Rural Access to New Opportunities in Water, Sanitation, And Hygiene

RANO WASH FINAL EVALUATION

Cooperative Agreement No: AID-687-A-17-00002

APRIL 2023

RANO WASH

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FRONT PICTURE: Water for life. Water user of the new water supply system, Andranomanelatra Commune, Vakinankaratra Region

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ACRONYMS AND ABBREVIATIONS

ASUREP	*Association des Usagers des Réseaux d'adduction en Eau Potable* (Water Users Association)
ATEAH	*Agent Technique de l'Eau, Assainissement et l'Hygiène* (Water, Sanitation, and Hygiene Technical Officer)
BC	Behavior Change
CARE	Cooperative for Assistance and Relief Everywhere Inc.
CLTS	Community-Led Total Sanitation
CRM	Climate Risk Management
CRS	Catholic Relief Service
CSO	Civil Society Organization
DAF	Director of Administration and Finance
DCOP	Deputy Chief of Party
DIP	Detailed Implementation Plan
DREAH	*Direction Régionale de l'Eau, de l'Assainissement et de l'Hygiène*
EMMP	Environmental Mitigation and Monitoring Plan
ERF	Environmental Review Form
ERR	Environmental Review Report
ESF	Environmental Screening Form
FY	Fiscal Year
GoM	Government of Madagascar
ICT4D	Information and Communication Technology for Development
IP	Implementing Partner
IPTT	Indicator Performance Tracking Table
IWRM	Integrated Water Resource Management
KRFF	Komitin'ny Rano Fanadiovana Fidiovana (Water, Sanitation and Hygiene Committee)
MEAH	*Ministère de l'Eau, de l'Assainissement et de l'Hygiène (*Ministry of Water, Sanitation and Hygiene)
MOU	Memorandum of Understanding
NGO	Nongovernmental Organization
ODF	Open Defecation–Free
PCDEAH	*Plan de Développement Communal en Eau, Assainissement et Hygiène*
PCT	Project Coordination Team

PIRS	Performance Indicator Reference Sheet
PMP	Performance Monitoring Plan
PPP	Public–Private Partnership
PPR	Performance Plan Report
RANO WASH	Rural Access to New Opportunities in Water, Sanitation, and Hygiene
SE&AM	*Suivi Eau et Assainissement de Madagascar* (Madagascar Water and Sanitation Monitoring)
SLC	*Structure Locale de Concertation* (Local Dialogue Structure)
SMILER	Simple Monitoring of Indicators for Learning and Evidence-Based Reporting
SO	Strategic Objective
SRMO	*Structure de Mise en Œuvre de la Coordination Régionale*
STEAH	*Service Technique de l'Eau, Assainissement et l'Hygiène* (Water, Sanitation and Hygiene Technical Department)
TA	*Technicien d'Appui*
TOR	Terms of Reference
ToT	Training of Trainers
USAID	United States Agency for International Development
USG	United States Government
VSLA	Village Savings and Loan Association
WASH	Water Sanitation and Hygiene
WHO	World Health Organization
WUA	Water User Association
WSP	WASH Service Provider

EXECUTIVE SUMMARY

A final evaluation of the Rural Access to New Opportunities in Water, Sanitation, and Hygiene (RANO WASH) project was conducted in Madagascar in December 2022. The evaluation's purpose was to assess to what extent the activity has achieved its overall objectives and then formulate recommendations and identify lessons learned for future activities USAID and Madagascar may wish to explore. The evaluation covered the RANO WASH implementation period from June 2017 to December 2022.

The evaluation used a mixed-methods design that collected both qualitative and quantitative data, comprising a document review, key informant interviews (KIIs), and focus group discussions (FGDs). The evaluation team conducted 44 KIIs and 18 FGDs with a total of 174 participants, as well as a quantitative survey (1,441 households and 120 communes). The data collection took place in December 2022, with the evaluation process beginning in October 2022 and ending in February 2023.

EVALUATION PURPOSE AND QUESTIONS

The evaluation focused on the following questions:

- To what extent has RANO WASH been relevant for WASH system strengthening and access to WASH services?
- To what extent has the RANO WASH project affected the overall WASH system in Madagascar through the building block pillars?
- To what extent has the RANO WASH project contributed to population access to WASH services and positive attitudinal and behavioral changes among citizens?
- To what extent can the RANO WASH project be expected to continue or be scaled up by communes, private sectors, and local coordination mechanisms after it ends? What evidence exists to demonstrate this sustainability?
- What are the lessons learned, best practices, and most significant challenges to the success of the RANO WASH project?

FINDINGS, CONCLUSION AND RECOMMENDATIONS

This report provides an evaluation of RANO WASH and makes recommendations to guide future WASH programming in Madagascar or similar contexts. Organized under the five main evaluation question criteria, below are findings related to RANO WASH's programmatic relevance and effectiveness, the sustainability of its results, and its impact on primary and secondary beneficiaries. The findings are presented per the evaluation questions.

To what extent has RANO WASH been relevant for WASH system strengthening and access to WASH services?

RANO WASH has been implemented to address real WASH needs in the field. The project aimed to address insufficient access to clean water, latrines, and other WASH services; poor hygiene behaviors, including open-air defecation; and poor WASH governance at the national, regional, and local levels. RANO WASH's theory of change properly and sustainably addressed these gaps. Overall, RANO WASH is suited to the context and culture of communities, local authorities, and regional technical services teams. All respondent groups noted that RANO WASH's contribution to meeting community needs for WASH benefits all community members, regardless of gender.

RANO WASH used a flexible approach to water supply with three types of services: 1) private connections for higher-earning households, 2) social connections that allow customers to share costs among several households, and 3) collective water points for poorer households. This flexible approach helped all groups in the targeted communities access clean and quality water for their

household needs. Although the project alone cannot address all the unmet needs, RANO WASH developed new ways to increase access to clean water using communal WASH plans (*Plan de Développement Communal en Eau, Assainissement et Hygiène* – PCDEAH). This helped commune governments identify repairs and rehabilitations using available funds or tax schemes to increase revenue for WASH budgets.

RANO WASH exceeded its targets for most of the indicators, some by over 200 percent.

To what extent has the RANO WASH project affected the overall WASH system in Madagascar through the building block pillars?

This section follows the eight building blocks of the RANO WASH strategy: institutional arrangements, sector coordination and integration, strategic planning, monitoring, financing, accountability and regulation, gender and social inclusion, and environment and water resources.

Concerning **institutional arrangement**, the evaluation team found that 1) the Ministry of Water, Sanitation and Hygiene (*Ministère de l'Eau, de l'Assainissement et de l'Hygiène* – MEAH) has improved leadership of the WASH sector and 2) the Regional Directorate of Water, Hygiene and Sanitation (*Direction Régionale de l'Eau, de l'Hygiène et de l'Assainissement* – DREAH) was coordinating the WASH sector at the regional level, contributed to training the *Service Technique de l'Eau, Assainissement et l'Hygiène* – STEAH; Water, Sanitation and Hygiene Technical Department) and communes, and has improved the STEAH training curricula. Communes and regional directorates have also made strides to fulfill their mandate to provide WASH services to citizens.

Regarding the **sector coordination pillar**, the evaluation team found that the National Unit for Sector Coordination (UCPP) is already set up within the MEAH. Still, its functionality is not yet perfect: meetings are not regularly held as initially planned to coordinate and monitor the WASH sector. In addition to the functionality of the national body for WASH sector coordination, the regional MEAH teams, after RANO WASH training and support, have taken the lead in sector coordination and WASH coordination structures at the communal and regional levels. The dynamism and cohesion of the actors (*Structure de Mise en Œuvre de la Coordination Régionale* – SRMO periodic meetings, etc.) have improved, and government, civil society organizations (CSOs), community members, and private sector actors are complementary in the field.

Concerning **strategic planning**, overall, 223 of the 250 targeted communes developed and implemented a PCDEAH with RANO WASH support, for an achievement rate of 89.2 percent. RANO WASH supported the MEAH in preparing a performance contract for regions and communes to measure progress against the national strategy. The regional objectives have been implemented with RANO WASH support.

Concerning the **monitoring pillar**, RANO WASH achieved 97 percent of the 250 targeted communes that were consistently reporting in the *Suivi Eau et Assainissement de Madagascar* (SE&AM; Madagascar Water and Sanitation Monitoring) and data transmitted to the regional and then national level. RANO WASH supported the development of the national monitoring system using the DHIS 2 platform, and all stakeholders were trained on the new system. This approach, coupled with training activities delivered by RANO WASH, led to increased use of the SE&AM by WASH stakeholders at all levels.

As for **financing**, the evaluation team found an increased budget and capacity for WASH financing and investment at the local level. 142 of the 250 communes (56.8 percent) demonstrated an increased use of public WASH budgets for constructing wells and latrines and rehabilitating and extending water networks. Around $1,945,658 in public funds was mobilized for the WASH sector in the targeted communes. In private financing, WASH service providers (WSPs) mobilized approximately 10 to 22 percent of the construction or rehabilitation budget to support the WASH sector, and Village Savings and Loan Association (VSLA) members also invested funds into this sector.

Concerning **accountability and regulation**, RANO WASH recorded approximately 231 communes that have established a functional accountability mechanism, representing 92.4 percent of

the 250 communes and 115.5 percent of the 200 targeted communes. The evaluation team found that the municipalities' self-efficacy increased in processing feedback.

Regarding **gender and social inclusion**, RANO WASH developed and implemented a strong inclusion strategy that led to more equitable access to WASH services in the targeted project area. Additionally, women, men, and youth participate in the WASH sector's local governance through the *Association des Usagers des Réseaux d'adduction en Eau Potable* (ASUREPs; Water Users Associations), *Structure Locale de Concertation* (SLCs; Local Dialogue Structures), and water service providers (WSPs). Women have better access to menstrual pads and showers during menstruation. Families discuss the needs of women and girls in the household regarding menstruation.

Finally, concerning the **environment and water resources**, RANO WASH implemented an environmental mitigation plan at the project level and supported communes to define watershed protection perimeters in all the intervention communes. In line with citizens' participation in local governance, communities were increasingly involved in local authorities' monitoring, protection, and reforestation activities.

To what extent has the RANO WASH project contributed to population access to WASH services and positive attitudinal and behavioral changes among citizens?

Access to services was analyzed for the three main services the RANO WASH project provided: access to water, access to sanitation, and behavior change promotion.

Concerning access to water, overall, RANO WASH reached 154,838 people with basic drinking water against 210,000 targeted by the end of the project, representing an achievement rate of 73.6 percent. For people receiving safely managed drinking water, RANO WASH reached 133,151 against a life of project (LOP) target of 90,000, for an achievement rate of 147.9 percent.

Regarding access to sanitation services, overall, RANO WASH reached 426,843 people with basic sanitation services against 362,712 targeted for the life of the project and 315,651 people with limited sanitation services against 264,401 targeted for the life of the project.

As for behavior change, 34 percent of households in the RANO WASH target area have a handwashing station with water and soap commonly used by household members, representing an achievement rate of around 96 percent compared to the target (35 percent of households).

Around 5,543 communities were verified open defecation–free (ODF) because of RANO WASH, against a target of 5,429 communities (102 percent achievement rate). At the beginning of the project, RANO WASH was targeted to have 75 percent of these communities verified ODF after follow-up.

To what extent can the RANO WASH project be expected to continue or be scaled up by communes, the private sector, and local coordination mechanisms after it ends?

The evaluation team noted that the close collaboration between the public and private sectors in water supply and management could have lasting effects on the project. The capacity of communes was also strengthened so that they developed a WASH sector development plan at the communal level (*Plan Communal de Développement EAH*, PCDEAH) and began mobilizing resources to support the WASH sector. This domestic financing of the WASH sector, through the increase in the communal WASH budgets, is a strong factor that can help sustain RANO WASH outcomes after the project closes.

The water management model's private management could allow the systems to function sustainably. Most WSPs managing water systems have been trained on a marketing strategy to expand the business model and linked to financial institutions and suppliers so that they can receive credit to

develop their business. This strategy will sustain the functionality of the water systems and allow WSPs to construct or rehabilitate water systems in new communities.

At the community level, RANO WASH supported and trained local masons and seamstresses to construct latrines and design reusable menstrual pads. They were trained in entrepreneurship and marketing to sustain their activity. Additionally, through the VSLA approach, these local workers can access credits and more funding to develop their activity, guaranteeing to sustain the RANO WASH outcome beyond the project life.

