** | **-** | **-** | **-** | **-** | **-** | **-** | **-** | **3,089** | **6,703** |
| ***Composante 3: Strengthen the capacity of small-scale service providers, the private sector, and water users' associations*** | | | | | | | | | | | | | | | | | | |
| **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 | Z'chor | 54 | 4 | - | 4 | - | - | 6 | 90 | 11 | - | - | - | - | - | - | 107 | (53) |
| | Sdhu | 30 | 2 | - | 2 | - | - | - | 23 | 2 | - | - | - | - | - | - | 25 | 5 |
| | Kld | 30 | 2 | - | 2 | - | - | - | 21 | 6 | - | - | - | - | - | - | 27 | 3 |
| | R3-TMB | 90 | 1 | - | 1 | - | - | | | - | 1 | - | - | 1 | - | - | 1 | 89 |
| | **Total** | **204** | **9** | **-** | **9** | **-** | **-** | **6** | **134** | **19** | **1** | **-** | **-** | **1** | **-** | **-** | **160** | **44** |
| 3.B: Number of local service providers who received program-supported training in WSS construction or manufacturing | Z'chor | 54 | 4 | - | 4 | - | - | 70 | 125 | 20 | - | - | - | - | - | - | 215 | (161) |
| | Sdhu | 30 | 2 | - | 2 | - | - | - | 32 | 2 | - | - | - | - | - | - | 34 | (4) |
| | Kld | 30 | 2 | - | 2 | - | - | - | 36 | 3 | - | - | - | - | - | - | 39 | (9) |
| | R3-TMB | 90 | 1 | - | 1 | - | - | - | | 24 | 2 | - | 2 | - | - | - | 26 | 64 |
| | **Total** | **204** | **9** | **-** | **9** | **-** | **-** | **70** | **193** | **49** | **2** | **-** | **2** | **-** | **-** | **-** | **314** | **(110)** |
| **IR 3.1: Private and small-scale WSS service sector strengthened** | | | | | | | | | | | | | | | | | | |
| **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 (USAID Standard Indicator)** | Z'chor | 157 | 5 | 5 | - | - | - | 123 | 136 | 40 | 12 | 12 | - | - | - | 18 | 329 | (172) |
| | Sdhu | 126 | 5 | 3 | 2 | - | - | - | 64 | 12 | 4 | - | - | 4 | - | 30 | 110 | 16 |
| | Kld | 126 | 5 | 1 | 4 | - | - | - | 65 | 46 | 8 | - | - | 8 | - | 24 | 143 | (17) |
| | R3-TMB | 220 | 15 | - | 5 | 5 | 5 | | | 46 | 60 | 14 | 3 | 42 | 1 | - | 106 | 114 |
| | **Total** | **629** | **30** | **9** | **11** | **5** | **5** | **123** | **265** | **144** | **84** | **26** | **3** | **54** | **1** | **72** | **688** | **(59)** |
| **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 | Z'chor | 54 | 2 | 2 | - | - | - | - | 14 | 3 | 23 | - | 23 | - | - | - | 40 | 14 |
| | Sdhu | 30 | - | - | - | - | - | - | 8 | 8 | 7 | - | - | 5 | 2 | - | 23 | 7 |
| | Kld | 30 | 2 | - | 2 | - | - | - | 14 | 8 | 16 | - | 1 | 15 | - | - | 38 | (8) |
| | R3-TMB | 90 | 8 | 2 | 2 | 2 | 2 | | | - | - | - | - | - | - | - | - | 90 |
| | **Total** | **204** | **12** | **4** | **4** | **2** | **2** | **-** | **36** | **19** | **46** | **-** | **24** | **20** | **2** | **-** | **101** | **103** |
| 3.2.B: Number of new works contracts established by program-trained or –assisted local providers of WSS services or products | Z'chor | 54 | - | - | - | - | - | 19 | 134 | 12 | 5 | - | - | 5 | - | - | 170 | (116) |
| | Sdhu | 30 | 23 | 23 | - | - | - | - | 38 | 36 | 5 | - | - | 3 | 2 | - | 79 | (49) |
| | Kld | 30 | 19 | 19 | - | - | - | - | 42 | 36 | 19 | - | - | 19 | - | - | 97 | (67) |
| | R3-TMB | 90 | 88 | 12 | 26 | 25 | 25 | | | 13 | 14 | 1 | - | 5 | 8 | - | 27 | 63 |
| | **Total** | **204** | **130** | **54** | **26** | **25** | **25** | **19** | **214** | **97** | **43** | **1** | **-** | **32** | **10** | **-** | **373** | **(169)** |

| | | Targets LoP | Targets FY 2013 | Planned & Programmed for FY 2013 | | | | Realization | | | | | | | | | | Remaining Targets |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | Q1 | Q2 | Q3 | Q4 | Total FY 2010 | Total FY 2011 | Total FY 2012 | Total FY 2013 | FY13 Q1 | FY13 Q2 | FY13 Q3 | FY13 Q4 | WADA results | Total FY 2010 thru FY 2013 Q4 | |
| ***Component 4: Install and rehabilitate improved drinking water and sanitation infrastructure, using a service delivery framework*** | | | | | | | | | | | | | | | | | | |
| **Result 4: Local capacity to construct or rehabilitate water and sanitation infrastructure strengthened** | | | | | | | | | | | | | | | | | | |
| 4.A: Number of wells/mini-forages constructed in targeted areas with program support | Z'chor | 85 | - | - | - | - | - | 6 | 29 | 39 | 5 | 5 | - | - | - | 16 | 95 | (10) |
| | Sdhu | 85 | 14 | 14 | - | - | - | - | 10 | 29 | 7 | - | - | 6 | 1 | 18 | 64 | 21 |
| | Kld | 85 | 10 | 10 | - | - | - | - | 12 | 33 | 3 | 2 | - | 1 | - | 14 | 62 | 23 |
| | R3-TMB | 105 | 48 | 12 | 12 | 12 | 12 | | | - | 16 | - | 10 | 3 | 3 | - | 16 | 89 |
| | **Total** | **360** | **72** | **36** | **12** | **12** | **12** | **6** | **51** | **101** | **31** | **7** | **10** | **10** | **4** | **48** | **237** | **123** |
| 4.B: Number of wells rehabilitated in targeted areas with program support | Z'chor | 40 | - | - | - | - | - | - | 2 | - | - | - | - | - | - | - | 2 | 38 |
| | Sdhu | 27 | 9 | 9 | - | - | - | - | 5 | - | - | - | - | - | - | 46 | 51 | (24) |
| | Kld | 35 | 9 | 9 | - | - | - | - | 4 | - | - | - | - | - | - | 64 | 68 | (33) |
| | R3-TMB | 30 | 40 | - | 14 | 13 | 13 | - | | - | 3 | - | 1 | 1 | 1 | - | 3 | 27 |
| | **Total** | **132** | **58** | **18** | **14** | **13** | **13** | **-** | **11** | **-** | **3** | **-** | **1** | **1** | **1** | **110** | **124** | **8** |
| 4.C.1: Number of peri-urban systems of drinking water supply completed in targeted areas with local and program contributions | Z'chor | 3 | 1 | 1 | - | - | - | - | - | - | - | - | - | - | - | - | - | 3 |
| | Sdhu | 3 | 1 | - | - | - | 1 | - | - | - | - | - | - | - | - | - | - | 3 |
| | Kld | 2 | 1 | 1 | - | - | - | - | - | - | - | - | - | - | - | - | - | 2 |
| | R3-TMB | 1 | - | - | - | - | - | - | | - | - | - | - | - | - | - | - | 1 |
| | **Total** | **9** | **3** | **2** | **-** | **-** | **1** | **-** | **-** | **-** | **-** | **-** | **-** | **-** | **-** | **-** | **-** | **9** |
| 4.C.2: Number of peri-urban systems of sanitation completed in targeted areas with local and program contributions | Z'chor | 1 | - | - | - | - | - | - | - | - | 1 | - | - | 1 | - | - | 1 | - |
| | Sdhu | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| | Kld | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| | R3-TMB | - | 1 | - | 1 | - | - | - | | - | - | - | - | - | - | - | - | - |
| | **Total** | **1** | **1** | **-** | **1** | **-** | **-** | **-** | **-** | **-** | **1** | **-** | **-** | **1** | **-** | **-** | **1** | **-** |
| 4.D: Number of multi-village water supply projects completed in targeted areas with local and program contributions | Z'chor | 1 | 6 | 1 | 2 | 3 | - | - | - | 1 | - | - | - | - | - | - | 1 | - |
| | Sdhu | - | 3 | - | - | 3 | - | - | - | - | - | - | - | - | - | - | - | - |
| | Kld | 1 | 3 | - | 1 | 2 | - | - | - | - | 1 | - | - | - | 1 | - | 1 | - |
| | R3-TMB | 1 | - | - | - | - | - | - | | - | - | - | - | - | - | - | - | 1 |
| | **Total** | **3** | **12** | **1** | **3** | **8** | **-** | **-** | **-** | **1** | **1** | **-** | **-** | **-** | **1** | **-** | **2** | **1** |
| **IR 4.1: Local capacity to build appropriate WSS infrastructure strengthened** | | | | | | | | | | | | | | | | | | |
| 4.1.A: Number of hand pumps fabricated locally with program support | Z'chor | 20 | - | - | - | - | - | 16 | - | - | - | - | - | - | - | - | 16 | 4 |
| | Sdhu | 10 | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | 10 |
| | Kld | 10 | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | 10 |
| | R3-TMB | 20 | - | - | - | - | - | | | - | - | - | - | - | - | - | - | 20 |
| | **Total** | **60** | **-** | **-** | **-** | **-** | **-** | **16** | **-** | **-** | **-** | **-** | **-** | **-** | **-** | **-** | **16** | **44** |
| 4.1.B: Number of household latrines constructed and equipped with a hand-washing device with program support | Z'chor | 900 | - | - | - | - | - | 32 | 1,482 | 477 | 222 | 203 | 10 | 5 | 4 | 594 | 2,807 | (1,907) |
| | Sdhu | 500 | - | - | - | - | - | - | 219 | 351 | 1 | - | 1 | - | - | 719 | 1,290 | (790) |
| | Kld | 500 | 126 | 63 | 63 | - | - | - | 195 | 596 | 51 | 46 | 5 | - | - | 530 | 1,372 | (872) |
| | R3-TMB | 1,900 | 311 | 100 | 100 | 111 | - | | | 264 | 165 | 17 | 4 | 67 | 77 | - | 429 | 1,471 |
| | **Total** | **3,800** | **437** | **163** | **163** | **111** | **-** | **32** | **1,896** | **1,688** | **439** | **266** | **20** | **72** | **81** | **1,843** | **5,898** | **(2,098)** |
| **4.1.C: Number of improved toilets provided in institutional settings (schools and health facilities) (USAID Standard Indicator)** | Z'chor | 29 | - | - | - | - | - | - | - | 14 | 15 | - | - | 10 | 5 | - | 29 | - |
| | Sdhu | 15 | - | - | - | - | - | - | - | - | 10 | - | - | 5 | 5 | - | 10 | 5 |
| | Kld | 15 | - | - | - | - | - | - | - | - | 15 | - | - | 5 | 10 | - | 15 | - |
| | R3-TMB | - | - | - | - | - | - | | | - | - | - | - | - | - | - | - | - |
| | **Total** | **59** | **-** | **-** | **-** | **-** | **-** | **-** | **-** | **14** | **40** | **-** | **-** | **20** | **20** | **-** | **54** | **5** |
| [*] Pre-existing PLHAs financed without project support | | | | | | | | | | | | | | | | | | |