The VSLA approach also increased access to funding through savings and loans to households. Therefore, it can allow households to increase their access to clean water and latrines, reducing the risk of inaccessibility to WASH services because of low income.

What are the lessons learned, best practices, and most significant challenges to the success of the RANO WASH project?

SUCCESSES

1. **Coordination at the regional and local levels.** National coordination has improved by setting up a special coordination unit within the MEAH and holding coordination meetings in 2022. Regional coordination at the level of the seven regions has been a success. Other regions have modeled the approaches made in the RANO WASH intervention regions.
2. **Increased community participation in WASH planning and management.** All the targeted communes involve citizens through community participation mechanisms such as ASUREPs and SLCs. These community participation mechanisms are functional, and these structures accompany communes in managing the WASH sector.
3. **Strengthening the overall WASH system in Madagascar.** The MEAH is better coordinating the overall WASH system in Madagascar than at the beginning of the project; the national WASH monitoring system (SE&AM) is now functioning smoothly, with most of the targeted communes consistently reporting through SE&AM and data submitted at the regional and central levels. Communes have developed a specific communal WASH development plan and budgeted for the WASH sector. Most of the communes have consistently increased their WASH budget throughout the RANO WASH implementation and were using the WASH budget to increase people's access to WASH services.
4. **Private sector engagement.** Increased interest by the private sector to engage in water supply was a success. For example, during a fair, RANO WASH launched calls for unsolicited applications and received 91 WSPs expressing interest in investing in around 90 municipalities.
5. **Increasing interest of communes to be certified ODF.** Many communes were certified ODF during the project implementation. A significant increase in ODF communes occurred in 2021 and 2022.
6. **Improving gender outcomes in the WASH sector was a key success of the RANO WASH project.** RANO WASH changed the social perception of menstruation. All community members, including men, are aware of women's menstruation constraints and the need to access menstrual pads and showers. This issue is discussed among men and women in the targeted communities.

CHALLENGES

1. **Limited government budget for the WASH sector.** The MEAH has insufficient budget to support the population WASH needs and support some key activities such as the sector review and operationalization of the sector monitoring system. This limits the accountability of MEAH staff and does not ensure the continuity of sector achievements, making MEAH dependent on partners and external funding.
2. **Delay in signing delegation contracts with the private sector.** This delay by communes and ministries was one of the key challenges noted by the RANO WASH team, delaying the provision of clean water to citizens because construction or rehabilitation works could not start without these contracts signed. This reduces the commitment of the private sector to invest even more because they fear the security of their investment.
3. **The lack of resources to pay water bills by schools and health centers.** The lack of resources is a blockage since the actors do not know who should pay b it is not included in the institutions' budget.

LESSONS LEARNED

1. Collaboration between national, regional, and communal stakeholders is important to achieve WASH outcomes at the national and local levels.
2. The communes should accelerate the signature of the delegation contract to provide sufficient guarantees to private companies to engage their investment to support access to WASH services.
3. Conducting stakeholder mapping is key to helping understand who does what in the WASH ecosystem and who can bring what to improve WASH outcomes.
4. Coordination of WASH activities with communes playing a central role in the WASH ecosystem is key to ensuring sustainable outcomes.

RECOMMENDATIONS

Based on the above findings, the evaluation team made the following recommendations.

1. Conduct a **stakeholder network analysis** at the beginning of the project to understand the WASH ecosystem and the role played by each stakeholder. This analysis can help identify the central actors in the ecosystem and their role in the network, which is uniquely connected to many others and the gatekeepers. This information will guide the project to know who to involve when discussing WASH issues at the local level.

2. **Communes and local leaders should play a central role in the WASH ecosystem at the local level.** RANO WASH learned that making communes the central actors in the WASH ecosystem was successful for the project. This approach helped obtain sustainable outcomes that communes can continue after the project closeout to engage with other stakeholders, including the private sector, to improve access to WASH services.

3. The program should have a **component to advocate that the central government should have a policy or strategy to reach remote, rural households**. RANO WASH used a private sector engagement approach for water supply. Private enterprises flagged that hard-to-reach areas were not profitable and, therefore, expanding service coverage into these areas was challenging. Future projects should work with the central government and communes to find ways to support at least the infrastructure extension cost to serve hard-to-reach areas.

4. Frequently **review the Monitoring, Evaluation, Accountability and Learning (MEAL) system,** particularly targets and performance against targets and program budget. RANO WASH held multiple MEAL review sessions, but the targets were not reviewed or

revised considering performance. One part of the MEAL review will need to analyze the program performance and available budget, reviewing targets to be more realistic according to the project's capacity to achieve these targets.

Table 1 summarizes the achievements of key outcome-level indicators.

Table 1. Baseline, target, and achievements for the key outcome indicators, RANO WASH MEAL system

Indicator #	Indicator	Baseline	Target	Achieved	Percentage Achieved
SO 1: Governance and monitoring of water and sanitation strengthened for delivering sustainable WASH services					
1,1	Number of intervention communes increasing WASH budget	NA	80	142	**178 percent**
1,2	Value of new funding mobilized to the water and sanitation sectors as a result of United States Government (USG) assistance	NA	$1,969,883	$ 1,945,658	**99 percent**
IR1.1 Strengthened government and stakeholder commitment and accountability to sector development					
1.1.1	National Sector Development Action Plan implemented	Red	Yellow	Red	**Red**
1.1.1.1	National body for WASH sector coordination operational	Red	Yellow	Yellow	**Yellow**
IR1.2 Improved sector monitoring, analysis and learning, influencing policy					
1.2.1	Proportion of intervention communes reporting in the national WASH monitoring system (SE&AM)	0 percent	86 percent	97 percent	**113 percent**
IR1.3 Strengthened sub-national systems					
1.3.1	Number of water and sanitation sector institutions strengthened to manage water resources or improve water supply and sanitation services as a result of USG assistance	NA	429	471	**110 percent**
1.3.2.1	Number of intervention communes engaging with private sector to provide WASH services	NA	105	148	**141 percent**
IR1.4 Increased community control over WASH services					
1.4.1	Number of WASH users groups operational in intervention communes	NA	250	363	**145 percent**
1.4.2.1	Number of intervention communes with functional WASH accountability mechanisms	NA	200	231	**116 percent**
SO 2: Private sector engagement in WASH service delivery increased and improved					
IR2.1 Improved WASH products, technologies, services, and business models					
2.1.1	Number of new/improved WASH products and technologies implemented with RANO WASH support	NA	10	26	**260 percent**
2.1.2	Number of new water and sanitation services provided with RANO WASH support	NA	50	55	**110 percent**
IR2.2 Improved design, construction, and management of WASH infrastructure					
2.2.1	Number of people gaining access to basic drinking water services as a result of USG assistance	NA	210,000	154,538	**74 percent**
2.2.2	Number of people gaining access to safely managed drinking water services as a result of USG assistance	NA	90,000	133,851	**149 percent**
2.2.3	Number of people gaining access to a basic sanitation service as a result of USG assistance	NA	362,712	426,843	**118 percent**
2.2.4	Number of people gaining access to a *limited* sanitation service as a result of USG assistance	NA	264,401	315,651	**119 percent**
2.2.5	Number of people benefiting from the adoption and implementation of measures to improve water resources management as a result of USG assistance	NA	270,187	243,854	**90 percent**
IR2.3 Strengthened technical and business skills and competencies					
2.3.2	Percentage increase in sales for RANO WASH–supported enterprises (average percentage increase in net sales for enterprises following business training)	NA	25 percent	18 percent	**71 percent**
SO 3: Adoption of healthy behaviors and accelerated use of WASH services					

Indicator #	Indicator	Baseline	Target	Achieved	Percentage Achieved
3,1	Proportion of households with soap and water at a handwashing station commonly used by family members	16 percent (at regional level)	35 percent	34 percent	**96 percent**
3,2	Number of communities verified as open defecation–free (ODF) as a result of USG assistance	NA	5,429	5,543	**102 percent**
IR3.1 Improved hygiene and sanitation behavior change (BC) solutions through applied research					
3.1.2	Number of intended organizations reporting applying knowledge gained from a knowledge product to improve program, service delivery, training/education, or research practice	NA	15/25	17	**113 percent**
IR3.2 Improved implementation of WASH BC at all levels: communities, government, and private sector					
3.2.1	Proportion of communities verified ODF that remain ODF following verification	73 percent	75 percent	95 percent	**126 percent**
3.2.2.1	Number of Village Savings and Loan Association members who reported investing in WASH services or products (latrine, water connection, etc.)	0	22,400	23,133	**103 percent**

Legend:

- Above 100 percent.
- 100 percent.
- 90 to 99 percent.
- 50 to 90 percent.
- 20 to 49 percent.
- Below 20 percent.

Picture 1. Drinking water infrastructures built in the commune of Mandialaza, Alaotra Mangoro region

1 BACKGROUND

1.1 WASH PROBLEM STATEMENT IN MADAGASCAR

Madagascar reports some of the world's worst water and sanitation statistics and is unlikely to reach the 2030 goal of universal access to WASH services. The impact on health outcomes is clear: diarrhea is a leading cause of child mortality, and UNICEF estimates that 49 percent of children aged under five years are chronically malnourished. According to Multiple Indicator Cluster Surveys, around 41 percent of the Malagasy population had access to basic drinking water services in 2018: more than half of the population does not have this privilege. According to the World Bank, access to water and sanitation in Madagascar suffers from deep inequalities and low-quality services that lack resilience to extreme weather events. Only 54.4 percent of the population has access to water, and only 12.3 percent has access to sanitation.

Madagascar is at the bottom of the list of 76 developing countries with the lowest access to basic sanitation. The Joint Monitoring Program shows that 65 percent of Madagascar's rural population lives without access to a viable source of drinking water, 81 percent lives without access to an improved sanitation facility, and 52 percent practices open defecation. Due to rapid population growth, the number of people practicing open defecation has increased by 65.2 percent between 1990 and 2015, increasing the risk of fecal–oral contamination and exposure to environmental enteropathy. Approximately 90 percent of the poorest quintile of the population lives without access to an improved source of drinking water, and less than 1 percent of the poorest quintile of the population owns a hygienic latrine[1].

The challenges to accelerating and expanding the use of improved and sustainably managed WASH services are threefold: weak governance, monitoring, and management capacity; weak private sector WASH supply; and unhealthy behaviors and low demand for WASH services.

1.2 SUMMARY OF THE RANO WASH PROJECT

The RANO WASH project in Madagascar is a six-year project funded by USAID from 2017 to 2023[2]. Cooperative for Assistance and Relief Everywhere Inc. (CARE) manages the RANO WASH consortium with core partners CRS, WaterAid, BushProof, and Sandandrano and access to a broad range of resource partners.

RANO WASH aims to increase equitable and sustainable access to water, sanitation, and hygiene services; maximize the impact on human health and nutrition; and preserve the environment in 250 rural communes in seven high-priority regions: Alaotra Mangoro, Amoron'i Mania, Atsinanana, Haute Matsiatra, Vakinankaratra, Vatovavy, and Fitovinany. To accomplish these goals, the project is developing a systematic partnership with national and regional governments, water and sanitation institutions, communities, private sector actors, CSOs, and beneficiaries. The aim is to implement a strategic set of mutually supporting activities that contribute to three interlinked strategic objectives, with gender and social inclusion as a cross-cutting component.

1. **Strengthen governance and monitoring of water and sanitation for sustainable and equitable WASH service delivery.**
    - Strengthen government and stakeholder engagement and accountability for sector development.
    - Improve sector monitoring, analysis, and learning to influence policy.

[1] National Millennium Development Goal monitoring survey in Madagascar, 2013.
[2] In November 2021, USAID approved a 12-month no-cost extension until June 15, 2023.

- Strengthen sub-national systems at the commune level to facilitate inclusive planning and improved sector coordination.