Source: Senegal USAID/PEPAM M&E Database – September 30, 2013

# Annex 2: Results for WADA 1 and WADA 2 and the Program's Component 5 – CLTS Activities / Water / Sanitation / Hygiene Promotion

| Region | TARGETS | | | | ZIGUINCHOR | ZIGUINCHOR | ZIGUINCHOR | ZIGUINCHOR | ZIGUINCHOR | SEHIOU | SEHIOU | SEHIOU | SEHIOU | KOLDA | KOLDA | KOLDA | KOLDA | WADA/ATPC Ziguinchor 1 Region | WADA/ATPC Sedhiou & Kolda 2 Regions | WADA/ATPC 3 Regions |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | WADA1 | TCCAF WADA2 | Total | | WADA I KABONKETOOR-PHASE 1 Oct 2010 thru March 2011 | WADA I KABONKETOOR-PHASE 2 April 2011 thru December 2011 | WADA I KABONKETOOR-PHASE 3 January 2012 thru June 2012 | WADA I KABONKETOOR-PHASE 4 July 2012 thru Dec 2012 | WADA I KABONKETOOR-PHASE 5 January 2013 thru April 2013 | WADA II CASADES-PHASE 1 May 2011 thru November 2011 | WADA II CASADES-PHASE 2 Dec 2011 thru June 2012 | WADA II CASADES-PHASE 3 July 2012 thru Dec 2012 | WADA II CASADES-PHASE 4 January 2013 thru April 2013 | WADA II ENDA-PHASE 1 April 2011 thru November 2011 | WADA II ENDA-PHASE 2 Dec 2011 thru June 2012 | WADA II ENDA-PHASE 3 July 2012 thru Dec 2012 | WADA II ENDA-PHASE 4 November 2012 thru April 2013 | WADA 1 USAID/PEPAM sub-totals | WADA 2 sub-totals | TOTAL WADA 1 + WADA 2 |
| Number of villages | 36 | 72 | 108 | | 6 | 6 | 6 | 12 | 6 | 6 | 6 | 12 | 12 | 6 | 6 | 12 | 12 | 36 | 72 | 108 |
| **DEMOGRAPHIC DATA** | | | | | | | | | | | | | | | | | | | | |
| Population | | | | Total | 1,861 | 1,993 | 2,757 | 1,897 | 1,586 | 1,050 | 2,095 | 1,818 | 3,981 | 627 | 1,261 | 1,332 | 1,418 | 10,094 | 13,582 | 23,676 |
| | | | | Men | 493 | 584 | 857 | 627 | 528 | 309 | 477 | 461 | 918 | 146 | 292 | 279 | 266 | 3,089 | 3,148 | 6,237 |
| | | | | Women | 501 | 565 | 867 | 636 | 512 | 308 | 530 | 415 | 931 | 149 | 330 | 328 | 358 | 3,081 | 3,349 | 6,430 |
| Number of children | | | | Total | 867 | 844 | 1,033 | 634 | 546 | 433 | 1,088 | 942 | 2,132 | 332 | 639 | 725 | 794 | 3,924 | 7,085 | 11,009 |
| | | | | Boys | 471 | 431 | 572 | 346 | 301 | 226 | 590 | 481 | 1,172 | 178 | 361 | 395 | 414 | 2,121 | 3,817 | 5,938 |
| | | | | Girls | 396 | 413 | 461 | 288 | 245 | 207 | 498 | 461 | 960 | 154 | 278 | 330 | 380 | 1,803 | 3,268 | 5,071 |
| Number of compounds | | | | | 16 | 33 | 27 | 23 | 18 | 79 | 113 | 155 | 240 | 43 | 74 | 83 | 89 | 117 | 876 | 993 |
| Number of houses | | | | | 136 | 159 | 230 | 220 | 157 | 82 | 131 | 157 | 301 | 77 | 142 | 99 | 182 | 902 | 1,171 | 2,073 |
| Number of households | | | | | 207 | 199 | 252 | 246 | 181 | 91 | 154 | 172 | 339 | 77 | 153 | 99 | 182 | 1,085 | 1,267 | 2,352 |
| **BASELINE DATA** | | | | | | | | | | | | | | | | | | | | |
| PM_f : functioning modern well | | | | | 12 | 21 | 16 | 14 | 4 | 5 | 8 | 4 | 6 | - | 3 | 2 | 2 | 67 | 30 | 97 |
| FV_f : functioning boreholes | | | | | - | - | 2 | 2 | 1 | 1 | 1 | - | - | - | - | - | - | 5 | 2 | 7 |
| MA_f : Number of households with functional latrines | | | | | 59 | 89 | 138 | 156 | 137 | 71 | 96 | 101 | 274 | - | - | - | - | 579 | 542 | 1,121 |
| LI_f : Number of individual functional latrines | | | | | 59 | 89 | 72 | 71 | 68 | 73 | 82 | 90 | 227 | - | - | - | - | 359 | 472 | 831 |
| **SPECIFIC INDICATORS** | | | | | | | | | | | | | | | | | | | | |
| A) Number of villages having reached ODF status (Open Defecation Free) in six months | 36 | 72 | 108 | | 6 | 6 | 6 | 12 | 6 | 6 | 6 | 12 | 12 | 6 | 6 | 12 | 12 | 36 | 72 | 108 |
| | | | | % Villages ODF | 100% | 100% | 100% | 100% | 100% | 100% | 100% | 100% | 100% | 100% | 100% | 100% | 100% | 100% | 100% | 100% |
| B.1.) Number of persons benefitting from a sanitation system within the CLTS program framework. A) Calculations based on PEPAM standard multipliers | | | | Calculations based on PEPAM standard multipliers | | | | | | | | | | | | | | | | |
| | 10,800 | 21,600 | 32,400 | Total | 1,650 | 1,550 | 2,310 | 2,250 | 1,690 | 880 | 1,390 | 1,600 | 3,400 | 940 | 2,040 | 2,020 | 2,330 | 9,450 | 14,600 | 24,050 |
| | | | | Men | 825 | 775 | 1,155 | 1,125 | 845 | 440 | 695 | 800 | 1,700 | 470 | 1,020 | 1,010 | 1,165 | 4,725 | 7,300 | 12,025 |
| | | | | Women | 825 | 775 | 1,155 | 1,125 | 845 | 440 | 695 | 800 | 1,700 | 470 | 1,020 | 1,010 | 1,165 | 4,725 | 7,300 | 12,025 |
| B) Calculations based on number of people in the target villages (Gender indicator) | | | | Calculations based on number of people in the target villages | | | | | | | | | | | | | | | | |
| | 10,800 | 21,600 | 32,400 | Total | 1,843 | 1,756 | 2,296 | 1,878 | 1,378 | 943 | 1,838 | 1,685 | 3,915 | 617 | 1,261 | 1,330 | 1,418 | 9,151 | 13,007 | 22,158 |
| | | | | Men | 964 | 1,015 | 1,429 | 973 | 829 | 535 | 1,067 | 897 | 2,059 | 324 | 653 | 674 | 680 | 5,210 | 6,889 | 12,099 |
| | | | | Women | 879 | 741 | 867 | 905 | 549 | 408 | 771 | 788 | 1,856 | 293 | 608 | 656 | 738 | 3,941 | 6,118 | 10,059 |
| (NB) Number of people with access to an improved sanitation facility : Zig=1900; Kd=1070; Sd=1280) - Site survey carried out to verify number of latrines that meet JMP standards. Study surveyed 3 CLTS sites per intervention region. | 4,250 | 0 | 4,250 | | | | | | 1,900 | | | | 1,280 | | | | 1,070 | 1,900 | 2,350 | 4,250 |
| B.2.) Percentage of houses in program target communities with a hand-washing station as a result of CLTS program | 50% | 50% | 50% | | 100% | 97% | 99% | 98% | 100% | 98% | 95% | 97% | 98% | 91% | 88% | 100% | 97% | 99% | 95% | 97% |
| B.3.) Number of persons having improved access to a potable water supply as a result of the CLTS program. A) Calculations based on PEPAM standard multipliers | | | | Calculations based on PEPAM standard multipliers | | | | | | | | | | | | | | | | |
| | 7,200 | 11,850 | 19,050 | Total | 1,050 | 1,050 | 900 | 1,500 | - | 900 | 600 | 1,800 | - | 1,200 | 750 | 1,350 | - | 4,500 | 6,600 | 11,100 |
| | | | | Men | 525 | 525 | 450 | 750 | - | 450 | 300 | 900 | - | 600 | 375 | 675 | - | 2,250 | 3,300 | 5,550 |
| | | | | Women | 525 | 525 | 450 | 750 | - | 450 | 300 | 900 | - | 600 | 375 | 675 | - | 2,250 | 3,300 | 5,550 |
| B) Calculations based on number of people in the target villages (Gender indicator) | | | | Calculations based on number of people in the target villages | | | | | | | | | | | | | | | | |
| | 7,200 | 11,850 | 19,050 | Total | 1,861 | 1,919 | 2,757 | 1,885 | - | 828 | 1,543 | 1,818 | - | 481 | 1,170 | 1,332 | - | 8,422 | 7,172 | 15,594 |
| | | | | Men | 964 | 977 | 1,429 | 973 | - | 422 | 785 | 942 | - | 243 | 607 | 674 | - | 4,343 | 3,673 | 8,016 |
| | | | | Women | 897 | 942 | 1,328 | 912 | - | 406 | 758 | 876 | - | 238 | 563 | 658 | - | 4,079 | 3,499 | 7,578 |
| *Number of schools benefiting from the construction of a borehole or rehabilitated modern well through the WADA Program* | 24 | 0 | 24 | | - | 6 | 1 | | - | - | 3 | 7 | 1 | - | 4 | 2 | - | 7 | 17 | 24 |
| *Number of schools benefiting from sanitary block latrine facilities through WADA Program* | 3 | 7 | 10 | | - | 1 | - | - | 3 | - | - | - | 3 | - | - | - | 3 | 4 | 6 | 10 |
| B.4.) Number of school children in target areas with access to an improved sanitation facility as a result of WADA assistance (boys and girls, by region) Gender indicator | 1800 | 900 | 2700 | Total | - | 500 | - | - | 525 | - | - | - | 525 | - | - | - | 525 | 1,025 | 1,050 | 2,075 |
| | 900 | 450 | 1350 | Boys | - | 325 | - | - | 350 | - | - | - | 350 | - | - | - | 350 | 675 | 700 | 1,375 |
| | 900 | 450 | 1350 | Girls | - | 175 | - | - | 175 | - | - | - | 175 | - | - | - | 175 | 350 | 350 | 700 |
| B.5.) Number of school children in target areas with access to improved drinking water supply as a result of WADA assistance (boys and girls, by region) Gender indicator New indicator to measure the outcomes of miniforages or wells constructed in schools | 7200 | 0 | 7200 | Total | - | 1,263 | 175 | - | - | - | 480 | 1,300 | 175 | - | 630 | 470 | - | 1,438 | 3,055 | 4,493 |
| | 3600 | 0 | 3600 | Boys | - | 690 | 96 | - | - | - | 263 | 711 | 96 | - | 345 | 257 | - | 786 | 1,672 | 2,458 |
| | 3600 | 0 | 3600 | Girls | - | 573 | 79 | - | - | - | 217 | 589 | 79 | - | 285 | 213 | - | 652 | 1,383 | 2,035 |

| Region | TARGETS | | | | ZIGUINCHOR | ZIGUINCHOR | ZIGUINCHOR | ZIGUINCHOR | ZIGUINCHOR | SEHIOU | SEHIOU | SEHIOU | SEHIOU | KOLDA | KOLDA | KOLDA | KOLDA | WADA/ATPC Ziguinchor 1 Region | WADA/ATPC Sedhiou & Kolda 2 Regions | WADA/ATPC 3 Regions |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | WADA1 | TCCAF WADA2 | Total | | WADA I KABONKETOOR-PHASE 1 Oct 2010 thru March 2011 | WADA I KABONKETOOR-PHASE 2 April 2011 thru December 2011 | WADA I KABONKETOOR-PHASE 3 January 2012 thru June 2012 | WADA I KABONKETOOR-PHASE 4 July 2012 thru Dec 2012 | WADA I KABONKETOOR-PHASE 5 January 2013 thru April 2013 | WADA II CASADES-PHASE 1 May 2011 thru November 2011 | WADA II CASADES-PHASE 2 Dec 2011 thru June 2012 | WADA II CASADES-PHASE 3 July 2012 thru Dec 2012 | WADA II CASADES-PHASE 4 January 2013 thru April 2013 | WADA II ENDA-PHASE 1 April 2011 thru November 2011 | WADA II ENDA-PHASE 2 Dec 2011 thru June 2012 | WADA II ENDA-PHASE 3 July 2012 thru Dec 2012 | WADA II ENDA-PHASE 4 November 2012 thru April 2013 | WADA 1 USAID/PEPAM sub-totals | WADA 2 sub-totals | TOTAL WADA 1 + WADA 2 |
| **I) SUPPORT FOR PARTICIPATORY GOVERNANCE** | | | | | | | | | | | | | | | | | | | | |
| 1-1) Number of CLTS committees established | 36 | 72 | 108 | Total CLTS Committees | 6 | 6 | 6 | 12 | 6 | 6 | 6 | 12 | 12 | 6 | 6 | 12 | 12 | 36 | 72 | 108 |
| | | | | *Total members* | *116* | *125* | *155* | *233* | *134* | *48* | *48* | *96* | *96* | *47* | *81* | *148* | *162* | *763* | *726* | 1,489 |
| | | | | *Women membres* | *70* | *58* | *81* | *101* | *60* | *26* | *22* | *50* | *65* | *27* | *37* | *69* | *84* | *370* | *380* | 750 |
| 1-2) Average percent of women CLTS committee members (Gender indicator) | 50% | 50% | 50% | | 60% | 46% | 52% | 43% | 45% | 54% | 46% | 52% | 68% | 57% | 46% | 47% | 52% | 48% | 52% | 50% |
| 1-3) Number of CLTS committees trained in hygiene education | 36 | 72 | 108 | | 6 | 6 | 6 | 12 | 6 | 6 | 6 | 12 | 12 | 6 | 6 | 12 | 12 | 36 | 72 | 108 |
| 1-4) Number of CLTS committee members trained in hygiene education | 228 | 456 | 684 | Total | 74 | 136 | 155 | 25 | 74 | 46 | 55 | 100 | 96 | 46 | 81 | 148 | 162 | 464 | 734 | 1,198 |
| | | | | *Men* | *31* | *78* | *74* | *17* | *38* | *20* | *26* | *31* | *33* | *20* | *44* | *79* | *78* | *238* | *351* | 589 |
| | | | | *Women* | *43* | *58* | *81* | *8* | *36* | *26* | *29* | *49* | *63* | *26* | *37* | *69* | *84* | *226* | *383* | 609 |
| 1-5) Average percent of women CLTS committee members trained in hygiene education (Gender indicator) | 50% | 50% | 50% | | 58% | 43% | 52% | 32% | 49% | 57% | 53% | 49% | 66% | 57% | 46% | 47% | 52% | 49% | 52% | 51% |
| 1-6) Number of CLTS committees having developed their quarterly action plans | 36 | 72 | 108 | | 6 | 6 | 6 | 12 | 6 | 6 | 6 | 12 | 12 | 6 | 6 | 12 | 12 | 36 | 72 | 108 |
| 1-7) Number of CLTS committees having implemented their quarterly action plans in a satisfactory manner | 36 | 72 | 108 | | 6 | 6 | 6 | 12 | 6 | 6 | 6 | 12 | 12 | 6 | 6 | - | 12 | 36 | 60 | 96 |
| | | | | *25%* | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| | | | | *Between 26 & 50%* | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| | | | | *Between 51 & 75%* | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| | | | | *More than 75%* | *6* | *6* | *6* | *12* | *6* | *6* | *6* | *12* | *12* | *6* | *6* | *12* | *12* | *36* | *72* | 108 |
| 1-8) Number of leadership workshops in IEC/CLTS conducted | 234 | 468 | 702 | Total | 22 | 65 | 694 | 58 | 72 | 96 | 63 | 146 | 210 | 65 | 114 | 212 | 268 | 911 | 1,174 | 2,085 |
| | | | | NGO | 6 | 38 | 622 | 57 | 48 | 96 | 63 | 127 | 203 | 17 | 112 | 208 | 240 | 771 | 1,066 | 1,837 |
| | | | | CLTS Committee | 16 | 27 | 72 | 39 | 24 | 84 | 60 | 141 | 160 | 65 | 114 | 212 | 268 | 178 | 1,104 | 1,282 |
| 1-9) Number of persons sensitized in CLTS/ODF status and hygiene & hand-washing practices (Gender indicator) | 764 | 1,528 | 2,292 | Total | 1,214 | 1,407 | 3,157 | 1,848 | 1,496 | 582 | 1,463 | 1,196 | 2,464 | 610 | 630 | 964 | 1,128 | 9,122 | 9,037 | 18,159 |
| | | | | *Women* | *501* | *565* | *867* | *626* | *493* | *247* | *500* | *395* | *788* | *149* | *174* | *389* | *355* | *5,052* | *2,997* | 6,049 |
| | | | | *Children* | *517* | *678* | *1,033* | *629* | *278* | *126* | *715* | *513* | *1,240* | *241* | *253* | *402* | *567* | *3,135* | *4,057* | 7,192 |
| 1-10) Average percent of women sensitized in CLTS/ODF status and hygiene & hand washing practices in partner communities (Gender indicator) | 80% | 80% | 80% | | 100% | 100% | 100% | 98% | 96% | 80% | 94% | 95% | 85% | 100% | 53% | 59% | 99% | 99% | 89% | 94% |
| 1-11) Average percent of children sensitized in hygiene & hand-washing practices and environmental management of the school compound in partner communities | 60% | 60% | 60% | | 60% | 80% | 100% | 99% | 51% | 29% | 66% | 54% | 58% | 73% | 40% | 55% | 71% | 80% | 57% | 65% |
| 1-12) Liters of drinking water potentially treated with program-supported methods for point-of-use application as a result of CLTS program | | | | | - | - | - | 12,000 | - | 24,600 | - | - | - | 36,000 | 24,000 | - | - | 12,000 | 84,600 | 96,600 |