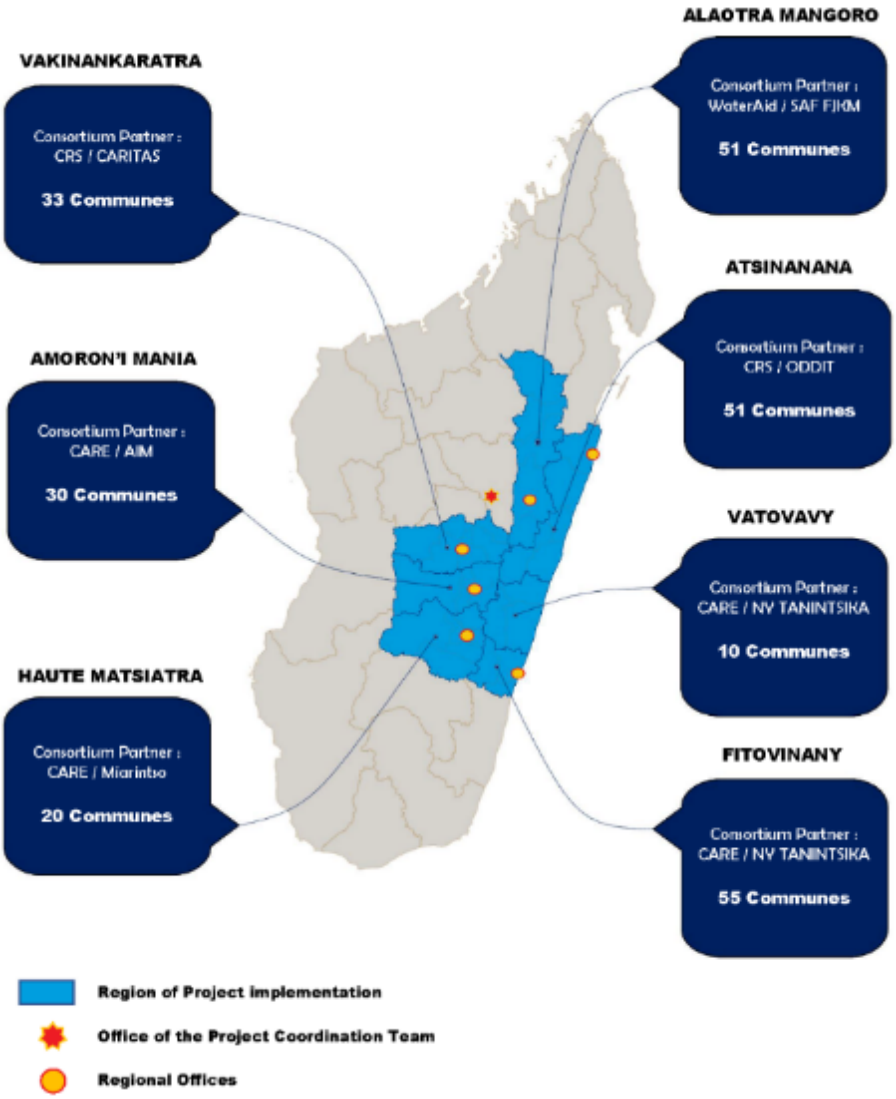
2. **Increase and improve private sector engagement in WASH service delivery.**
   - Improve WASH products, technologies, services, and business models.
   - Improve the design, construction, and management of WASH infrastructure.
   - Strengthen technical and business skills and competencies of private companies engaged in the WASH sector.
3. **Promote the adoption and acceleration of health behaviors and the use of WASH services.**
   - Improve hygiene and sanitation behavior change solutions through applied research.
   - Improve the implementation of WASH behavior change at all levels: communities, government, and the private sector.
   - Promote evidence-based WASH behavior change and hygiene promotion sharing to influence policy and practice.
4. **Promote gender and social inclusion in all components of the RANO WASH project.**
   - Promote the engagement of men, women, and youth as decision-makers in policy spaces by strengthening responsive and gender-sensitive governance in the WASH sector to raise their voices in community-based organizations supported by the project.
   - Engage the private sector in the provision of WASH services and products that are available and accessible to different community groups, including vulnerable groups, by promoting the economic empowerment of women and youth.
   - Implement a transformative approach to facilitate healthy behaviors and gender equity across the WASH sector to enable gender equality and social inclusion in households and communities.

The RANO WASH project targets 250 communes in seven regions in Madagascar, with a total population of 3,184,508. The project has reached diverse beneficiaries, including men, women, boys, girls, communes, private companies, and CSOs, as summarized in Table 2.

Table 2. Direct and indirect beneficiaries by category

Type of beneficiaries	Number of direct beneficiaries	Number of indirect beneficiaries
Households accessing water	**288,389**	**0**
Households accessing sanitation services	**742,494**	**0**
Local masons	**420**	**560,015**
Seamstresses	**475**	**665,315**
Water service providers (WSPs)	**22**	**216,623**
Communes	**250**	**3,184,508**

RANO WASH has also reached key government structures, including the Ministry of Water, Sanitation and Hygiene; seven Regional Directorates of Water, Sanitation and Hygiene; the Ministry of Public Health; the Ministry of Interior and Decentralization; the Ministry of National Education; and Regional Services for Budget and Taxation. At the local level, the project also reached local structures for participation (SLCs), civil society organizations (CSOs), water user associations (WUAs), the Water, Sanitation and Hygiene Technical Department (*Service Technique de l'Eau, Assainissement et l'Hygiène* – STEAH), and private water service providers (WSPs).



DEVELOPMENT HYPOTHESIS

The program posited the following development hypothesis:

"(1) If WASH governance and systems and capacities to manage WASH services accountably are strengthened,

(2) if quality WASH products and services are reliably available and affordable for all, and
(3) if demand for improved WASH behaviors and services grows in an expanded consumer market, then the incidence and prevalence of childhood diarrhea, exposure to environmental enteropathy, and under- five mortality rates will decrease." This hypothesis was elaborated into a program theory of change (TOC), summarized in Figure 1.

The three strategic objectives (SOs) were expected to be interdependent. Running throughout the program is a focus on "community dialogue and engagement for a gender transformative approach to empower all people, especially women and girls" (TOC).

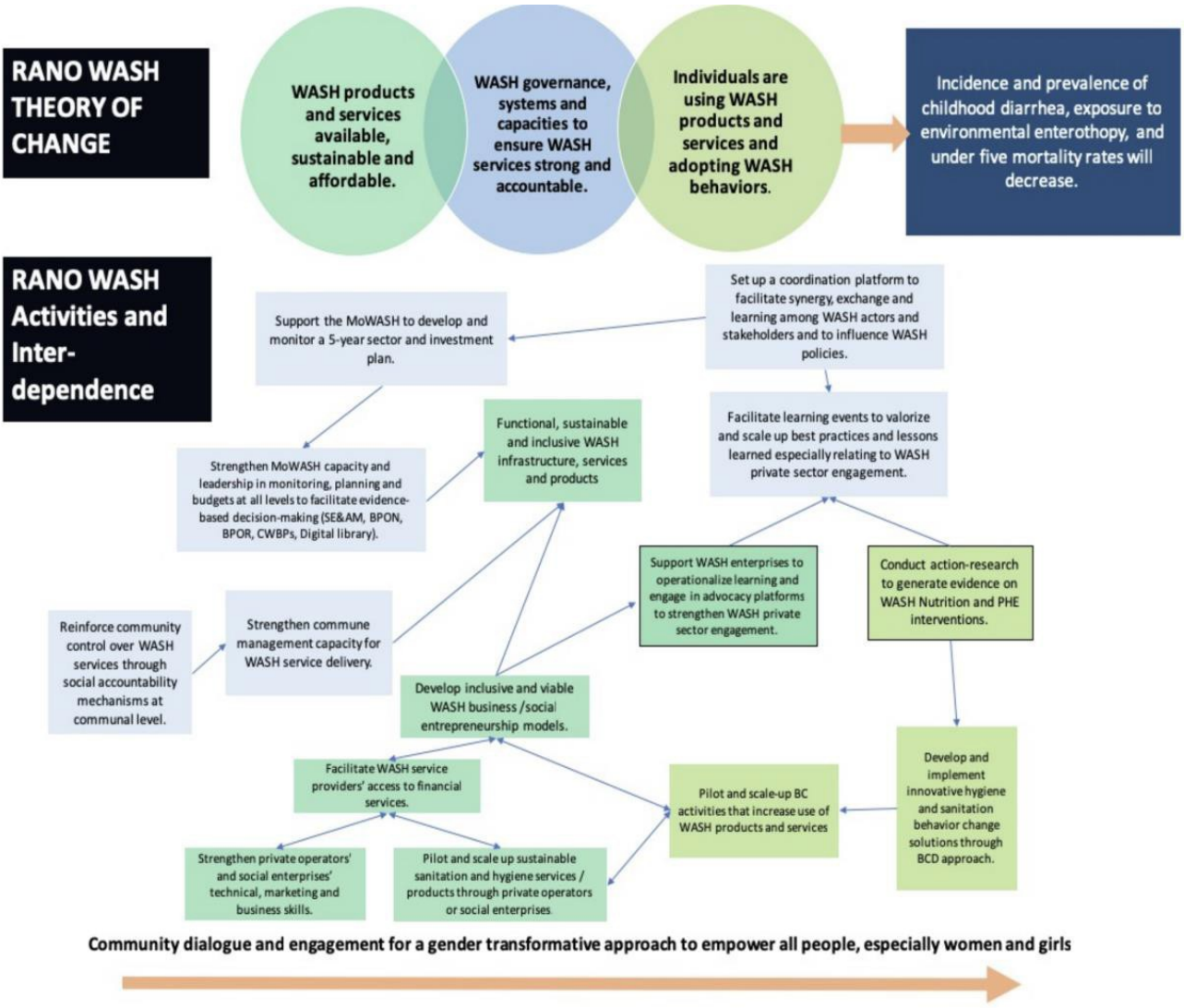


Figure 1. RANO WASH Theory of Change

2 EVALUATION METHODS AND LIMITATIONS

2.1 EVALUATION PURPOSE

The RANO WASH project is implemented by a consortium headed by CARE under Cooperative Agreement No. AID-687-A-17-00002.

This final evaluation:

1. Examined the overall progress of the RANO WASH project in meeting the project goal and objectives, specifically how it affected the WASH ecosystem and people's access to WASH services, as well as their behavior in terms of WASH service demand and practices.
2. Reviewed, analyzed, and evaluated the design, effectiveness, and sustainability of RANO WASH.
3. Provides specific recommendations for future activities and directions that USAID may wish to explore regarding WASH in Madagascar.

2.2 EVALUATION QUESTIONS

1. To what extent has RANO WASH been appropriate and relevant for WASH system strengthening and access to WASH services? (In terms of appropriateness and relevance, the evaluation team reviewed how well the design of the project and its TOC corresponded to the needs identified in the field.)

2. To what extent has RANO WASH affected the overall WASH system in Madagascar through the building block pillars? (To address this question, the evaluation team first assessed the efforts or approaches used to affect the WASH ecosystem, access to WASH services, and attitudes and behavior, and then assessed how RANO WASH affected these aspects of WASH in Madagascar.)

3. To what extent has RANO WASH contributed to population access to WASH services and positive attitudinal and behavioral changes among citizens? (To address this question, the evaluation team must assess whether RANO WASH participants receive quality WASH services and are actively participating in improving WASH outcomes in their community.)

4. To what extent can RANO WASH be expected to continue or be scaled up by communes, private sectors, and local coordination mechanisms after it ends? What evidence exists to demonstrate this sustainability?

5. What are the lessons learned, best practices, and most significant challenges to the success of RANO WASH?

2.3 EVALUATION METHODOLOGY AND DESIGN

The RANO WASH evaluation team used a mixed-methods design for this evaluation, which collected both qualitative and quantitative data to address the evaluation questions. This data collection included a documentation review, 44 key informant interviews (KIIs), focus group discussions (FGDs) with a total of 174 participants, and a quantitative survey (1,441 households and 120 communes).

The data collection took place in December 2022, with the evaluation process beginning in October 2022 and ending in February 2023. Figure 2 illustrates the data collection sample size and methodologies spread across the RANO WASH targeted regions.

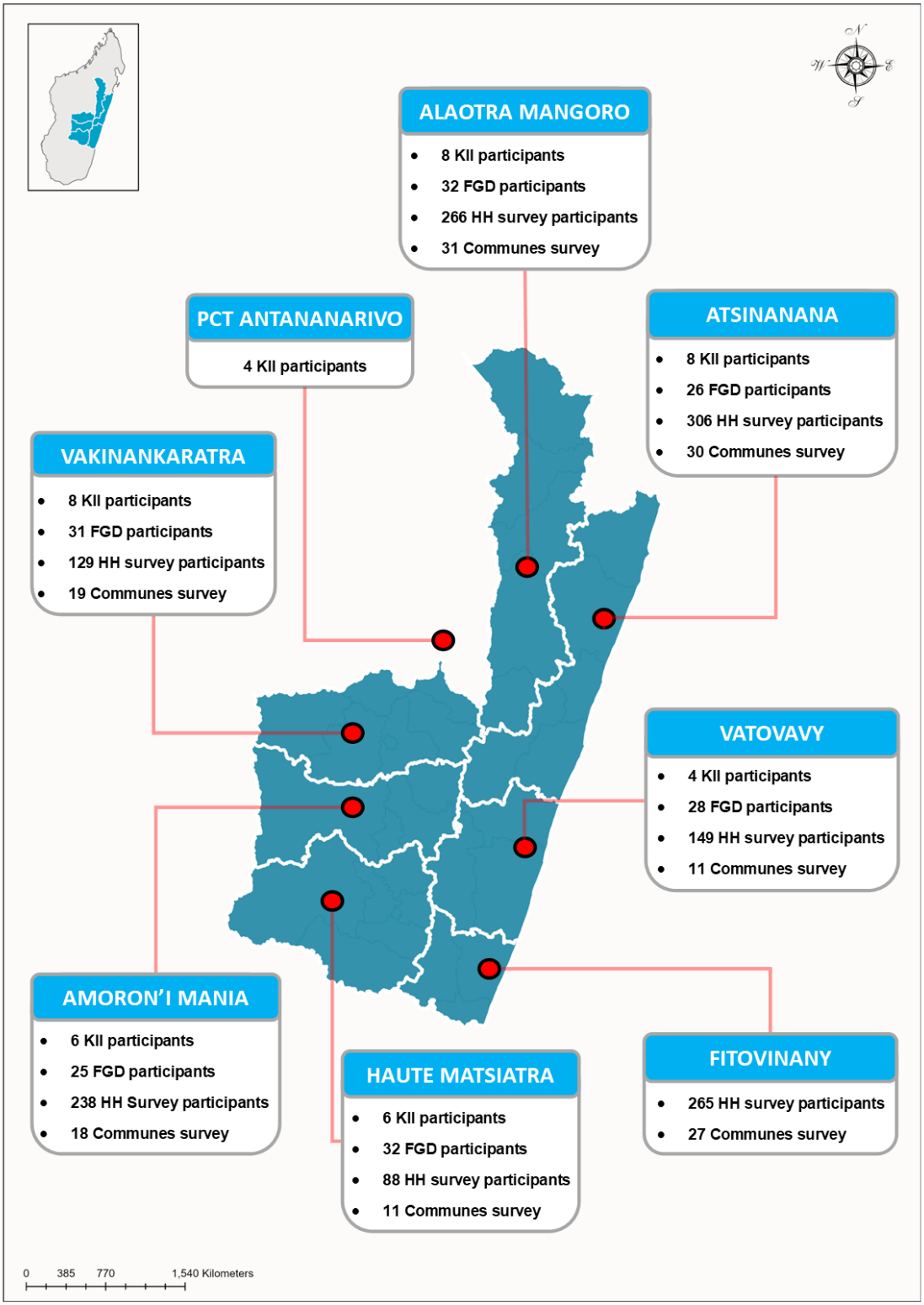


Figure 2. Distribution of people interviewed during the final evaluation by region and data collection method

2.4 DOCUMENTATION REVIEW

The evaluation team undertook a review of documents produced by and relevant to the RANO WASH project to better understand its design and implementation, extract findings relevant to the evaluation questions, and inform the development of the evaluation's data collection protocols so that the instruments appropriately supplement or crosscheck against information in the background documents. The evaluation team triangulated information from the documents with the data extracted from the KIIs, FGDs, and surveys.

2.5 QUANTITATIVE SURVEY

For the household survey, the sampling method used was a four-stage survey.

- First stage: all the targeted regions were selected.
- Second stage: 100 communes were selected using a simple random sampling method.
- Third stage: fokontanys were selected using a simple random sampling in each targeted commune. The number of fokontany sampled in each commune was proportional to the commune size in terms of the number of fokontanys in the region.
- Fourth stage: households were selected using the ballpoint pen method.

By the end of the interviews, enumerators reached 1,441 households in the seven project intervention regions.

For the commune survey, the communes to be interviewed were selected using a two-stage cluster sampling method, with each region considered a cluster as follows:

- In the first stage, all seven targeted regions were selected.
- In the second stage, 150 communes were selected using a simple random sampling method.

2.6 QUALITATIVE SURVEY

2.6.1 Key informant interviews

The evaluation team conducted KIIs in person. These were conducted in the seven targeted regions (20 communes covered) and the central office in Antananarivo and targeted (i) the mayors, (ii) private sector companies, especially those managing water systems, (iii) community leaders, (iv) MEAH representatives at both the regional and central levels, and (v) RANO WASH staff at both the regional and central levels, as well as implementing-partner staff.

Table 3 summarizes the number of people reached with KIIs.

Table 3. Distribution of the sample by key informant groups

Region	Project staff	Mayors	Water service providers	Community leaders	MEAH staff
Antananarivo	4				
Alaotra Mangoro	1	2	3	2	
Amoron'i Mania		3	1	2	
Atsinanana		2	3	3	
Haute Matsiatra		2	2	1	1
Vakinankaratra	1	2	2	2	1
Vatovavy		2	1	1	

Region	Project staff	Mayors	Water service providers	Community leaders	MEAH staff
Fitovinany					
Total	**6**	**13**	**12**	**11**	**2**

2.6.2 Focus group discussions

The evaluation team organized 18 focus groups reaching 180 people, as summarized in Table 4. Separate discussion groups were organized for men, women, and other vulnerable groups, including older adults and people with disabilities.

Table 4. Distribution of focus groups and participants by region

Region	Number of groups	Number of people		
		Men	Women	Other vulnerable groups
Alaotra Mangoro	3	0	10	22
Amoron'i Mania	3	8	12	5
Atsinanana	3	8	10	8
Haute Matsiatra	3	10	10	12
Vakinankaratra	3	11	10	10
Vatovavy	3	10	10	8
Fitovinany				
Total	**18**	**47**	**62**	**65**

2.7 DATA ANALYSIS METHODS

The evaluation team employed several qualitative and quantitative data analysis methods to identify key findings from the collected data, draw conclusions, and make recommendations. Specifically, they used the following types of analysis: trend, comparative, content, crosstabulations, and significance testing. Wherever possible and relevant, the evaluation team conducted a gender and social (e.g., ethnic group) analysis to examine distinctions and similarities in experience and results by gender.

2.7.1 Qualitative data analysis methods

The evaluation team took notes during the KIIs and FGDs conducted with RANO WASH stakeholders. They then cleaned and synthesized electronic summaries on a rolling basis after each interview or focus group. The evaluation team conducted internal working sessions to identify and discuss emerging findings and themes and categorized conclusions and recommendations by evaluation questions.

Data analysis methods such as content and comparative analyses were used to identify response categories and patterns and elucidate emergent themes and contextual factors among the qualitative data.

2.7.2 Quantitative data analysis methods

During the data collection, the evaluation team monitored incoming survey responses daily to verify that the survey operated as planned. They flagged completion rates and detected any preliminary data collection concerns. The evaluation team conducted a final cleaning process before analysis to review potential data quality concerns in the final dataset.

The team conducted a quantitative analysis using the statistics software XL Stat, ensuring all data was weighted to ensure representativeness. The evaluation extrapolated data using extrapolation coefficients defined by the following expression: for each individual i in the dataset, e_i is the extrapolation coefficient.

Usually in statistics, the extrapolation coefficient is the reverse of the inclusion probability in the sample: $e_i = \frac{1}{P_i}$

The evaluation team disaggregated all data by gender and region. This disaggregation was analyzed with chi-squared statistical significance testing and, when significant, is presented in section 3.

2.8 LIMITATIONS AND BIAS

The evaluation team designed a robust methodology, ensuring a representative sample of the targeted population. However, the evaluation has the following limitations.

1. The evaluation team interviewed the Ministry of Water, Sanitation and Hygiene personnel but not people from other key ministries such as the Ministry of Health (WASH in health facilities) or the Ministry of Education (WASH in schools), which both collaborated with the RANO WASH project.
2. This was a performance evaluation, and the data analyzed concerned the quantitative indicators and project monitoring and evaluation data. The evaluation team did not check the accuracy of these data or conduct a quality audit to validate them. Therefore, some of the conclusions' validity is contingent on the monitoring and evaluation data accuracy and consistency.
3. The number of beneficiaries of water is estimated with a 95 percent confidence interval, using an extrapolation method. Time and resource constraints prevented the team from meeting all the households in the targeted communities for a census. Although representative of the target population, the sampling method obtained values for these indicators that are estimations and not exact values.

3 FINDINGS, CONCLUSIONS, AND RECOMMENDATIONS

3.1 EVALUATION QUESTION 1: TO WHAT EXTENT HAS RANO WASH BEEN APPROPRIATE AND RELEVANT FOR WASH SYSTEM STRENGTHENING AND ACCESS TO WASH SERVICES?

The first evaluation question assesses RANO WASH's relevance from design to implementation.

Overall, the RANO WASH TOC is relevant to the WASH context in Madagascar. In addition, all project activities are aligned with the Government of Madagascar's national and regional priorities, as described in some key sector documents, including Madagasikara Madio, to combat open defecation, as well as national, regional, and communal plans. The project's activities and strategies have also been developed or updated jointly with the MEAH and other relevant line ministries (e.g., National Education and Public Health), as well as regional technical services (Regional Directorate of Water, Hygiene and Sanitation; *Direction Régionale de l'Eau, de l'Hygiène et de l'Assainissement* – DREAH) and commune government teams. Diverse public and private sector stakeholders were engaged in identifying and implementing solutions.

Need assessments conducted during the baseline studies show that RANO WASH has been implemented to address real WASH needs in the field. The main WASH problems identified before the project were insufficient access to clean water, latrines, and other WASH services; poor hygiene behaviors, including open defecation; and poor WASH governance at the national, regional, and local levels.

RANO WASH's TOC properly and sustainably addresses these gaps. The project was implemented using a system approach to influence the overall WASH ecosystem so that communes could provide sustainable WASH services to citizens (supply) and citizens could increase their demand for WASH services by adopting appropriate behaviors in terms of hygiene and sanitation. Finally, RANO WASH is suited to the context and culture of communities, local authorities, and regional technical service teams, as recognized by all categories of respondents during data collection.

Concerning the targeting, the final evaluation team found that RANO WASH exceeded the targets for most indicators, some by more than 200 percent.

The following sections analyze the relevance specific to each of the three SOs of the RANO WASH project.

3.1.1 SO1: Governance and monitoring of water and sanitation strengthened for delivering sustainable WASH services

SO1 is strengthening government capacity at the national, regional, and commune levels to deliver quality, sustainable WASH services. Under this strategic objective, the RANO WASH team developed a sector system-wide approach based on nine building blocks, as shown in Figure 8.

Figure 3. Building blocks for a strong WASH system

Addressing all the building block challenges can easily contribute to sustaining access to quality WASH services.

RANO WASH project's activities and strategies have been developed and updated jointly with MEAH and other relevant ministries (e.g., Education and Public Health), DREAHs, and commune government teams. The gaps in each building block were jointly identified, and corrective actions were defined with the support of all these stakeholders. Diverse public and private sector stakeholders were engaged in identifying and implementing solutions.

RANO WASH contributed to improving the WASH sector at the national level. The MEAH progressed in most of the nine building blocks, including but not limited to the upgrade of the sector monitoring and evaluation system (SE&AM), coaching to the ministry in terms of program financial management, sustainability of WASH services (life cycle cost), providing training to STEAHs, strengthening the WASH system in Madagascar, sector coordination, and joint sector review.

RANO WASH improved regional planning, review, monitoring, and learning. DREAHs understood their roles and expressed satisfaction with logistical, material, and capacity-building support for the Regional Coordination Structures (*Structure de Mise en Œuvre de la Coordination Régionale* – SRMOs). However, they noted an incompatibility between public–private partnership (PPP) criteria and service coverage for remote rural areas. They also noted funding gaps for day-to-day activities for strengthening the sector at the regional level and coaching commune-level actors such as STEAHs. SRMOs were also used as a platform to exchange and learn between key actors.