| Region | TARGETS | | | | ZIGUINCHOR | ZIGUINCHOR | ZIGUINCHOR | ZIGUINCHOR | ZIGUINCHOR | SEHIOU | SEHIOU | SEHIOU | SEHIOU | KOLDA | KOLDA | KOLDA | KOLDA | WADA/ATPC Ziguinchor 1 Region | WADA/ATPC Sedhiou & Kolda 2 Regions | WADA/ATPC 3 Regions |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | WADA1 | TCCAF WADA2 | Total | | WADA I KABONKETOOR-PHASE 1 Oct 2010 thru March 2011 | WADA I KABONKETOOR-PHASE 2 April 2011 thru December 2011 | WADA I KABONKETOOR-PHASE 3 January 2012 thru June 2012 | WADA I KABONKETOOR-PHASE 4 July 2012 thru Dec 2012 | WADA I KABONKETOOR-PHASE 5 January 2013 thru April 2013 | WADA II CASADES-PHASE 1 May 2011 thru November 2011 | WADA II CASADES-PHASE 2 Dec 2011 thru June 2012 | WADA II CASADES-PHASE 3 July 2012 thru Dec 2012 | WADA II CASADES-PHASE 4 January 2013 thru April 2013 | WADA II ENDA-PHASE 1 April 2011 thru November 2011 | WADA II ENDA-PHASE 2 Dec 2011 thru June 2012 | WADA II ENDA-PHASE 3 July 2012 thru Dec 2012 | WADA II ENDA-PHASE 4 November 2012 thru April 2013 | WADA 1 USAID/PEPAM sub-totals | WADA 2 sub-totals | TOTAL WADA 1 + WADA 2 |
| **II) CONSTRUCTION/REHABILITATION OF INFRASTRUCTURES** | | | | | | | | | | | | | | | | | | | | |
| Numbre of water points tested and having water of good quality | | | | New Boreholes | 6 | 5 | 6 | 10 | - | 6 | 4 | 12 | - | 5 | 5 | 9 | - | 27 | 41 | 68 |
| 2-1) Number of traditional wells rehabilitated within the CLTS program | 0 | 36 | 0 | Total | - | - | - | - | - | 9 | 12 | 11 | 14 | 7 | 16 | 24 | 17 | - | 110 | 110 |
| | | | | *Modern* | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| | | | | *Traditional* | - | - | - | - | - | 9 | 12 | 11 | 14 | 7 | 16 | 24 | 17 | - | 110 | 110 |
| 2-2) Number of mini-boreholes constructed within the CLTS program | 24 | 43 | 67 | Total | 6 | 5 | 6 | 10 | - | 6 | 4 | 12 | - | 5 | 5 | 9 | - | 27 | 41 | 68 |
| | | | | *Modern* | 6 | 5 | 6 | 10 | - | 6 | 4 | 12 | - | 5 | 5 | 9 | - | 27 | 41 | 68 |
| | | | | *Traditional* | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| 2-3) Number of household latrines constructed within the CLTS program framework and equipped with a hand-washing device | 540 | 1,080 | 1,620 | Total | 104 | 67 | 71 | 105 | 57 | 24 | 67 | 160 | 340 | 48 | 87 | 67 | 108 | 404 | 901 | 1,305 |
| | | | | *Traditional* | 104 | 67 | 71 | 105 | 57 | 24 | 67 | 160 | 340 | 48 | 87 | 67 | 108 | 404 | 901 | 1,305 |
| | | | | *Number of Handwashing units* | 104 | 67 | 71 | 105 | 57 | 24 | 67 | 160 | 340 | 48 | 87 | 67 | 108 | 404 | 901 | 1,305 |
| 2-4) Number of household latrines rehabilitated within the CLTS program framework and equipped with a hand-washing device | 540 | 1,080 | 1,620 | Total | 61 | 88 | 160 | 120 | 112 | 64 | 72 | - | - | 46 | 117 | 135 | 125 | 541 | 559 | 1,100 |
| | | | | *Traditional* | 61 | 88 | 160 | 120 | 112 | 64 | 72 | - | - | 46 | 117 | 135 | 125 | 541 | 559 | 1,100 |
| | | | | *Handwashing Unit* | 61 | 88 | 160 | 120 | 112 | 64 | 72 | - | - | 46 | 117 | 135 | 125 | 541 | 559 | 1,100 |
| (N8) Number of subsidized latrines built: Zig=190; Kd=107; Sd=128) | 425 | 0 | 425 | | | | | | 190 | | | | 128 | | | | 107 | 190 | 235 | 425 |
| **III) WATER AND SANITATION POLICIES, DURABILITY AND COMMUNICATION** | | | | | | | | | | | | | | | | | | | | |
| 3-1) Number of policies, laws, agreements, regulations, or investment agreements promoting sustainable water supply and sanitation that are implemented as a result of CLTS program | | 2 | 2 | | | | | | | | | | | | | | | | 2 | 2 |
| 3-2) Percent of operations and maintenance costs for water supply and sanitation services covered through customer charges in program-assisted target areas | 100% | 100% | 100% | | | | | 107% | 94% | | | 21% | 97% | | | 41% | 65% | 101% | 56% | 78% |
| 3-3) Funds leveraged for program-supported projects (USD)<br>Cost share contributions of local NGOs = $37,127<br>Cost share contributions of local beneficiaries = $183,378<br>Participation of Italian NGO - ACRA = $13,485 | | | | | | | | | | | | | | | | | | | | $ 233,990 |
| 3-4) Number of positive external media publications, awards, or public recognition involving the CLTS activities | 7 | 14 | 21 | | 1 | 1 | 6 | | 6 | 1 | 6 | | 13 | 1 | 6 | 12 | | 14 | 39 | 53 |

Source: Senegal – WADA 1 & 2 - M&E / Indicators – Final Close-out report - August 2013

# Annex 3: Infrastructure Planning Table – Construction and Development – Distribution of Infrastructures by Region and Project Type – Number of Beneficiaries and Infrastucture Costs

**Infrastructure Development Table & Plan** This table includes WADA 1 and WADA 2

**Updated 26 Septembre, 2013**

**USAID/PEPAM Program** Casamance

**Infrastructure Units and Beneficiaries** Tambacounda

| Infrastructure | LoP targets planned - Infrastructure | LoP targets planned - Beneficiaries | Beneficiares per infrastructure unit | Year 1 FY10 Achieved | | Year 2 FY11 Achieved | | Year 3 FY12 Achieved | | year 4 FY13 +Q4 Estimate | | Year 5 FY14 Planned | | Total for all years Yr1 to Yr5 | | Percentage Achieved | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | FY09-FY10 | | FY11 | | FY12 | | FY13 | | FY14 | | | | | |
| **Hydrology / Water Points** | **Inf Units** | **Beneficiaries** | **# Bénéf per Unit** | **Inf Units** | **Benef** | **Inf Units** | **Benef** | **Inf Units** | **Benef** | **Inf Units** | **Benef** | **Inf Units** | **Benef** | **Inf Units** | **Benef** | **Inf Units** | **Benef** |
| **Big Infrastructure sites** | | | **Extension activities** | | | | | | | | | | | | | | |
| Kartiak | 1 | 3,297 | 888 | | | | | 1 | 3,297 | | | | | 1 | 3,297 | 100% | 100% |
| Salekegne | 1 | 4,433 | | | | | | | | 1 | 4,433 | | | 1 | 4,433 | 100% | 100% |
| Bassire | 1 | 1,784 | | | | | | | | | | 1 | 1,784 | 1 | 1,784 | 100% | 100% |
| Diouloulou | 1 | 5,281 | 1,420 | | | | | | | | | 1 | 5,281 | 1 | 5,281 | 100% | 100% |
| Mampatime | 1 | 6,280 | 626 | | | | | | | | | 1 | 6,280 | 1 | 6,280 | 100% | 100% |
| Ebinako | 1 | 7,836 | 1,154 | | | | | | | | | 1 | 7,836 | 1 | 7,836 | 100% | 100% |
| Marsassoum | 1 | 10,300 | 1,138 | | | | | | | | | 1 | 10,300 | 1 | 10,300 | 100% | 100% |
| Rehabilitation of AEPs Tambacounda | 9 | | 20,950 | | | | | | | | | 9 | 0 | 9 | 20,950 | 100% | 100% |
| **Sub-Total Large Inf - Water Supply** | **16** | **39,211** | **26,176** | **0** | **0** | **0** | **0** | **1** | **3,297** | **1** | **4,433** | **14** | **31,481** | **16** | **60,161** | **100%** | **153%** |
| Medium or deep boreholes, with drilling rig / hand pumps | 30 | 9,000 | 300 | 1 | 300 | 6 | 1,800 | 5 | 1,500 | 18 | 5,400 | 56 | 16,800 | 86 | 25,800 | 287% | 287% |
| Medium boreholes / hand pumps | 69 | 20,700 | 300 | 20 | 6,000 | 50 | 15,000 | 64 | 19,200 | 24 | 7,200 | 0 | 0 | 158 | 47,400 | 229% | 229% |
| Shallow boreholes / hand pumps | 270 | 40,500 | 150 | 8 | 1,200 | 26 | 3,900 | 13 | 1,950 | 3 | 450 | 0 | 0 | 50 | 7,500 | 19% | 19% |
| Rehab existing wells / hand pumps | 130 | 19,500 | 150 | 2 | 300 | 9 | 1,350 | 0 | 0 | 1 | 300 | 1 | 150 | 13 | 2,100 | 10% | 11% |
| **Sub-Total small Inf - Water Supply** | **499** | **89,700** | | **31** | **7,800** | **91** | **22,050** | **82** | **22,650** | **46** | **13,350** | **57** | **16,950** | **307** | **82,800** | **62%** | **92%** |
| **Sanitation** | | | | | | | | | | | | | | | | | |
| integrated peri-urban sanitation | 150 | 1,500 | 10 | 0 | 0 | 0 | 0 | 0 | 0 | 81 | 810 | 0 | 0 | 81 | 810 | 54% | 54% |
| Latrines & handwashing stations | 6,954 | 69,540 | 10 | 32 | 320 | 1,896 | 18,960 | 1,699 | 16,990 | 3,258 | 32,580 | 345 | 3,450 | 7,230 | 72,300 | 104% | 104% |
| Public sanitary bloc facilities (schools & health centers) | 10 | 2,025 | 175 | 0 | 0 | 1 | 450 | 0 | 0 | 8 | 1,400 | 11 | 925 | 20 | 2,775 | 200% | 137% |
| **Sub-total Sanitation** | **7,114** | **73,065** | | **32** | **320** | **1,897** | **19,410** | **1,699** | **16,990** | **3,347** | **34,790** | **356** | **4,375** | **7,331** | **75,885** | **103%** | **104%** |
| **TOTAL BENEFICIARIES - WATER SUPPLY USAID/PEPAM** | **515** | **128,911** | | **31** | **7,800** | **91** | **22,050** | **83** | **25,947** | **47** | **17,783** | **71** | **48,431** | **323** | **142,961** | **63%** | **111%** |
| **TOTAL BENEFICIARIES - SANITATION USAID/PEPAM** | **7,114** | **73,065** | | **32** | **320** | **1,897** | **19,410** | **1,699** | **16,990** | **3,347** | **34,790** | **356** | **4,375** | **7,331** | **75,885** | **103%** | **104%** |
| **Infrastructure installed by enterprises trained and supported by the Program (at sites other than USAID/PEPAM sites) = SPIN OFFS** | | | | | | | | | | | | | | | | | |
| Simple boreholes & hand pumps | 36 | 5,400 | 150 | 0 | 0 | 15 | 2,250 | 25 | 3,750 | 69 | 10,350 | 31 | 4,650 | 140 | 21,000 | 389% | 389% |
| Rehab of existing wells / hand pumps | 45 | 6,750 | 150 | | | 5 | 750 | 20 | 3,000 | 28 | 4,200 | 42 | 6,300 | 95 | 14,250 | 211% | 211% |
| **Sub-total Water Supply** | **81** | **12,150** | **300** | **0** | **0** | **20** | **3,000** | **45** | **6,750** | **97** | **14,550** | **73** | **10,950** | **235** | **35,250** | **290%** | **290%** |
| Latrines & Handwashing stations | 600 | 6,000 | 10 | | | 50 | 500 | 50 | 500 | 60 | 600 | 75 | 750 | 235 | 2,350 | 39% | 39% |
| **TOTAL UNITS & BENEFICIAIRES - Water Supply - USAID/PEPAM + Priv Enterprises** | **596** | **141,061** | **300** | **31** | **7,800** | **111** | **25,050** | **128** | **32,697** | **144** | **32,333** | **144** | **59,381** | **558** | **178,211** | **94%** | **126%** |
| **TOTAL UNITS & BENEFICIAIRES - Sanitation - USAID/PEPAM + Priv Enterprises** | **7,714** | **79,065** | **10** | **32** | **320** | **1,947** | **19,910** | **1,749** | **17,490** | **3,407** | **35,390** | **431** | **5,125** | **7,566** | **78,235** | **98%** | **99%** |
| | | **115,890** | Contractual target for number of beneficiaires with acces to improved water supply, per revisions to the CoAg | | | | | | | | | | | | | | **154%** |
| | | **69,545** | Contractual target for number of beneficiaires with acces to improved sanitation, per revisions to the CoAg | | | | | | | | | | | | | | **112%** |