The STEAHs are key actors in behavior change and purchases of services. They understand their responsibilities. However, their role concerning technical and financial oversight of WSPs was rarely mentioned in interviews. Training and support were consistent with community needs and surpassed many expectations. The training of mayors and their teams was effective in ensuring their participation and leadership. Respondents noted the utility of project tools and partnerships that promote collaboration and coordination, including STEAHs, local WASH committees (KRFFs), WASH CSOs, WUAs, LPs, and PCDEAHs. Commune governments have accepted their role as contracting authority ("*Maître d'Ouvrage.*")

Overall, RANO WASH is suited to the context and culture of communities, local authorities, and regional technical service teams. All respondent groups (community members and representatives from the public and private sectors) noted that RANO WASH's contribution to meeting community needs for WASH benefits all community members, regardless of gender. Access to water was the top priority among all respondents, and in communes without water infrastructure or with non-functional infrastructure, this was a noted source of tension for respondents. Unmet needs in water service provision include the extension of water networks, source protection, and minor and large-scale rehabilitation of WASH infrastructure. Although the project alone cannot address all these unmet needs, RANO WASH has developed new ways to increase access to clean water, such as tax generation schemes, elaborating communal WASH plans (PCDEAHs), and helping commune governments and citizens to identify repairs and rehabilitations they can fund on their own. RANO WASH also supported and encouraged communes to engage the private sector in the WASH sector through PPP.

Picture 2. Municipal meeting, Kianjandrakefona, Commune, Amoron'i Mania

3.1.2 SO2: Private sector engagement in WASH service delivery increased and improved

SO2 aims to engage the private sector for both water and sanitation to increase clean water, latrine, and menstrual supplies in the community.

Access to clean water was a problem in the targeted regions and communes. Even in communes where people could access water, its quality was questionable. RANO WASH contributed to improving access to quality water to reduce waterborne diseases in the targeted communities.

> "*In general, we notice that the beneficiaries are satisfied because the water is clean, safe, and they do not have to go far to get it. Also, people obtain water according to their needs, according to the quantity they wish. Women are no longer tired of fetching water and doing laundry. Husbands can help the wife with all the housework. And all the young people and children are*

healthy. The disabled have no trouble getting water, and all their clothes are clean". **The Deputy Mayor of Ambiabe commune**

In addition, the baseline study showed that most of the infrastructure managed by the community was either not functional or not providing enough water to citizens at any time they needed it because of insufficient maintenance. RANO WASH developed and implemented a private sector engagement strategy to engage private companies to support them to construct or rehabilitate water systems in targeted communities and properly manage these systems to sustainably provide sufficient and quality clean water to citizens. As a result of this strategy, the private sector understands its role in improving access to clean water, and citizens acknowledged that water was more accessible, without multiple interruptions, than before the RANO WASH project. However, people acknowledged that mostly the fokontany capital was connected to the water network. This is likely due to the poor profitability of the water system in hard-to-reach areas.

RANO WASH used a flexible approach to water supply, with private connections for those with enough money to afford it, social connections for those who could pool their resources to access clean water, and collective water points for vulnerable households. RANO WASH also implemented a strategy of automatic water kiosks as an alternative solution before households subscribed to the services. This flexible approach helped the majority of groups in targeted communities have access to several service choices for clean and quality water for their household needs. Although the project alone cannot address all of the unmet needs, RANO WASH has developed new ways to increase access to clean water. These include tax generation schemes, delegating the management of public water services to a private sector investor–manager–builder (IMB), adopting the IMB unsolicited bidding approach, organizing regional fairs in the communes to appeal to potential investors, issuing restricted calls for bids from IMBs, developing communal WASH plans (PCDEAHs), organizing WASH fairs to engage communes and private operators to invest in water services, and helping communal governments and citizens identify repairs and rehabilitation that they can finance on their own or through their private partners.

"*The approach of the project is effective because there are many households who have private connection, and for those who do not have the private connection, people have access to drinking water thanks to the public fountain terminal. This approach is effective because the very project meets our needs.*" **Men's focus group in Andranovorivato**

For access to sanitation services, RANO WASH engaged 420 local masons (419 men and one woman) and trained them in construction and distribution. They built 6,485 latrines, 153 showers, and 409 mobile handwashing stations in the community. For access to hygiene services, especially women's access and their use of menstrual pads, RANO WASH engaged 475 local seamstresses (22 men and 453 women) and trained them to design reusable menstrual pads for women in their community. A total of 91,810 menstrual pads were produced and sold during the project's life. The main gap is the imbalance between men and women, resulting in an overrepresentation of men among masons (only one woman against 419 men) and an overrepresentation of women among seamstresses (only 22 men against 453 women). This imbalance could be explained by social norms about specific jobs by sex, which need to be addressed in future programs.

Engaging individuals and training them to provide specific WASH services in their community was relevant because the latrines and menstrual pads were available and accessible at any time to community members. One of the problems in access to these products mentioned by community members during the baseline was the cost. Having people in the community designing and producing these products in the community brought down the production cost, and their price thus became more affordable to community members, as confirmed by the following statement:

"*Latrines were very expensive, and we preferred open-air defecation as we do not have as much money to build a toilet.*" **Women's focus group in Beforona**

The project midterm evaluation recommended to revisit the identification and selection process of local masons and seamstresses and further support and strengthen marketing and business planning training, supply chains, and access to finance. In response to this recommendation, RANO WASH staff mentioned that local masons and seamstresses were selected from the beginning of the project, so revising the recruitment process at this stage of the project implementation was not possible. However, the project focused on building local masons' and seamstresses' capacity. The project has also supported local masons and seamstresses who set up their network to facilitate the grouping of input purchases and access to a larger market volume. In addition, the financial education provided to Village Savings and Loan Associations (VSLAs) has helped them to take out loans from VSLAs as members and from microfinance institutes. Finally, the project has facilitated linking local masons and seamstresses with financial institutions and other institutions that may need their services, such as schools and health centers.

The private sector noted their difficulty in securing sufficient funding for WASH infrastructure construction or rehabilitation throughout the project implementation. To address this problem for both water supply and sanitation and hygiene, RANO WASH adopted two parallel strategies. Concerning private companies constructing or rehabilitating water systems, RANO WASH organized several events to inform financial institutions and potential investors about the WASH sector's economic potential, including webinars, meetings, fairs, and exhibitions. As a result of these events, WSP providers, banks, and microfinance institutions were linked to ensure that these private companies could access enough funding when needed to support construction and rehabilitation activities. In addition, RANO WASH strengthened the linkage of WSPs with equipment and material suppliers so that the latter adopted payment facilities adapted to the needs of WSPs. The project encouraged masons and seamstresses to become VSLA group members so that they had access to small credits to support their activity. RANO WASH also supported local masons and seamstresses to set up a network at the district level. It has allowed them to increase their demand and access to financial services adapted to their needs through financial institutions such as banks and microfinance companies.

Picture 3. Animation for the promotion of new water services in Lokomby, Fitovinany

3.1.3 SO3: Adoption of healthy behaviors and accelerated use of WASH services

Regarding the issue of hygiene and sanitation, open defecation was and remains a major challenge in the targeted communities, as recognized by local authorities. The third SO of promoting healthy behaviors, including fighting open defecation, was relevant. It produced significant results, bringing multiple villages and communes to be certified as ODF.

> "*RANO WASH made awareness of sanitation and hygiene. For example, after using the toilet, even children, you always wash your hands. There was a song about handwashing before eating, after toilet. Especially women, they know that very well. Each household learned the lesson.*" **Men's focus group in Ampasibe Onibe commune**

Women's menstrual hygiene was also a significant challenge in the project area. Women faced challenges because of insufficient financial resources to afford using single-use sanitary napkins, as confirmed by the mayor of Antsoantany commune in the following statement:

> "*Indeed, our expectations have been met. Concerning the hygiene of the women in the countryside, they cannot afford disposable sanitary napkins. They do as they can during their period. Since the introduction of the local seamstress, we have been able to see that it has been beneficial and hygienic for the women.*" **Mayor of Antsoantany commune**

Women and girls have access to menstrual pads and a shower to bathe during their menstruation. They can discuss with their families the needs of women and girls during menstruation, and they are no longer ashamed to expose their sanitary pads to the sun after washing them. These practices were taboo before the RANO WASH project implementation in the targeted communities.

Picture 4. Local Seamstress sanitary pads, Ambositra commune, Amoron'i Mania

3.2 EVALUATION QUESTION 2: TO WHAT EXTENT HAS THE RANO WASH PROJECT AFFECTED THE OVERALL WASH SYSTEM IN MADAGASCAR THROUGH THE NINE BUILDING BLOCKS?

This section analyzes the effectiveness and performance of RANO WASH and is structured by the building blocks. Because the third learning question concerns service delivery, only eight of the nine blocks are analyzed under this section, and the service delivery building block is analyzed in the following section.

3.2.1 Institutional arrangements

Law number 93-005 of January 26, 1994, on decentralization policy orientation, the water code, and its application decrees define the institutional arrangement for local development considering all sectors, including the WASH sector. However, RANO WASH contributed to strengthening the operationalization of the decentralization process in the WASH sector by building the capacity of communes to play a central role at their level. The following outcomes were recorded through both document review and interviews in the field.

Through RANO WASH support, the MEAH improved leadership of the sector. The MEAH led the sector by setting up a special unit in charge of sector coordination at the national level (Department of Communication and Partnership), owning and operating the newly upgraded SE&AM platform, conducting a joint sector review every year, conducting analysis of the WASH system at the national level, and training the seven Regional Directorates.

The DREAHs are coordinating the WASH sector at the regional level, contributed to training the STEAHs and communes, and have improved the STEAH training curricula. RANO WASH supported the DREAHs in setting up SRMOs in each intervention region, a coordination platform for the WASH sector. The project also delivered training of trainers and coaching to the DREAHs to support the communes and train the STEAHs in the communes under their authority. All the targeted DREAHs were trained, and regional leadership played a key role in engaging the communes, supporting the communes to provide quality WASH services, and collecting and reporting WASH data in the SE&AM system.

Communes and regional directorates have fulfilled their mandate to provide WASH services (100 percent). Communes and the regional WASH directorates are working together to fulfill their mandate in the WASH sector. RANO WASH trained regional and communal teams to clarify their roles and responsibilities and how they can work together to improve WASH indicators in the communes and regions. As a result of this training, DREAHs and communes played a central role in helping RANO WASH achieve most of the key performance indicators. Communes developed and implemented PCDEAHs, mobilized resources to support the WASH sector, and invested in providing WASH services to their citizens.

Water user groups were set up in communes to improve access to and use of WASH services. They work closely with the communes to ensure these services are available and sustainable.

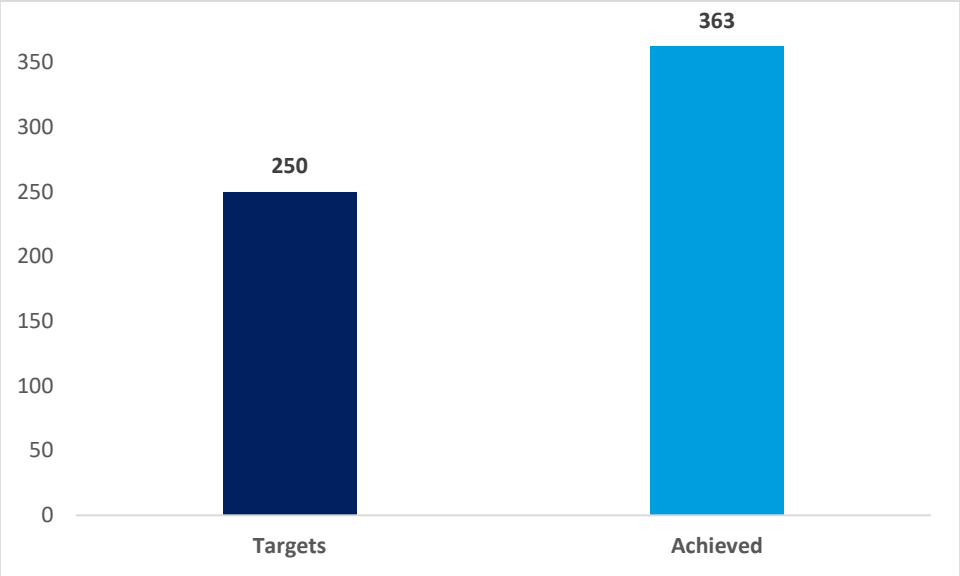


Figure 4. Number of WASH user groups operational in targeted communes

Water user groups were committed to providing WASH services to communities. Communes engaged them in developing a common strategy for communal project management and budgeting for the WASH sector.

RANO WASH conducted a strengthening engagement across institutions in the WASH sector coordination mechanism (SRMOs), especially CSOs and the private sector, and conducted reflection and advocacy with other sector actors on access to services for schools and health centers. RANO WASH also established or re-dynamized water user groups in the targeted communes; the results are presented in Figure 4. Overall, 363 water user groups were established in the targeted communes against a target of 250, for an achievement rate of 145 percent.

All the WASH actors in the communes contributed to filling gaps (including private sector involvement, local authorities, and leaders). RANO WASH supported and strengthened the operationalization of structures (SLCs, CSOs, ASUREPs, and private operator groups). All these actors played a strategic role in improving WASH indicators in the targeted regions and communes:

Local authorities' satisfaction regarding the key roles played by CSOs and SLCs at the communal level was confirmed by multiple respondents, including the ATEAH of Andranovorivato commune, who stated, "*The change that we found was the existence of the CSOs and SLC because they did not exist before. These CSOs and SLC develop proposals based on the population's needs and the commune's development, which will be sent to the municipal council for deliberation.*"

3.2.2 Sector coordination and integration

As recognized by public actors and civil society, the WASH sector coordination has improved throughout the RANO WASH implementation. Before the project started, the national WASH coordination mechanism was not functional, and the related indicator was scored in red. To date, this indicator is scored yellow, meaning that significant effort and work have re-dynamized the national coordination mechanism, as shown in Figure 5. .

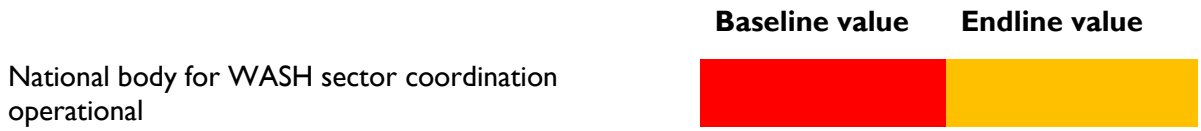


Figure 5. National coordination mechanism, baseline and endline

The National Unit for Sector Coordination (UCPP) is already set up within the MEAH, but its functionality is not yet perfect, as reflected by the color code being yellow instead of green. However, the RANO WASH project was aware of all the challenges and anticipated bringing the functionality from red to yellow, which has been done.

Picture 5. Regional Coordination Structure (SRMO),

In addition to the functionality of the national body for WASH sector coordination, the regional MEAH teams, after RANO WASH training and support, have taken the lead in sector coordination, and WASH coordination structures at the communal and regional levels are functional. The dynamism and cohesion of the actors (such as SRMO periodic meetings) have improved, and the government, CSOs, community members, and private sector actors are complementary, as illustrated by the following statements.

> "*In terms of coordination, when there was a problem, the DREAH, with the support of the ministry, the fokontany, as well as representatives of people who opposed the change in water management, met. This meeting aimed to find a way to cut water connection costs. As a result, social water connections have been installed for the people who were against the change, under the conditions that they are the ones responsible for the maintenance of such connections.*" **Mayor, Antsoantany commune**
>
> "*As a teaching from this coordination, it is the importance of SLC. Since the existence of SLC, the roles and responsibility of various partners have been well-synchronized and well-distinguished. Suddenly, they are all present in the SLC.*" **Mayor, Morarano Gara commune**

The number of communes reporting in SE&AM (timeliness, quality, and use of data for decision-making) has increased. The indicator tracking table shows that 97 percent of targeted communes consistently report WASH data in the national monitoring and evaluation system (SE&AM). STEAHs have been trained by the RANO WASH team on data collection, verification, and transmission.

RANO WASH also hired a local consultant who supports MEAH to develop a national WASH sector monitoring system using the DHIS2 platform. All the MEAH teams involved in SE&AM were trained at the national, regional, and local levels, and data are consistently entered and synchronized in the national platform.

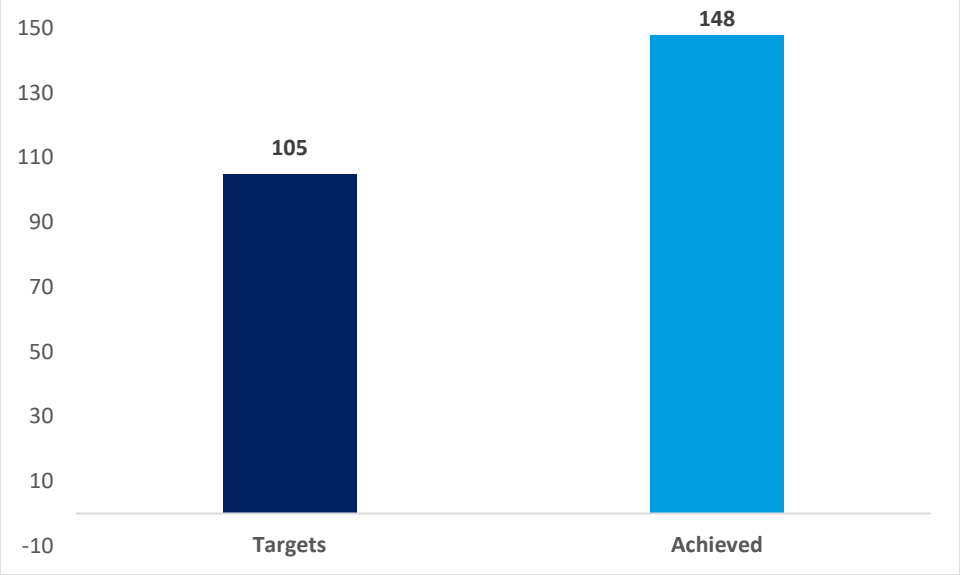


Figure 6. Number of intervention communes engaging with the private sector to provide WASH services

The evaluation team found an increased involvement of all sectors, including the private sector. RANO WASH trained and supported communes to engage with the private sector to work together in reaching WASH objectives assigned to the communes. Overall, 148 communes are currently engaging with the private sector to support the WASH sector, compared to a project target of 105, meaning an achievement rate of 141 percent by the final evaluation report writing time.

RANO WASH promoted inter-sectoral partnerships led by local authorities to maximize impacts on health and nutrition. In this line, institutions such as schools and health centers were engaged in the project to receive WASH infrastructure. Figure 7- shows the number of institutions reached with WASH services.

Overall, 225 institutions were reached, against 211 planned, for an achievement rate of 106.6 percent. However, the evaluation team found that even though the number of institutions reached with WASH services was high, most could not pay water invoices due to confusion about who should be paying (communes, institutions, or another entity). The RANO WASH team is working to address this challenge by clarifying the roles and responsibilities under the law before the project closeout.

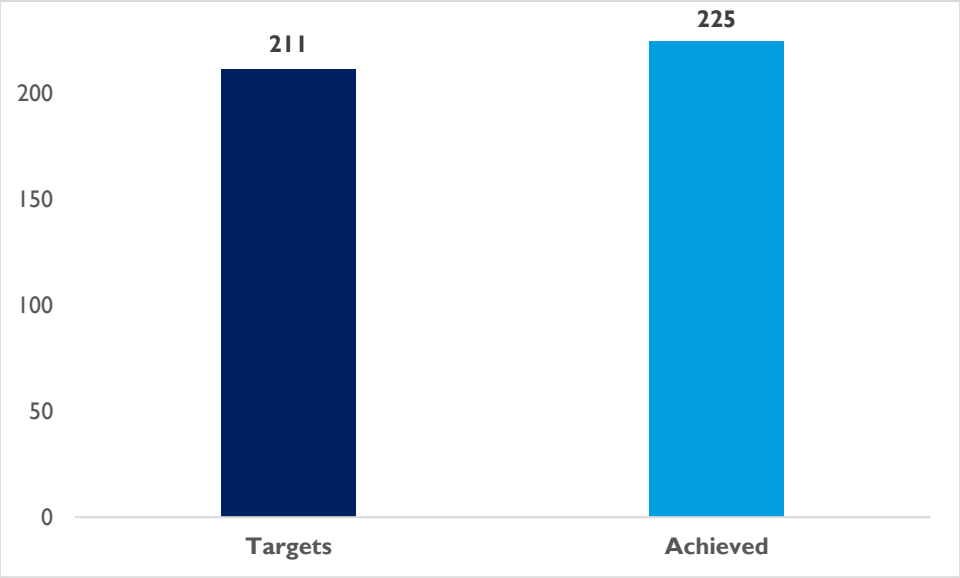


Figure 7. Number of institutional settings gaining access to basic drinking water services as a result of US government assistance

3.2.3 Strategic planning

Strategic planning was one of the key components of the RANO WASH project, and the team supported communes through training to develop WASH communal plans (PCDEAHs). As a result, communes are aware of the necessity of PCDEAHs and the developed and implemented PCDEAH in their competence area, as shown in Figure 8. Overall, 223 of the 250 targeted communes developed and implemented a PCDEAH with RANO WASH, for an achievement rate of 89.2 percent.

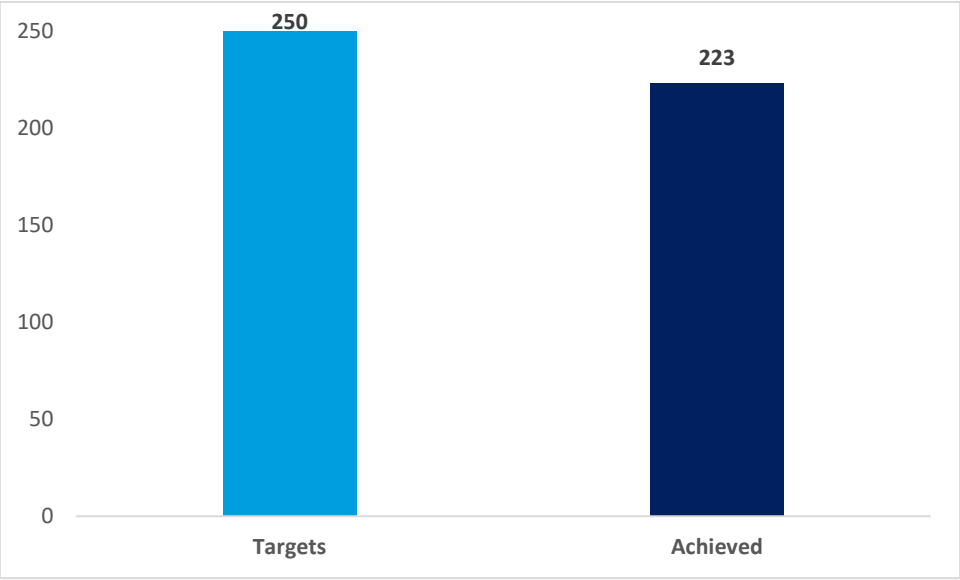


Figure 8. Number of communes that developed and implemented a PDCEAH

In line with strategic planning, RANO WASH supported the MEAH in preparing a performance contract for regions and communes, following the national strategy. The regional objectives have been implemented with RANO WASH support.

The evaluation team found regular, multi-stakeholder reviews of WASH sector performance at the national level and in all the targeted regions of the RANO WASH project. During the performance review, corrective action plans are designed to address delay issues in the initial plan implementation.

3.2.4 Monitoring

The evaluation team concluded that one of the significant successes of the RANO WASH project was related to WASH sector monitoring. Fokontany, communes, and DREAHs are more committed to monitoring activities, SE&AM is frequently updated, and data are transmitted at the regional and national levels by all stakeholders involved. Figure 9 shows that RANO WASH targeted around 86 percent of the 250 communes reporting in the national WASH monitoring system. RANO WASH achieved 97 percent of the targeted communes consistently reporting in the SE&AM and data transmitted to the regional and national levels. The project supported the development of the national monitoring system by hiring a consultant who worked with all the WASH stakeholders, using a participatory approach. The consultant also upgraded the SE&AM system on the DHIS 2 platform, and all stakeholders were trained on the new system. This approach, coupled with the training delivered by the RANO WASH project since the launch, led to increased use of the SE&AM by WASH stakeholders at all levels (local, regional, and national).