# Infrastructure Development Table - Regional Allocation of Infrastructure - water & sanitation

**Updated 26 Septembre, 2013**

**USAID/PEPAM Program**

This table includes WADA 1 and WADA 2

| Infrastructure Type | Targets Planned all five years | Casamance 2010 thru 2014 | | | | | | Tambacounda 2012 thru 2014 | | | | | | Total Yr1 Yr5 | % | Total Yr1 Yr5 | % |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **Water Supply** | | Yr1 | Yr2 | Yr3 | Yr4 | Yr5 | Total | Yr1 | Yr2 | Yr3 | Yr4 | Yr5 | Total | | | | |
| AEP Water Supply - Large Infrastructure Sites | 16 | 0 | 0 | 1 | 1 | 14 | 16 | | | 0 | 0 | 0 | 0 | 16 | 100% | 16 | 100% |
| Boreholes for mini AEP- Medium Infrastructure Sites | 8 | | | 4 | 3 | 1 | 8 | | | | | | | 8 | 100% | 8 | 100% |
| Rehabilitation of AEPs and sites Tambacounda | 9 | | | | | | 0 | | | | | 9 | 9 | 9 | 100% | 9 | 100% |
| Medium or deep boreholes, with drilling rig / hand pumps | 30 | 1 | 6 | 5 | 5 | 0 | 17 | | | 0 | 13 | 56 | 69 | 86 | 287% | | |
| Medium boreholes / hand pumps | 69 | 20 | 50 | 64 | 24 | 0 | 158 | | | 0 | 0 | 0 | 0 | 158 | 229% | 308 | 62% |
| Shallow boreholes / hand pumps | 270 | 8 | 26 | 13 | 3 | 0 | 50 | | | 0 | 0 | 0 | 0 | 50 | 19% | | |
| Rehab existing wells / hand pumps | 130 | 2 | 9 | 0 | 1 | 1 | 13 | | | 0 | 0 | 1 | 1 | 14 | 11% | | |
| **Sanitation** | | | | | | | | | | | | | | | | | |
| peri-urban sanitation - Ziguinchor | 150 | 0 | 0 | 0 | 81 | 0 | 81 | | | 0 | 0 | 0 | 0 | 81 | 54% | | |
| Latrines & Handwashing units | 6,954 | 32 | 1,896 | 1,435 | 3,170 | 0 | 6,533 | | | 264 | 88 | 345 | 697 | 7,230 | 104% | 7,331 | 103% |
| Public S Bloc facilities (schools & health centers) | 10 | 0 | 1 | 0 | 8 | 1 | 10 | | | 0 | 0 | 10 | 10 | 20 | 200% | | |

| Infrastructure Type | # of units Inf. | Year 1 FY 2010 | | | Year 2 FY 2011 | | | Year 3 FY 2012 | | | Year 4 FY 2013 | | | Year 5 FY 2014 | | | Total for Projet, Yr1 - Yr5 | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **Water Supply** | | Cas | Tamba | Total | Cas | Tamba | Total | Cas | Tamba | Total | Cas | Tamba | Total | Cas | Tamba | Total | Cas | Tamba | Total |
| AEP Water Supply - Large Infrastructure Sites | 16 | 0 | | 0 | 0 | | 0 | 1 | 0 | 1 | 1 | 0 | 1 | 14 | 0 | 14 | 16 | 0 | 16 |
| Boreholes for mini AEP- Medium Infrastructure Sites | 8 | | | 0 | | | 0 | 4 | | 4 | 3 | | 3 | 1 | | 1 | 8 | 0 | 8 |
| Rehabilitation of AEPs and sites Tambacounda | 9 | | | 0 | | | 0 | | | 0 | | | 0 | | 9 | 9 | 0 | 9 | 9 |
| Medium or deep boreholes, with drilling rig / hand pumps | 30 | 1 | | 1 | 6 | | 6 | 5 | 0 | 5 | 5 | 13 | 18 | | 56 | 56 | 17 | 69 | 86 |
| Medium boreholes / hand pumps | 69 | 20 | | 20 | 50 | | 50 | 64 | 0 | 64 | 24 | 0 | 24 | | 0 | 0 | 158 | 0 | 158 |
| Shallow boreholes / hand pumps | 270 | 8 | | 8 | 26 | | 26 | 13 | 0 | 13 | 3 | 0 | 3 | | 0 | 0 | 50 | 0 | 50 |
| Rehab existing wells / hand pumps | 130 | 2 | | 2 | 9 | | 9 | 0 | 0 | 0 | 1 | 0 | 1 | | 1 | 1 | 12 | 1 | 13 |
| **Sanitation** | | | | | | | | | | | | | | | | | | | |
| peri-urban sanitation - Ziguinchor | 150 | 0 | | 0 | 0 | | 0 | 0 | 0 | 0 | 81 | 0 | 81 | 0 | 0 | 0 | 81 | 0 | 81 |
| Latrines & Handwashing units | 6,954 | 32 | | 32 | 1,896 | | 1,896 | 1,435 | 264 | 1,699 | 3,170 | 88 | 3,258 | 0 | 345 | 345 | 6,533 | 697 | 7,230 |
| Public S Bloc facilities (schools & health centers) | 10 | 0 | | | 1 | | 1 | 0 | 0 | 0 | 8 | 0 | 8 | 1 | 10 | 11 | 10 | 10 | 20 |

**USAID/PEPAM - Senegal Millenium Water and Sanitation Program**

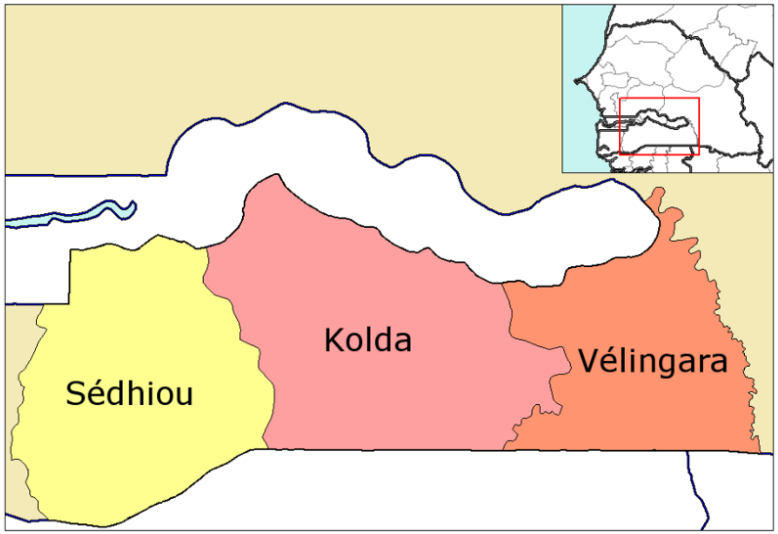
**Infrastructure Development Plan - Cost of Infrastructure**

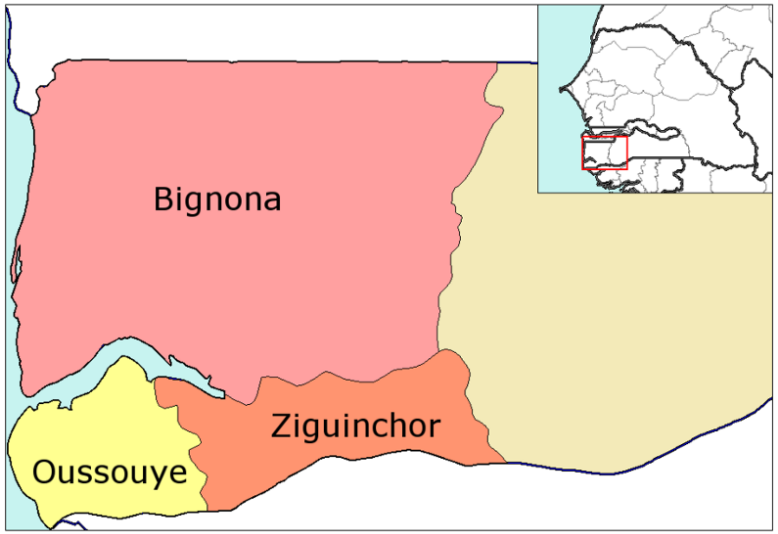
**5th Year Annual Work Plan - Includes infrastructure & beneficiaries for WADA activities where there is leveraging with the USAID/PEPAM program**

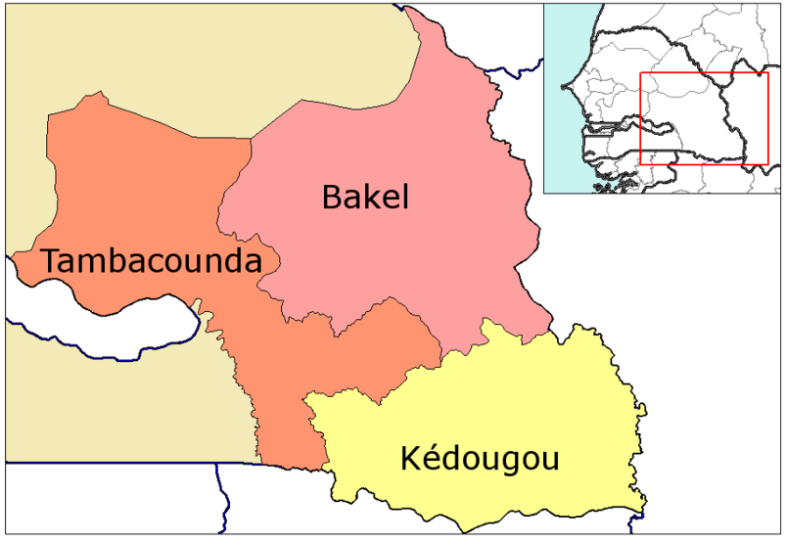
| Costs revised 26 september 2013 | | Reg. Casamance | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **Costs in CFA / XOF** | | | | | | | Region Tamba | | | | | | | | | |
| **Type of Facility - Infrastructure** | **# of Units Planned LoP** | | **Costs (Year 1)** | | **Costs (Year 2)** | | **Costs (Year 3)** | | **Costs (Year 4)** | | **Costs (Year 5)** | | **Total Life of Project (Year 1 through Year 5)** | |
| | | | **FY09-FY10** | | **FY11** | | **FY12** | | **FY13** | | **FY14** | | | |
| | | | **Units** | **Cost (CFA/XOF)** | **Units** | **Cost (CFA/XOF)** | **Units** | **Cost (CFA/XOF)** | **Units** | **Cost (CFA/XOF)** | **Units** | **Cost (CFA/XOF)** | **Units** | **Cost (CFA/XOF)** |
| **WATER SUPPLY - HYDROLOGY** | | | | | | | | | | | | | | |
| **Big Infrastructure sites - Water Supply (AEMV) - 7 sites** | | | | | | | | | | | | | | |
| Kartiak - Ziguinchor | 1 | | 0 | | 0 | | 1 | XOF 53,060,835 | 0 | | | | 1 | XOF 53,060,835 |
| Salekegne - Kolda | 1 | | 0 | | 0 | | 0 | | 1 | XOF 50,808,734 | | | 1 | XOF 50,808,734 |
| Bassire - Ziguinchor | 1 | | 0 | | 0 | | 0 | | 0 | | 1 | XOF 83,112,165 | 1 | XOF 83,112,165 |
| Dioulouolou - Ziguinchor | 1 | | 0 | | 0 | | 0 | | 0 | | 1 | XOF 84,659,190 | 1 | XOF 84,659,190 |
| Mampatime - Kolda | 1 | | 0 | | 0 | | 0 | | 0 | | 1 | XOF 79,037,114 | 1 | XOF 79,037,114 |
| Ebinako - Ziguinchor | 1 | | 0 | | 0 | | 0 | | 0 | | 1 | XOF 191,067,007 | 1 | XOF 191,067,007 |
| Marsassoum - Sedhiou | 1 | | 0 | | 0 | | 0 | | 0 | | 1 | XOF 164,675,574 | 1 | XOF 164,675,574 |
| 3 boreholes 6 inch -mini-AEP sites; Djibabouya, Boudiemar, Sare Bara | 3 | | | | | | 3 | XOF 23,899,950 | Ext Prof | XOF 2,862,500 | | | 3 | XOF 26,762,450 |
| 4 boreholes 4 inch -mini-AEP sites, C3 PEPAM Team; Selety, Médiègue, Djiragone, Médina Passy | 4 | | | | | | 4 | XOF 14,000,000 | | | | | 4 | XOF 14,000,000 |
| Rehabilitation and caractérisation of 5 boreholes - mini-AEP - Casamance | 1 | | | | | | | | 1 | XOF 6,000,000 | | | 1 | XOF 6,000,000 |
| Réhabilitation of 9 AEP sites - Tambacounda | 9 | | | | | | | | | | 9 | XOF 80,000,000 | 9 | XOF 80,000,000 |
| **Sub-total - Large Infr Water Supply** | **24** | | **0** | **XOF -** | **0** | **XOF -** | **8** | **XOF 90,960,785** | **2** | **XOF 59,671,234** | **14** | **XOF 682,551,050** | **24** | **XOF 833,183,069** |
| Medium or deep boreholes, with drilling rig / hand pumps | 30 | | 1 | XOF 3,500,000 | 6 | XOF 21,000,000 | 5 | XOF 17,500,000 | 18 | XOF 63,000,000 | 56 | XOF 196,000,000 | 86 | XOF 301,000,000 |
| Medium boreholes / hand pumps | 69 | | 20 | XOF 36,100,000 | 50 | XOF 90,250,000 | 64 | XOF 115,520,000 | 24 | XOF 43,320,000 | 0 | XOF - | 158 | XOF 285,190,000 |
| Shallow boreholes / hand pumps | 270 | | 8 | XOF 13,344,000 | 26 | XOF 43,368,000 | 13 | XOF 21,684,000 | 3 | XOF 5,004,000 | 0 | XOF - | 50 | XOF 83,400,000 |
| Rehab existing wells / hand pumps | 130 | | 2 | | 9 | XOF 8,730,000 | 0 | XOF - | 1 | XOF 970,000 | 1 | XOF 970,000 | 13 | XOF 10,670,000 |
| Borehole with solar pannels & pump at school (Badiana College) | 1 | | 1 | XOF 5,200,000 | | | | | | | | | 1 | XOF 5,200,000 |
| **Sub-total small boreholes & wells & pumps** | **500** | | **32** | **XOF 58,144,000** | **91** | **XOF 163,348,000** | **82** | **XOF 154,704,000** | **46** | **XOF 112,294,000** | **57** | **XOF 196,970,000** | **308** | **XOF 685,460,000** |
| **Total Water Supply / Hydrology** | **524** | | **32** | **XOF 58,144,000** | **91** | **XOF 163,348,000** | **90** | **XOF 245,664,785** | **48** | **XOF 171,965,234** | **71** | **XOF 879,521,050** | **332** | **XOF 1,518,643,069** |
| **SANITATION** | | | | | | | | | | | | | | |
| **PERI-URBAIN Sanitation - Ziguinchor** | | | | | | | | | | | | | | |
| Latrines TCM, VIP, + BALPs | 150 | | 0 | XOF - | 0 | XOF - | 0 | XOF - | 81 | XOF 28,350,000 | 0 | XOF - | 81 | XOF 28,350,000 |
| **RURAL / VILLAGES** | | | | | | | | | | | | | | |
| Latrines & Handwashing stations | 6,954 | | 32 | XOF 3,734,400 | 1,896 | XOF 221,263,200 | 1,699 | XOF 198,273,300 | 3,258 | XOF 380,208,600 | 345 | XOF 10,350,000 | 7,230 | XOF 813,829,500 |
| Blocs sanitary bloc facilities (schools & health centers) | 10 | Yr 2 = Badiana | 0 | | 1 | XOF 6,300,000 | 0 | XOF - | 8 | XOF 16,000,000 | 11 | XOF 8,000,000 | 20 | XOF 30,300,000 |
| **Sub-total Sanitation** | **7,114** | | **32** | **XOF 3,734,400** | **1,897** | **XOF 227,563,200** | **1,699** | **XOF 198,273,300** | **3,347** | **XOF 424,558,600** | **356** | **XOF 18,350,000** | **7,331** | **XOF 872,479,500** |
| **TOTAL - CFA** | | | | **XOF 61,878,400** | | **XOF 390,911,200** | | **XOF 443,938,085** | | **XOF 596,523,834** | | **XOF 897,871,050** | | **XOF 2,391,122,569** |
| **TOTAL - US $$** | | | | **$ 127,584** | | **$ 806,002** | | **$ 915,336** | | **$ 1,229,946** | | **$ 1,851,281** | | **$ 4,930,150** |

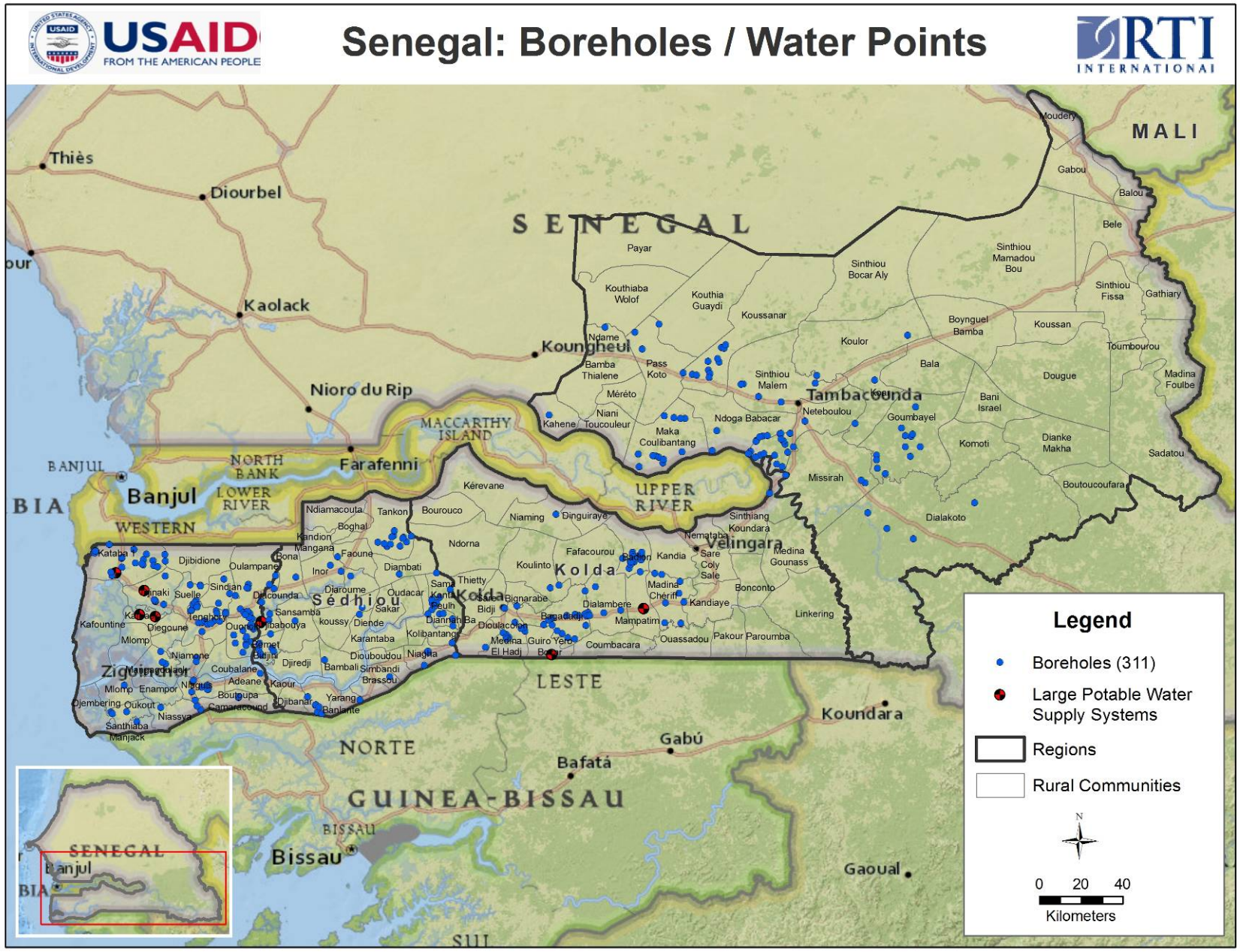
| AVERAGE UNIT COST FOR EACH TYPE OF INFRASTRUCTURE | | |
|---|---|---|
| Average cost of the 3 Types of Latrines (rural & villages) SanPlat, DLV, VIP | XOF | 116,700 |
| Average cost of reduced subsidy Latrines (rural & villages) - Tamba (ACHIEA) | XOF | 30,000 |
| Average cost of peri-urban latrines (VIP & "pour flush - TCM") with soak-away pits - BALPs & handwashing stations | XOF | 350,000 |
| Cost of sanitation bloc facility (5 cabins + handwashing) Rural / villages (for schools) | XOF | 2,000,000 |
| Cost of sanitation bloc facility (5 cabins + handwashing) Rural / villages (for health centers) | XOF | 600,000 |
| Boreholes for mini-AEP - Mediump Infrastructure water supply | XOF | 8,925,000 |
| Boreholes with small drilling rig + pump | XOF | 3,500,000 |
| Deep depth boreholes / manual pump | XOF | 2,300,000 |
| Medium depth boreholes / manual pump | XOF | 1,805,000 |
| Shallow depth boreholes / manual pump | XOF | 1,668,000 |
| Rehabilitation of simple boreholes, wells, and pumps | XOF | 970,000 |
| 1 USD = | XOF 485 (CFA) | |