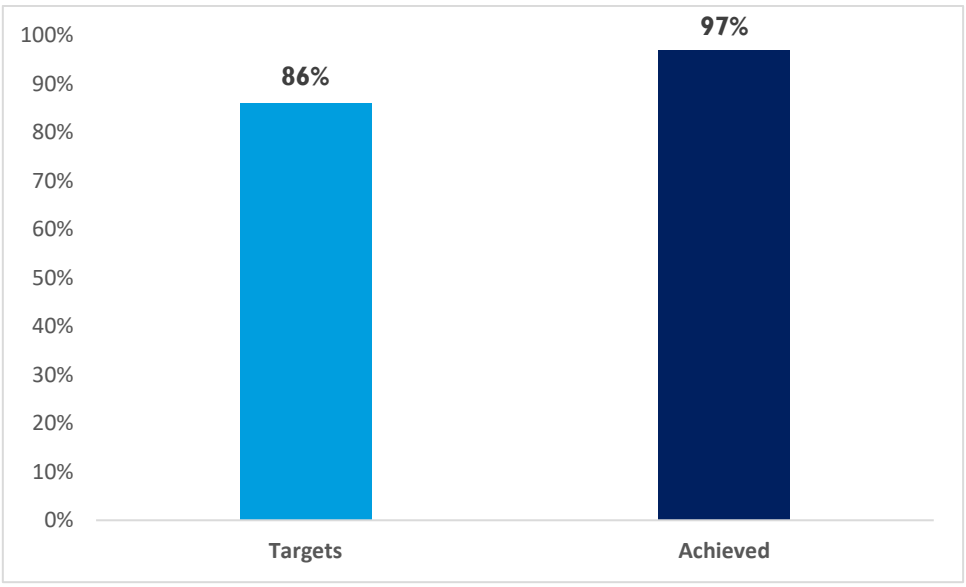


Figure 9. Proportions of targeted communes reporting in the national WASH monitoring system (SE&AM)

The evaluation team also found that the national government and regional teams provide regular feedback to communes using SE&AM data. RANO WASH trained the regional and national teams on data quality assurance methods, including delivering feedback to communes to adjust data of poor quality.

The MEAH understands and acknowledges the importance of the national WASH monitoring system and decided to search for financing and partnership to support the operationalization of SE&AM in all 23 regions, with nine regions currently trained on the upgraded SE&AM. Officials' engagement to support the SE&AM led to increased functionality of the SE&AM and increased availability of the WASH monitoring data to support WASH planning at national, regional, and local levels.

3.2.5 Financing

WASH sector financing was a priority of RANO WASH, and the project supported the mobilization of both public and private funding for the WASH sector. Concerning the mobilization of the public financing of the WASH sector, Figure 10 shows that the proportion of communes securing a WASH budget increased with time following the start of the RANO WASH project in 2017. This represents a correlation between the system-strengthening implementation and the number of communes with a WASH budget. In 2017, only 14.7 percent of the targeted communes had budgeted a dedicated amount for the WASH sector. This increased from 14.7 percent in 2017 to 22 percent in 2018, 33 percent in 2019, 67 percent in 2020, and finally 79.8 percent of the communes in 2021, a significant increase in the number of communes prioritizing WASH as their target area.

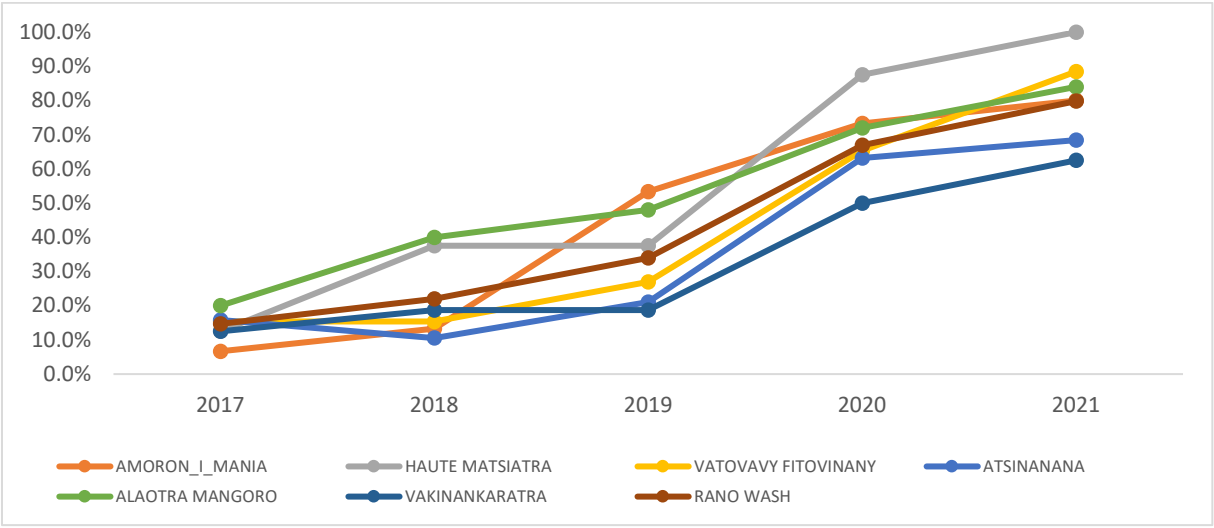


Figure 10. Evolution of the number of communes with a WASH budget from 2017 to 2021: Learning study, September 2021

The situation is similar in the seven regions, particularly in the Haute Matsiatra region, which registered 100 percent of its communes with a WASH budget in 2021. The significant increase in the number of communes with a WASH budget between 2019 and 2020 could be explained by the intensification of project activities in general and system-strengthening activities during this period. The RANO WASH project began at the end of 2017, and the activities were intensified in the field starting at the end of 2018 and 2019. This shows a strong correlation between the activity intensification and the increase in communes with a WASH budget. These results are confirmed by a local authority:

> *"What RANO WASH has done was an awareness of the importance of financing the WASH sector. The RANO WASH project has also trained municipal officials on fundraising and investment and encouraged mayors and their deputies to allocate funds for water, hygiene, and sanitation."* **Deputy Mayor, Ambiabe commune**

The evaluation team found an increased budget and capacity for WASH financing and investment, as shown in Figure 11.

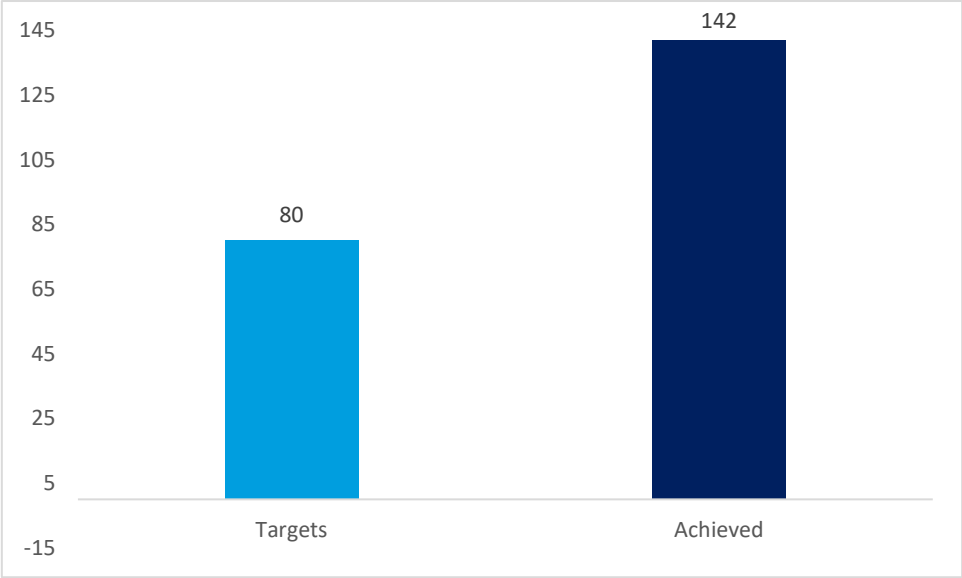


Figure 11. Number of targeted communes increasing WASH budget

Of the 250 communes, 142 (56.8 percent) have demonstrated an increased use of WASH budgets for constructing wells and latrines and rehabilitating and extending water networks. RANO WASH aimed to reach around 80 communes that have an increased WASH budget to improve service provision, so this represents an achievement rate of 177.5 percent compared to the LOP target.

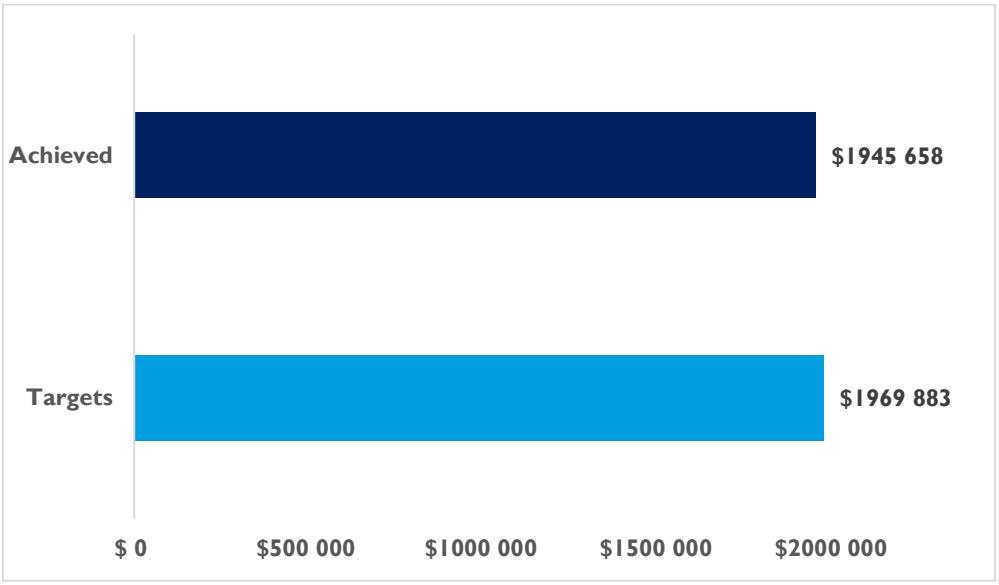


Figure 12. Value of new funding mobilized to the water and sanitation sectors as a result of US government assistance

Concerning the new funding mobilized to support the WASH sector, Figure 12 summarizes the RANO WASH achievement and target. Overall, approximately 1,969,883 US dollars was mobilized as new funding to support the WASH sector in the targeted communes, against 1,945,658 dollars initially targeted by the project team. The systematic WASH sector budgeting by communes as they received capacity-building is an important factor that could help sustain the project outcome beyond the RANO WASH project life.

As a result of the mobilization of WASH funding by communes, more than 3,142 water points were constructed or rehabilitated by communes using part of their WASH budget or through PPP mechanisms. Communes also supported the construction or rehabilitation of around 15,966 latrines in the seven regions of the RANO WASH project. The 250 communes distributed 214,773 WASH

kits to community members. Waterpoints constructed or rehabilitated using communes' WASH budgets reached around 14,576 people in the seven regions. In contrast, 171,722 are using latrines whose construction or rehabilitation was supported by the 250 communes in the seven regions. Hygiene promotion reached more people, with around 651,869 receiving hygiene promotion and behavior change messages as a result of the activities of the communes in behavior change promotion.

Communal authorities listed multiple factors that motivated them to mobilize a dedicated budget for the WASH sector. Since the RANO WASH objectives coincided with communal development objectives, and after clarification by the project team of the importance of improving WASH indicators in the communities, some mayors reported being convinced by the story of perceiving the health and environmental benefits of WASH for their municipalities and decided to invest in the WASH sector alongside the RANO WASH project. Mayors also reported that their communes benefited from the RANO WASH partnership and that they wanted to become involved to reach as many people as possible with quality drinking water. Additionally, after RANO WASH provided awareness-raising sessions as well as coaching and mentoring for commune authorities on the project and the Malagasy Water Code, mayors began to better understand their responsibilities regarding the upkeep and maintenance of infrastructure already in place, including water sources and standpipes. The municipality team also become aware of the importance of water, hygiene, sanitation, and a strong collaboration with civil society to establish local coordination structures that support the mayor in implementing WASH activities.

Concerning the mobilization of private funding, private companies including WSPs and households appeared to make significant investments in the WASH sector. Private companies invested in water system construction or rehabilitation for approximately $659,853 during the project implementation, and multiple companies committed to investing more in water supply in the targeted communes. More WSPs have committed to contributing to the WASH sector and improving the quantity and quality of WASH services to community members.