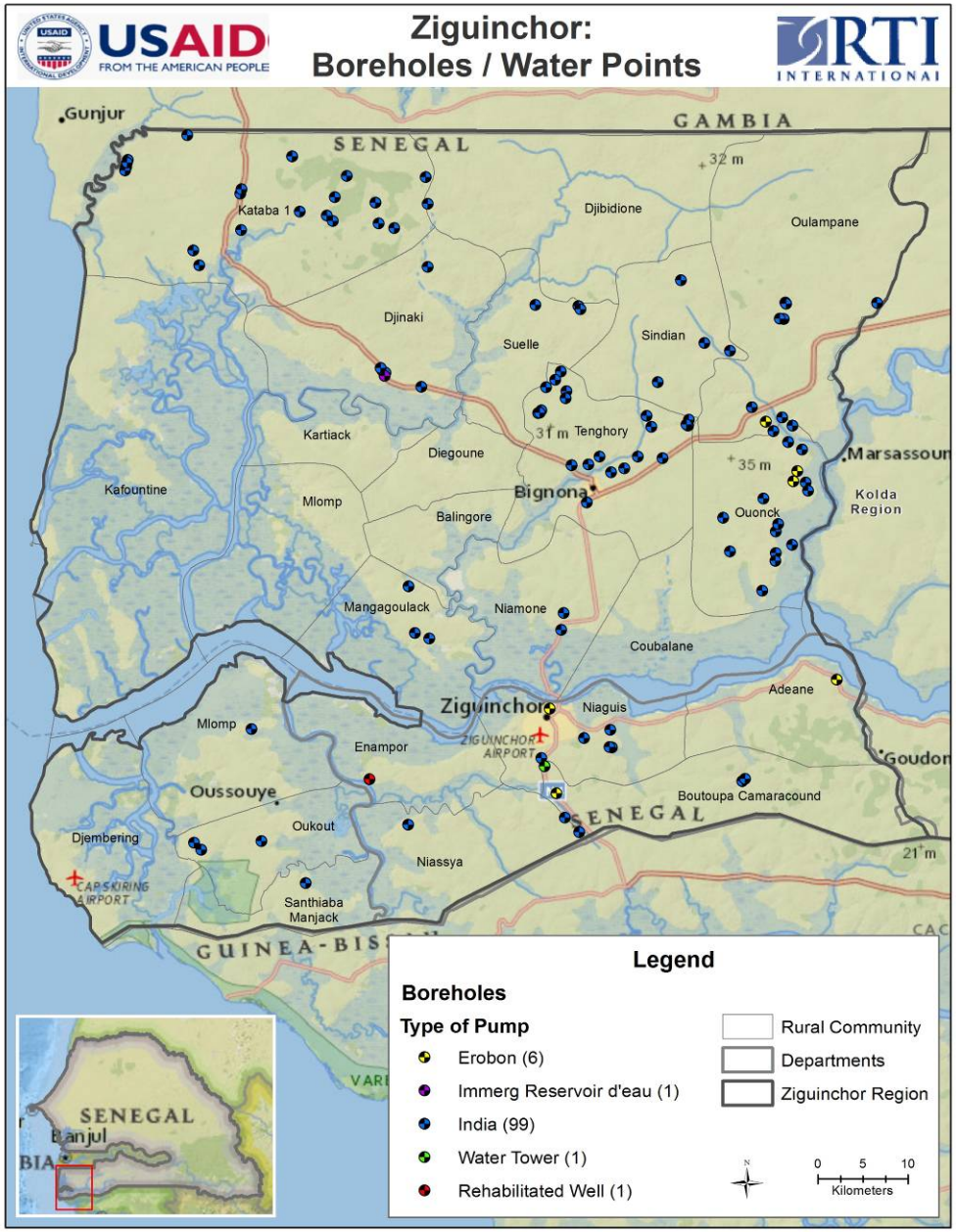
## *Annex 4: Maps (GIS) – Program Intervention Regions – Achievements in Water and Sanitation*



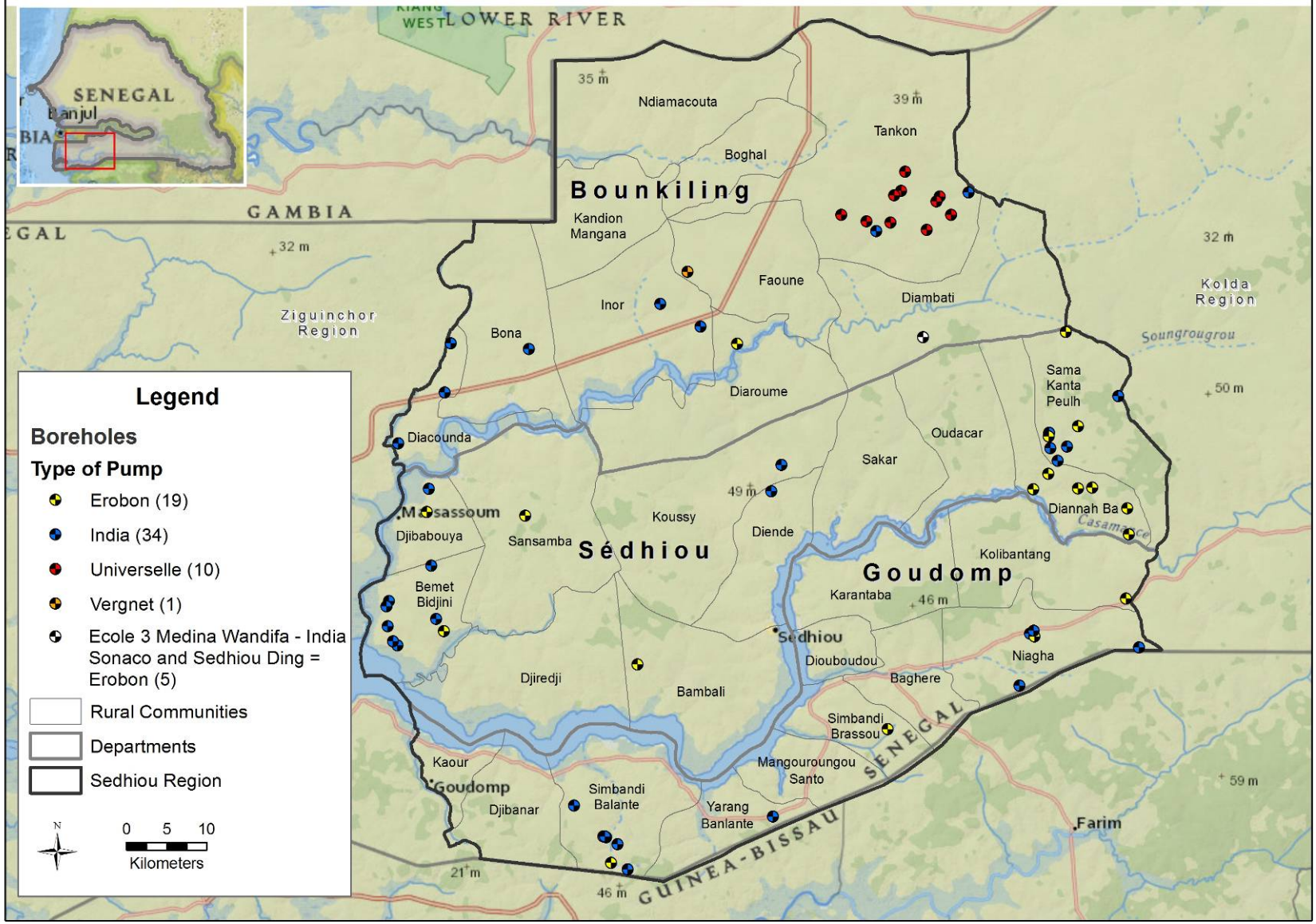



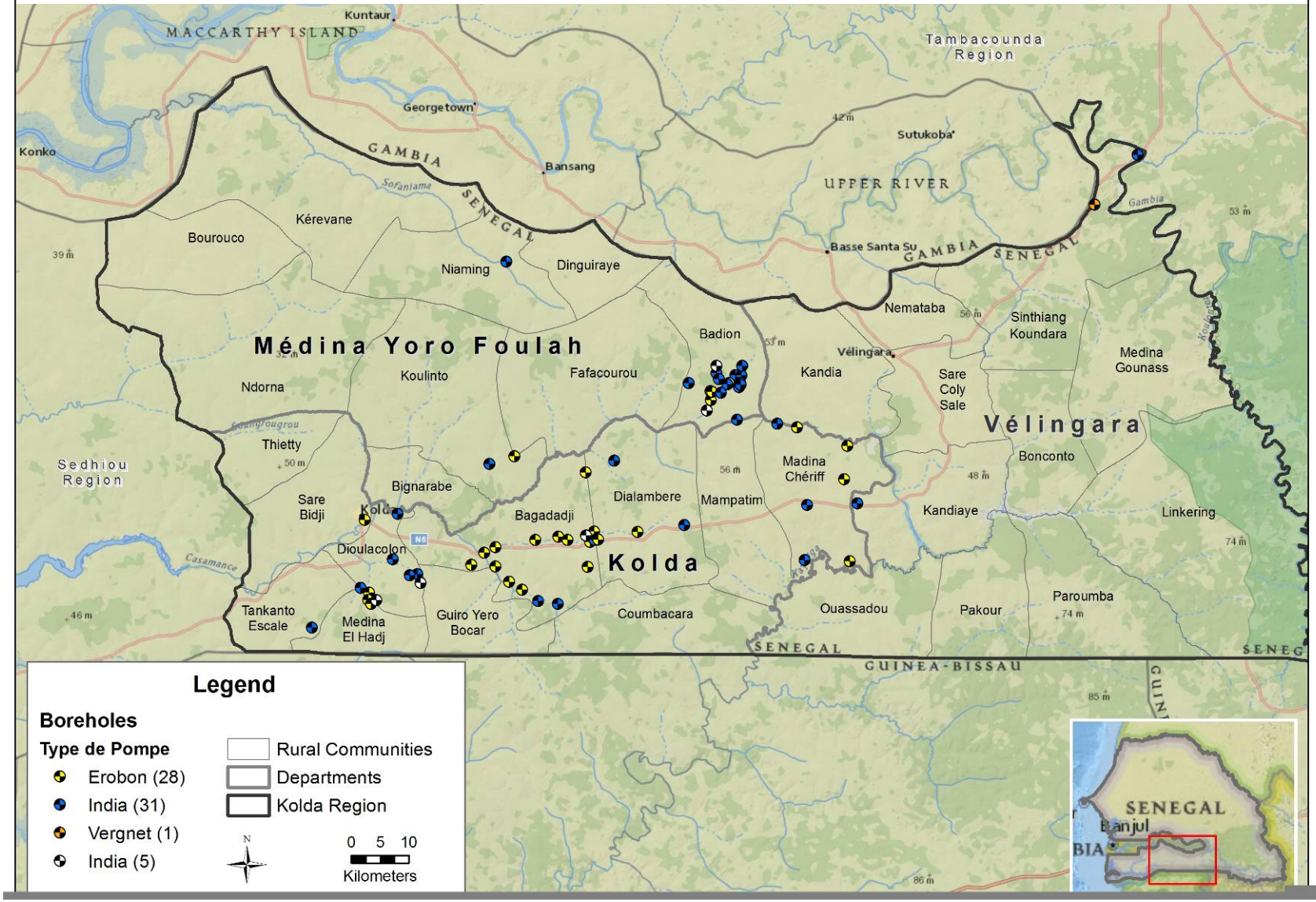

USAID
FROM THE AMERICAN PEOPLE
Senegal: Boreholes / Water Points
RTI INTERNATIONAL
SENEGAL
MALI
GUINEA-BISSAU
GAMBIA
Thiès
Diourbel
Kaolack
Kaolack
Kounghéul
Nioro du Rip
Farafenni
Banjul
Tambacounda
Velingara
Kolda
Sédhiou
Ziguinchor
Koundara
Gabú
Bafatá
Bissau
Gaoual
MACCARTHY ISLAND
NORTH BANK
LOWER RIVER
WESTERN
UPPER RIVER
NORTE
LESTE
Legend
Boreholes (311)
Large Potable Water Supply Systems
Regions
Rural Communities
N
0 20 40
Kilometers

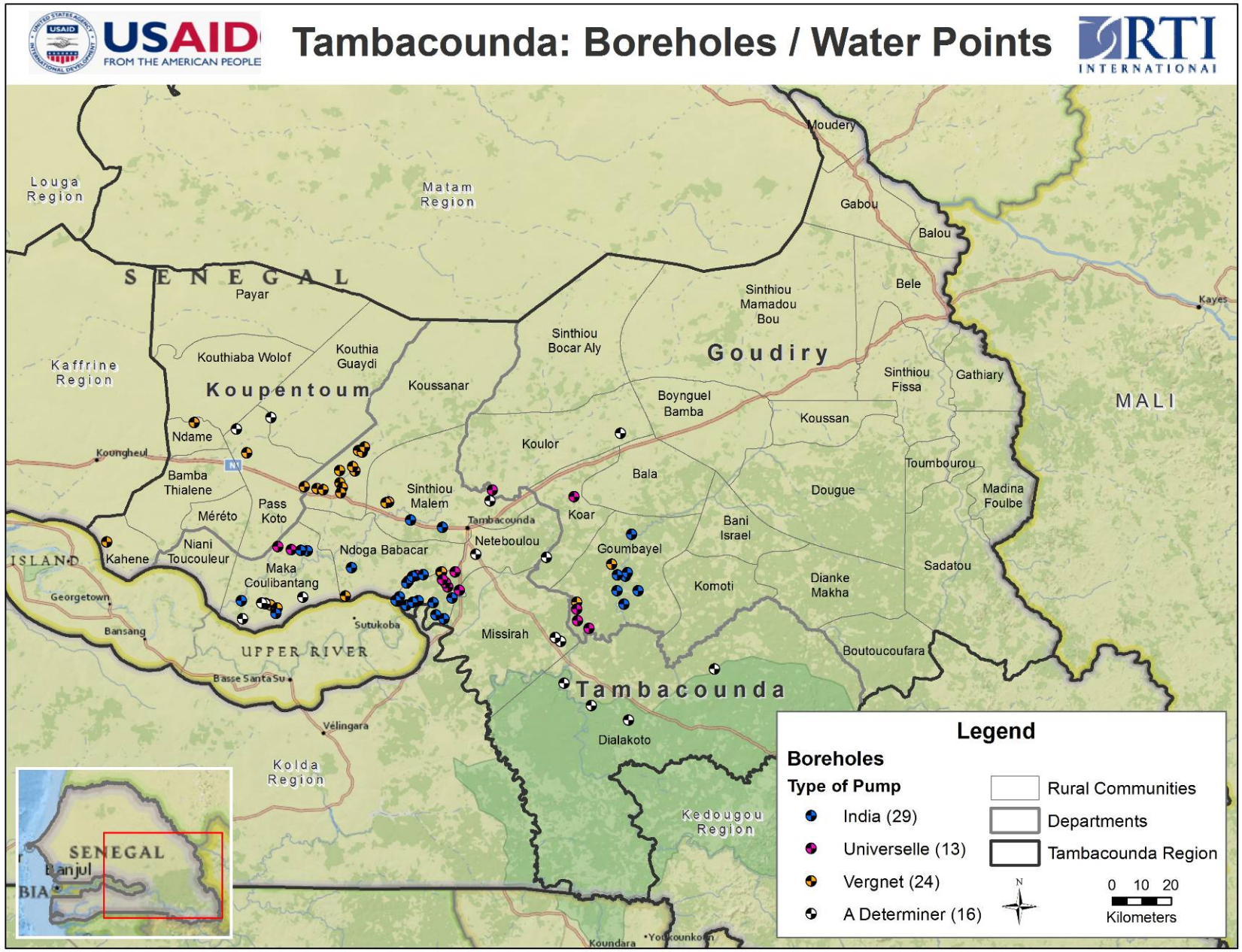

USAID
FROM THE AMERICAN PEOPLE
Ziguinchor:
Boreholes / Water Points
RTI
INTERNATIONAL
Gunjur
GAMBIA
SENEGAL
32 m
Kataba 1
Djibidione
Oulampane
Djinaki
Suelle
Sindian
Kartiack
31 m
Tenghory
Diegoune
Marsassoum
35 m
Kafountine
Mlomp
Bignona
Kolda
Region
Balingore
Ouonck
Mangagoulack
Niamone
Coubalane
Adeane
Ziguinchor
Niaguis
Mlomp
Enampor
ZIGUINCHOR
AIRPORT
Goudom
Oussouye
Boutoupa Camaracound
SENEGAL
Oukout
Djembering
Niassya
21 m
CAP SKIRING
AIRPORT
Santhiaba
Manjack
GUINEA-BIS
Legend
Boreholes
Type of Pump
Erobon (6)
Immerg Reservoir d'eau (1)
India (99)
Water Tower (1)
Rehabilitated Well (1)
Rural Community
Departments
Ziguinchor Region
N
0 5 10
Kilometers
SENEGAL
Banjul
BIA

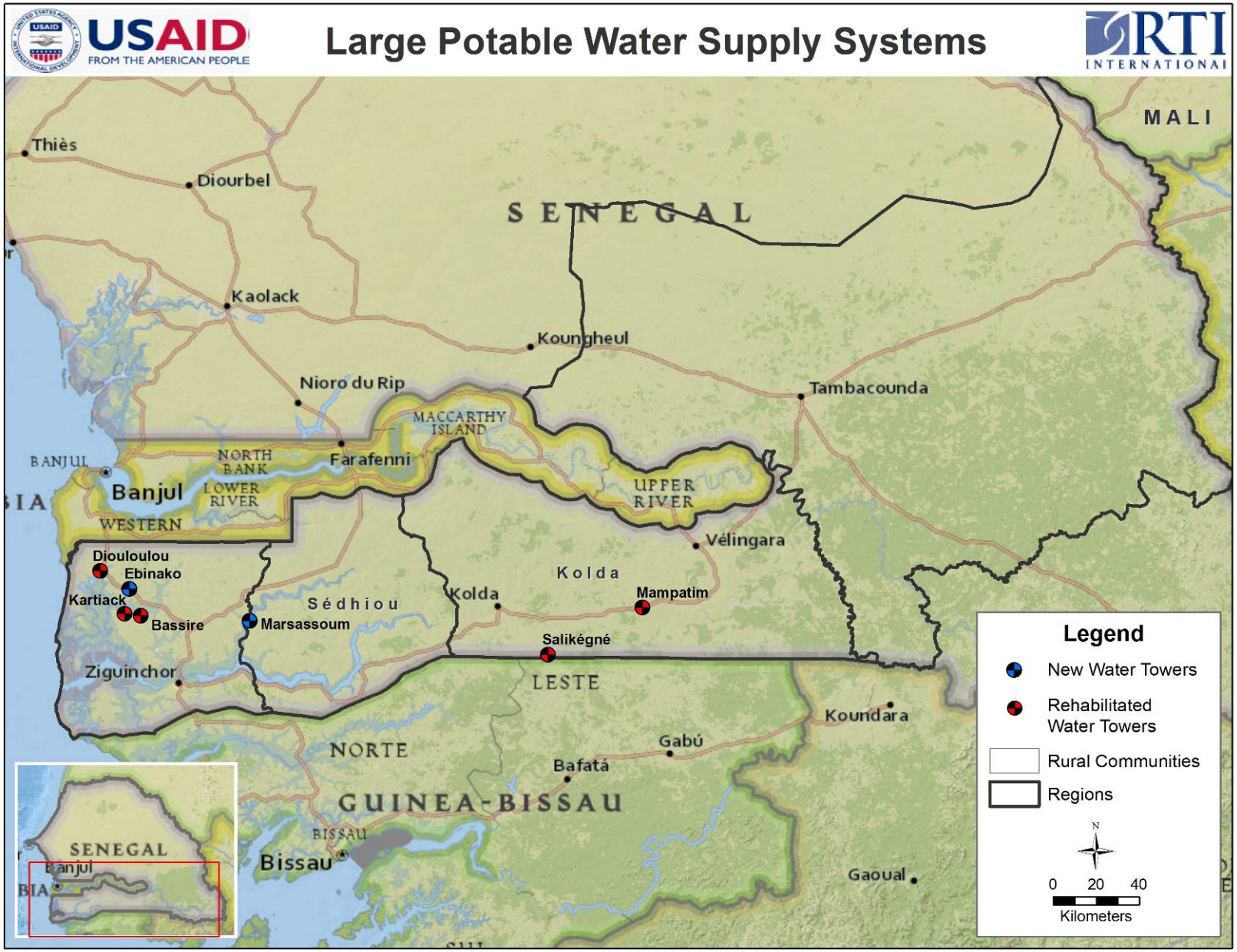
# Sedhiou: Boreholes / Water Points

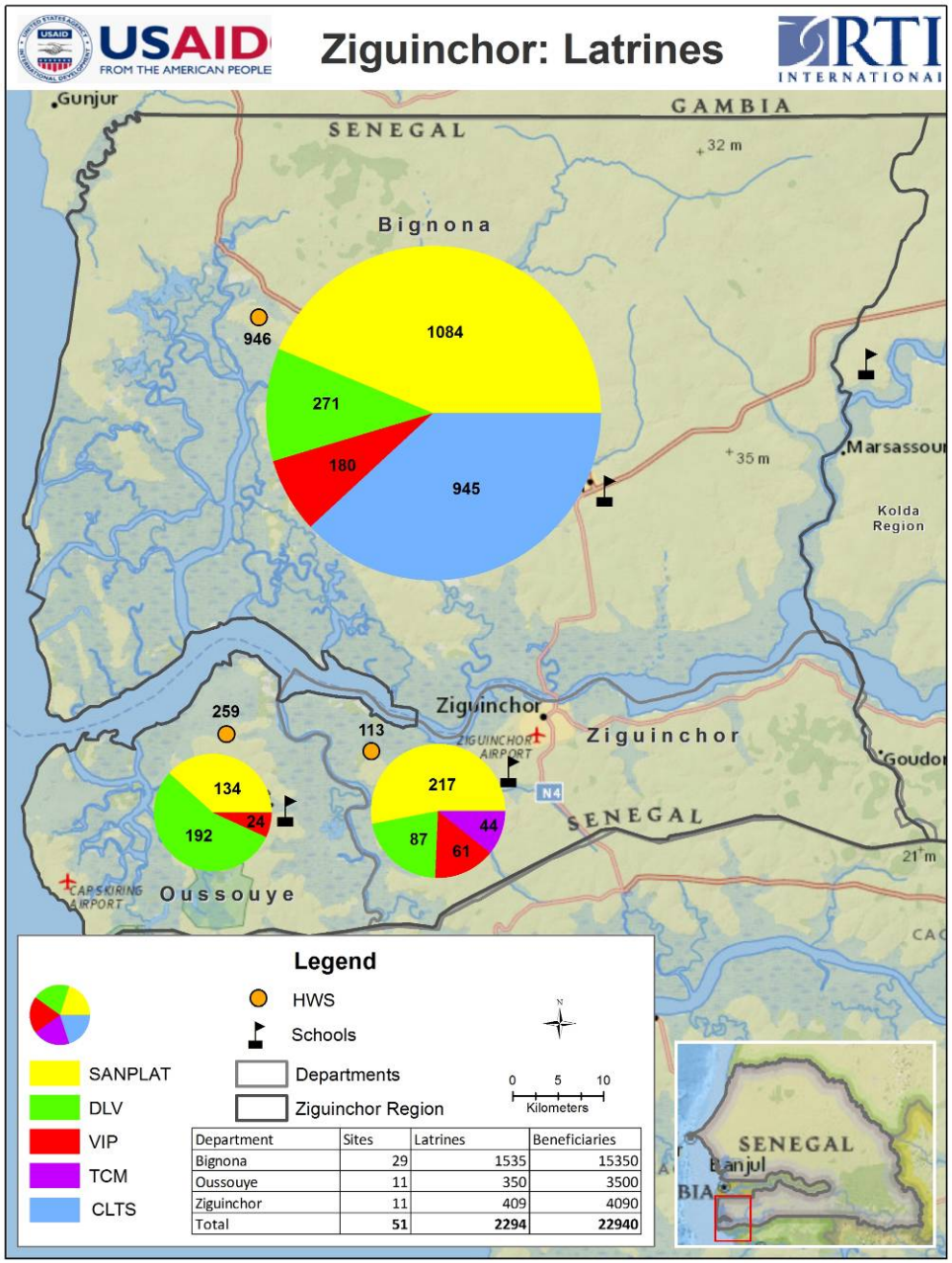


# Kolda: Boreholes / Water Points



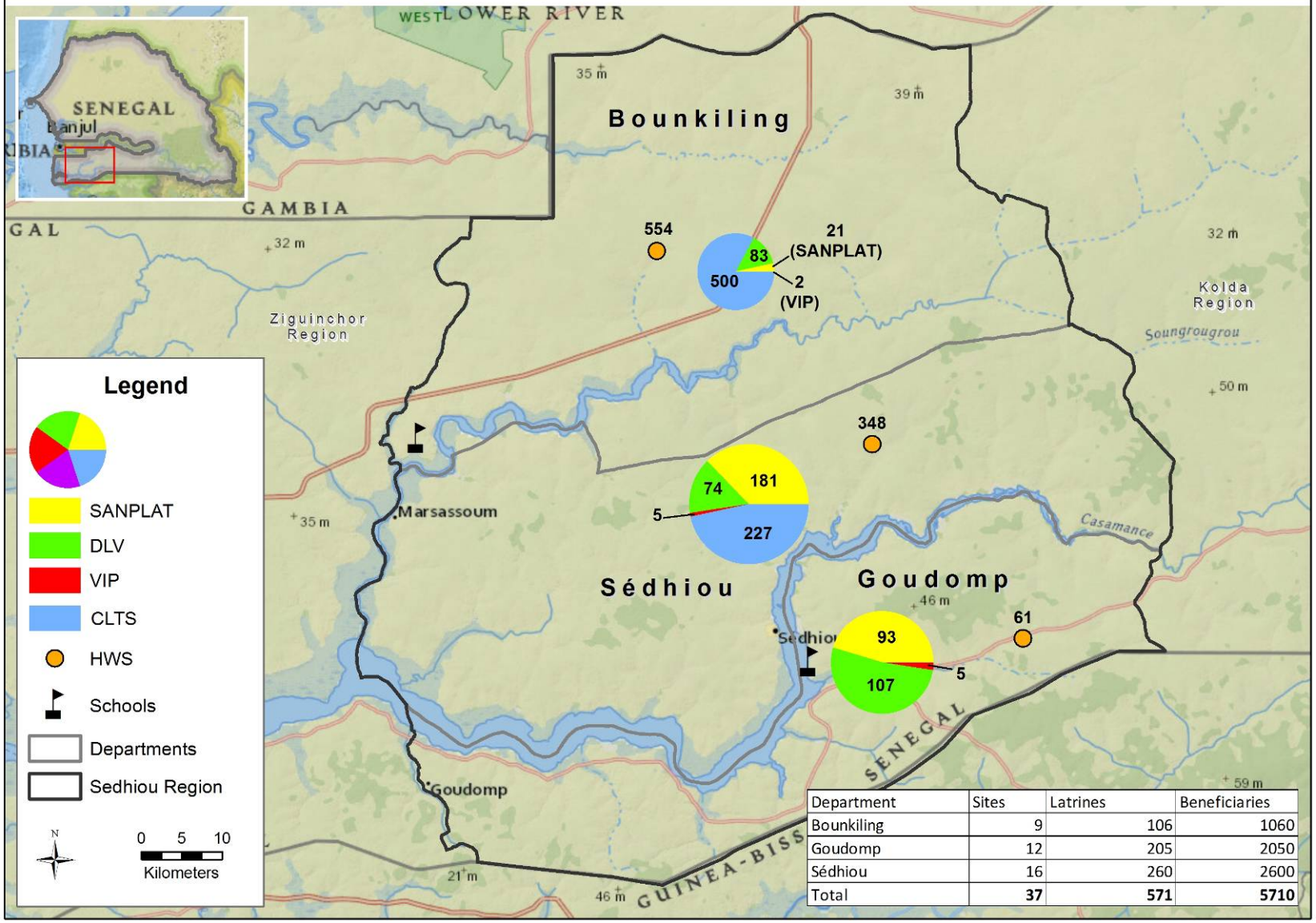

USAID
FROM THE AMERICAN PEOPLE
Tambacounda: Boreholes / Water Points
RTI INTERNATIONAL
Louga Region
Matam Region
Moudery
Gabou
Balou
Bele
Kayes
SENEGAL
Payar
Sinthiou Mamadou Bou
Sinthiou Bocar Aly
Goudiry
Kaffrine Region
Kouthiaba Wolof
Kouthia Guaydi
Koupentoum
Koussanar
Sinthiou Fissa
Gathiary
MALI
Boynguel Bamba
Koussan
Ndame
Koungheul
Koulor
Toumbourou
Bamba Thialene
Bala
Dougue
Madina Foulbe
Sinthiou Malem
Pass Koto
Méréto
Tambacounda
Koar
Bani Israel
Niani Toucouleur
Neteboulou
Goumbayel
ISLAND
Kahene
Ndoga Babacar
Maka Coulibantang
Sadatou
Komoti
Dianke Makha
Georgetown
Sutukoba
Bansang
Missirah
UPPER RIVER
Boutoucoufara
Basse Santa Su
Tambacounda
Vélingara
Dialakoto
Kolda Region
Kedougou Region
SENEGAL
Banjul
BIA
Koundara
Yoboukounkoun
Legend
Boreholes
Type of Pump
India (29)
Universelle (13)
Vergnet (24)
A Determiner (16)
Rural Communities
Departments
Tambacounda Region
N
0 10 20
Kilometers


USAID
FROM THE AMERICAN PEOPLE
Large Potable Water Supply Systems
RTI INTERNATIONAL
MALI
Thiès
Diourbel
SENEGAL
Kaolack
Koungheul
Nioro du Rip
Tambacounda
MACCARTHY ISLAND
BANJUL
NORTH BANK
Farafenni
Banjul
LOWER RIVER
UPPER RIVER
WESTERN
Vélingara
Diouloulou
Ebinako
Kolda
Kartiack
Sédhiou
Kolda
Mampatim
Bassire
Marsassoum
Salikégné
Ziguinchor
LESTE
Koundara
NORTE
Gabú
Bafatá
GUINEA-BISSAU
BISSAU
Bissau
Gaoual
SENEGAL
Banjul
Legend
New Water Towers
Rehabilitated Water Towers
Rural Communities
Regions
N
0 20 40
Kilometers

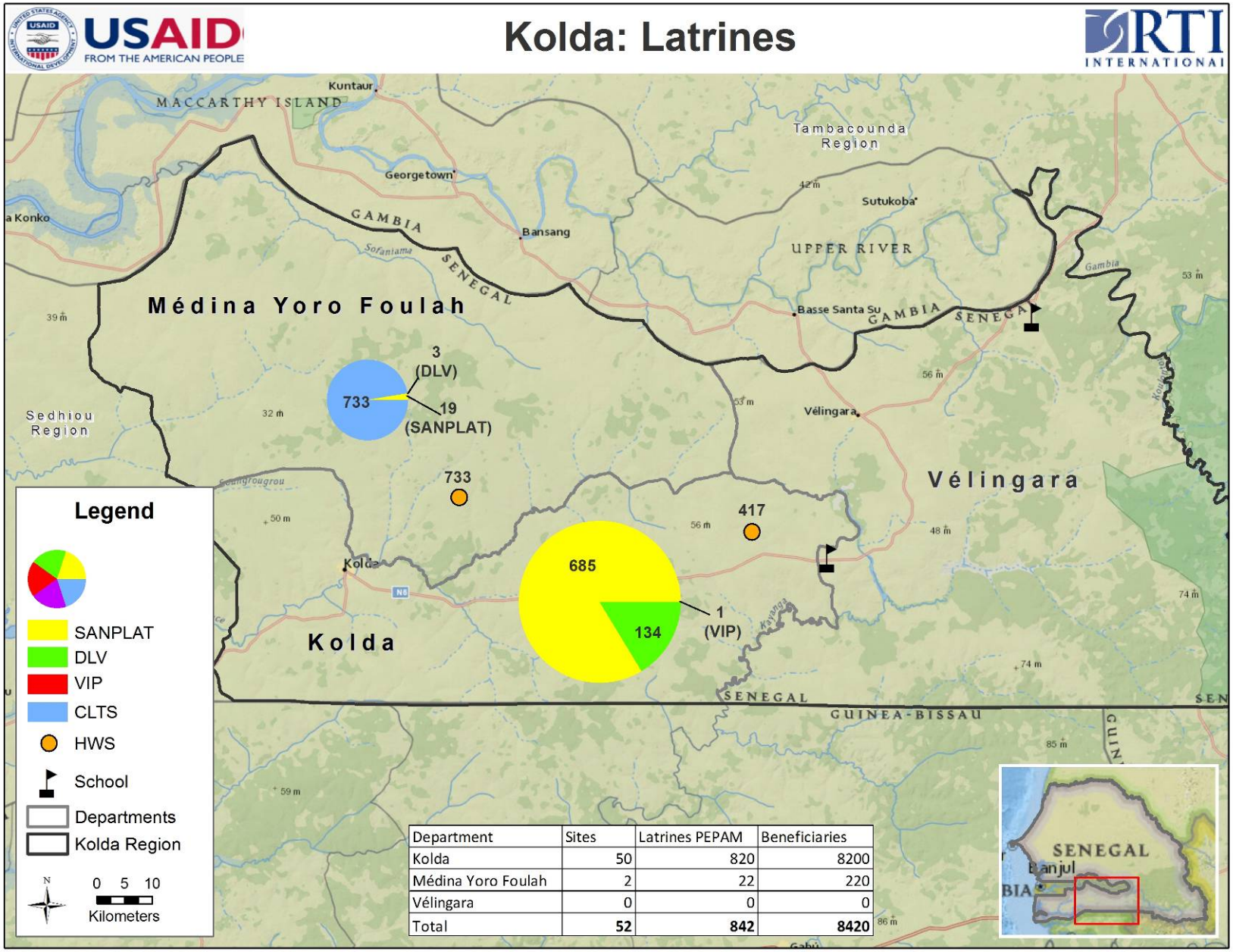



| Department | Sites | Latrines | Beneficiaries |
|---|---|---|---|
| Bignona | 29 | 1535 | 15350 |
| Oussouye | 11 | 350 | 3500 |
| Ziguinchor | 11 | 409 | 4090 |
| Total | **51** | **2294** | **22940** |

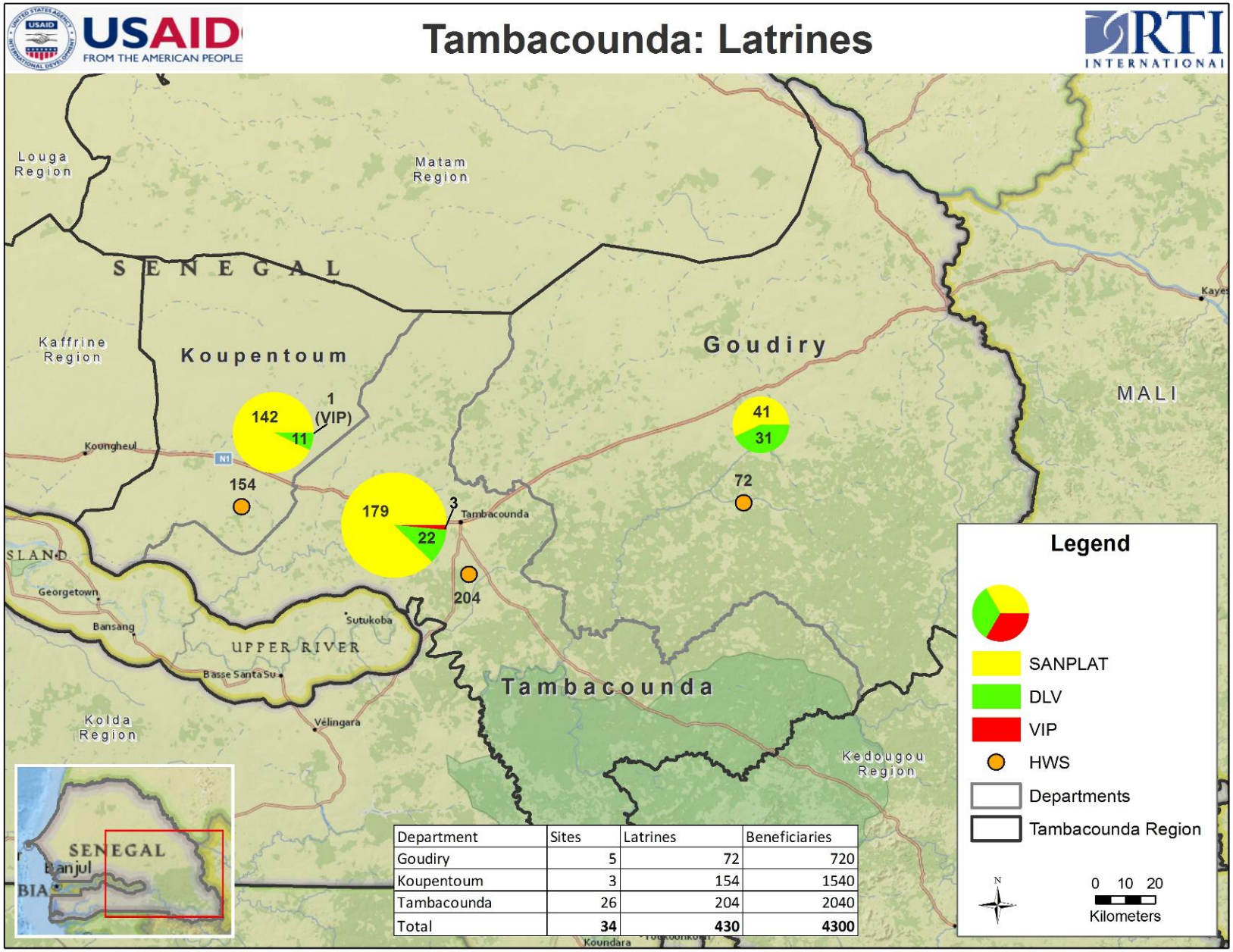
# Sedhiou: Latrines




| Department | Sites | Latrines | Beneficiaries |
|---|---|---|---|
| Bounkiling | 9 | 106 | 1060 |
| Goudomp | 12 | 205 | 2050 |
| Sédhiou | 16 | 260 | 2600 |
| Total | **37** | **571** | **5710** |




| Department | Sites | Latrines PEPAM | Beneficiaries |
|---|---|---|---|
| Kolda | 50 | 820 | 8200 |
| Médina Yoro Foulah | 2 | 22 | 220 |
| Vélingara | 0 | 0 | 0 |
| Total | **52** | **842** | **8420** |




| Department | Sites | Latrines | Beneficiaries |
|---|---|---|---|
| Goudiry | 5 | 72 | 720 |
| Koupentoum | 3 | 154 | 1540 |
| Tambacounda | 26 | 204 | 2040 |
| Total | **34** | **430** | **4300** |

# Annex 5: Tracking of CG Maintenance Accounts for Borehole Maintenance – September 2013

| N° | | Status of Maintenance Fund (XOF/CFA) | | | | | | Région |
|---|---|---|---|---|---|---|---|---|
| | | Sep-13 | | | | | | |
| | | Old Balance | Amount Mobilised | O&M Expenditures | Balance | | | |
| | Totals | 4,319,692 | 2,668,640 | 83,500 | 7,047,332 | | | Ziguinchor |
| | Total amount in maintenance fund | | | | 7,047,332 | 66,484 | Average amount of maintenance fund, number of sites = 106 | Ziguinchor |
| | | | | | | 133% | Percent goal of minimum balance of 50,000 CFA | |
| | Totals | 2,759,111 | 150,800 | 72,990 | 2,825,921 | | | Sédhiou |
| | Total amount in maintenance fund | | | | 2,825,921 | 43,476 | Average amount of maintenance fund, number of sites = 65 | Sédhiou |
| | | | | | | 87% | Percent goal of minimum balance of 50,000 CFA | |
| | Totals | 1,783,600 | 348,400 | 18,000 | 2,139,000 | | | Kolda |
| | Total amount in maintenance fund | | | | 2,139,000 | 35,066 | Average amount of maintenance fund, number of sites = 61 | Kolda |
| | | | | | | 70% | Percent goal of minimum balance of 50,000 CFA | |
| | | | | | | | | |
| | Total all three regions of Casamance | 8,862,403 | 3,167,840 | 174,490 | 12,012,253 | 51,777 | Average amount of maintenance fund, number of sites = 232 sites | Ziguinchor, Sedhiou, Kolda |
| | | | | | | 104% | Percent goal of minimum balance of 50,000 CFA | |

| N° | | Status of Maintenance Fund (XOF/CFA) | | | | | | Région |
|---|---|---|---|---|---|---|---|---|
| | | Sep-13 | | | | | | |
| | | Old Balance | Amount Mobilised | O&M Expenditures | Balance | | | |
| | Totals | 862,400 | 29,225 | 300 | 889,325 | | | Tambacounda |
| | Total amount in maintenance fund | | | | 889,325 | 55,583 | Average amount of maintenance fund, number of sites = 16 | Tamba |
| | | | | | | 111% | Percent goal of minimum balance of 50,000 CFA | |