The evaluation team noted the mobilization of VSLAs in ODF communities to improve access to finance, strengthen social cohesion, and act as change agents for behavior change. Local masons and seamstresses took credit in VSLA groups to fund their activity. They took loans to invest in their businesses, including manufacturing WASH products and services. Overall, from a learning study conducted in FY 2021 in two regions, local masons, seamstresses, and other households received an estimated 35,017 US dollars in loans and 31,409 US dollars in savings to support their WASH activities Though the number of loans invested in WASH only represents 7.34 percent of all loans, most loans are invested in trade or crafts, which can increase households' incomes and purchasing power so that they can easily access WASH services as well.

Picture 6. Idea box review, Amparintsokatra commune, Alaotra Mangoro

3.2.6 Accountability and regulations

The evaluation team noted that more communes have functional accountability mechanisms in place. Figure 13 shows the number of communes with functional WASH accountability mechanisms. The RANO WASH project recorded 231 communes that have established a functional accountability mechanism, representing 92.4 percent of the 250 communes and 115.5 percent of the 200 targeted communes. This outcome was mentioned by two local authorities interviewed through key informant interviews:

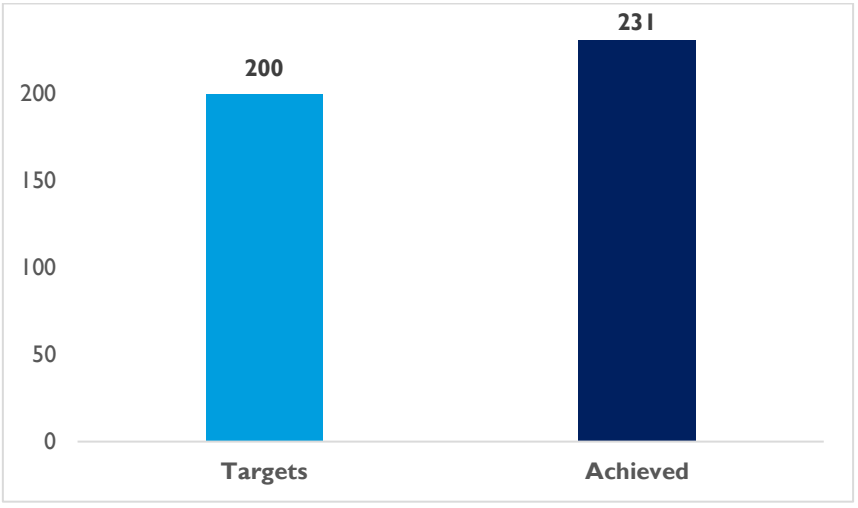


Figure 13. Number of intervention communes with functional WASH accountability mechanisms

"*A change has occurred in regional, municipal, and local governments following participation in the RANO WASH project. It is now at the level of the municipality that we collect information on population needs and their priorities. When these priorities are defined, they are sent to the SLC level which discuss them before presenting them to municipal council. The changes that have occurred in the municipality are an evolution of governance with the implementation of blue suggestion boxes where people can file their complaints directly. This is more practical for people who do not file a complaint directly.*" **Deputy Mayor, Andranomiditra commune**

Several factors have motivated communes to put in place these accountability mechanisms, including the benefits of accountability to improve the work of communes and the satisfaction of the population. This was noted by a RANO WASH project team member during the sensitization of municipal authorities: "*There are several reasons why we, the municipal agents, have put in place an idea box. Because we have already worked with the RANO WASH project, we know very well how important it is to put it in place. It is through this that people and beneficiaries communicate and engage in development. Another motivation is to show that the commune is accountable.*" Other factors are the concern with listening to the voice of the people and strengthening trust between leaders and communities, the need to fight rumors and involve communities in local development by setting up a mechanism for exchange between communities and the municipality, and the concern with identifying the real problems of communities to address them. This was confirmed by another mayor, who said: "*We decided to set up an accountability mechanism to know the reality of the needs of the inhabitants and the standard of living because some people do not dare to speak directly to the commune but express themselves through the accountability mechanism.*" Another mayor added that "*the accountability mechanism was put in place to identify the problems of the population, respond to their needs, and provide solutions to their problems in order to instill trust between the municipal authorities and the communities."*

The evaluation team found increased self-efficacy of the municipalities in processing feedback. RANO WASH supported communes in establishing inclusive accountability mechanisms and trained these communes on feedback and complaint processing and responses. Most of the communes whose officials were interviewed recognize the merits of installing an accountability mechanism in their municipality. For several of the mayors interviewed, the accountability mechanism has enabled the local authority to be more attentive to the communities' expectations and respond more effectively to satisfy the communities it serves.

This was confirmed by a mayor who stated: "*Before, the management of the commune was not clear to the population, but now, the revenues and expenditures of the commune are well-understood by most people because of the existence of posters. The possibility of communication and exchange of ideas between the population and the authorities through community meetings makes it possible to identify problems and solve them earlier.*" Another added, "*The accountability mechanism has allowed the commune to become more accountable. With the accountability mechanism, people's ideas are received on time, and the communes have greater administration transparency*." The fact that the communes agreeing to implement an accountability mechanism recognize its benefits is a success of the RANO WASH project that is encouraging for future adoption by other communes in Madagascar.

3.2.7 Gender and social inclusion

Gender constituted a cross-cutting component in the RANO WASH project. The evaluation team found that a gender task force is led by the MEAH, which holds periodic meetings to promote gender and social inclusion in the WASH sector. RANO WASH played a key role in revitalizing this task force, and the project gender advisor was a key person in the MEAH gender task force.

Concerning citizens' participation in WASH governance at the local level, the final evaluation showed that men, women, people with disabilities, community members, and youth are more involved than

before in consultations, decision-making, and advocacy around improving WASH services. This involvement is done through the accountability mechanism and local consultation structures. Concerning the accountability mechanism, communal leaders mentioned several actions that have been taken to ensure that accountability mechanisms are as inclusive as possible. They cited, among others, the diversification of communication channels used; the sensitization of communities on the existence of the accountability mechanisms and their freedom to use them to provide feedback or complain, particularly women, youth, older adults, and people living with disabilities; and the organization of regular field trips to collect feedback and complaints from communities. This is validated by the statement of a mayor of one of the target communes, who said: "*To ensure that our accountability mechanism is inclusive, we made sure to put the suggestion box in the right place to suit everyone, to motivate people to express themselves freely, to organize frequent field visits, and we encouraged, in particular, women, youth, the elderly, and those living with disabilities to express themselves through these accountability mechanisms.*" Another mayor believed that the attention and response of the communes to feedback and complaints from communities in general and vulnerable groups in particular has allowed for inclusive use of accountability mechanisms by the populations.

Concerning participation through local consultation structures, women participate in the management of the WASH sector. They represent around 34.5 percent of the members of local participation structures and 15.9 percent of the leaders of these structures. CSOs have the highest proportion of women members (48 percent) and leaders (24 percent). In SLCs, women represent around 23.9 percent of members and only 9.9 percent of leaders. These results indicate that women are well-represented in decision-making structures in the WASH sector, even though work remains to increase their participation in management.

One in three (33.7 percent) of the WSP staff are women, compared to 66.3 percent who are men. The results are different from one region to another. In the Vakinankaratra region, all WSP staff are men, with no women. However, in the Fitovinany region, women are the majority of WSP staff, representing 50.9 percent, compared to 49.1 percent for men.

The evaluation team found that all target populations, including women, youths, and marginalized groups, could access WASH services. Communities have taken steps to ensure that infrastructure is inclusive. The following statement illustrates equitable access to WASH services:

> "*Everyone is beneficiary, whether man or woman. There is no discrimination of the rich or poor, disabled, faith or not. There have been promotion and awareness-raising that pushed the population who benefited from the offer. They were informed of the existence and the advantages of the project. There is no limit in terms of accessibility to services. There are those who have chosen to use the connection, social connection. The invoices they receive per month are the only limits in the use of water.*" **Deputy mayor, Ampasibe Onibe commune**

The evaluation team found that households have adopted a more gender-equitable division of labor in some project sites. RANO WASH promoted much coordination during sensitization campaigns as community leaders, religious leaders, local masons, and seamstresses contributed to disseminating messages in the community. The project reported that most households adopted a more gender-equitable division of labor.

As a result of engaging men and women in sensitization campaigns, social norms around menstrual hygiene have evolved. The evaluation team found that women have better access to menstrual pads and showers during menstruation. Families discuss the needs of women and girls regarding menstruation, and household members and communities accept that women and girls no longer hide their sanitary pads after washing them so that they are properly exposed to the sun. The evaluation found that men and women speak about menstruation, and many communities have developed a market for sanitary pads.

Another point is the emergence of local young and female WASH operators in the targeted communities.

3.2.8 Environment and water resources

RANO WASH developed and implemented an environmental mitigation plan and was required to develop an environment, technical, and social framework (ESF) for all construction and rehabilitation. The evaluation teams noted that communal leaders were more involved in monitoring the ESF throughout project implementation because it was also part of the delegation contract signed between private companies and communes. Regional authorities and other stakeholders at the regional level are also committed to protecting the environment and water resources.

RANO WASH supported communes in defining the watershed protection perimeters, which are now well-defined in all the intervention communes. In line with citizens' participation in local governance, communities were increasingly involved in local authorities' monitoring, protection, and reforestation activities. Additionally, CSOs advocated at the SLC level to protect the watershed and then conducted reforestation efforts. The project team also established locally led partnerships with environment preservation organizations to ensure source protection for the water system.

Picture 7. Reforestation for the protection of watersheds in the commune of Andrainjato, Amoron'i Mania

3.3 EVALUATION QUESTION 3: TO WHAT EXTENT HAS THE RANO WASH PROJECT CONTRIBUTED TO POPULATION ACCESS TO WASH SERVICES AND POSITIVE ATTITUDINAL AND BEHAVIORAL CHANGES AMONG CITIZENS?

The population access to WASH services was assessed by the number of people accessing clean water and sanitation and who adopted appropriate WASH behaviors. Overall, people recognized that the RANO WASH project met the population's needs, as confirmed by a community leader through the following statement.

> "*From what I can see, the RANO WASH project is a priority and has met the needs of the people because now all the people have become clean; there is no more diarrhea and stomach diseases; many people were released from open defecation and are now using toilets. People have been very active in bringing drinking water to their homes thanks to the RANO WASH project.*" **A community leader**

The evaluation team separately analyzed access to water, access to sanitation, and behavior change by community members.

3.3.1 Access to clean water

Access to water was analyzed by the type of management of the water system. RANO WASH differentiated safely managed water points or systems from basic water points. Concerning the number of people reached with basic drinking water, overall, the RANO WASH project reached 154,838 people against 210,000 targeted by the end of the project, representing an achievement rate of 73.6 percent. Most beneficiaries of basic drinking water are also women, representing 56.4 percent of all beneficiaries compared to only 43.6 percent of men. This is even higher in the Atsinanana region, where women represent more than 65.1 percent of the beneficiaries of basic drinking water. By age, people between six and 30 years old still represent most beneficiaries, accounting for approximately 48.4 percent, compared to 25.4 percent for children under six years old. The results at the regional level are the same in terms of the number of beneficiaries by age group.

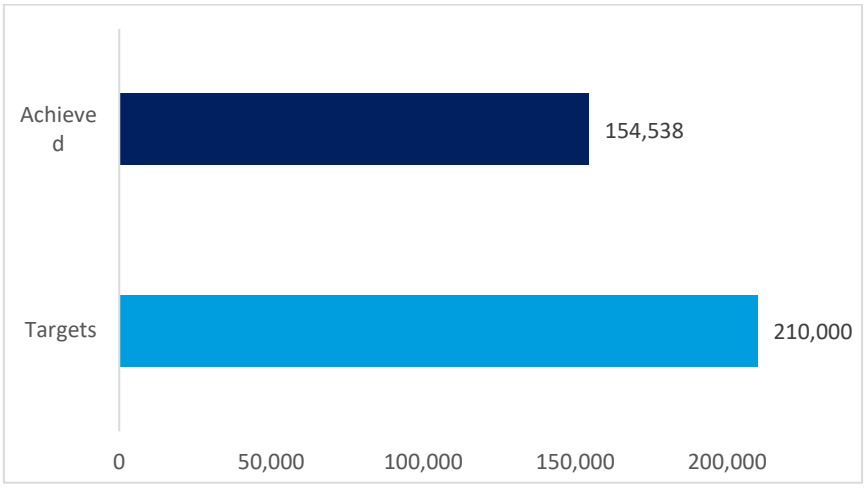


Figure 14. Number of people gaining access to basic drinking water services as a result of US government assistance

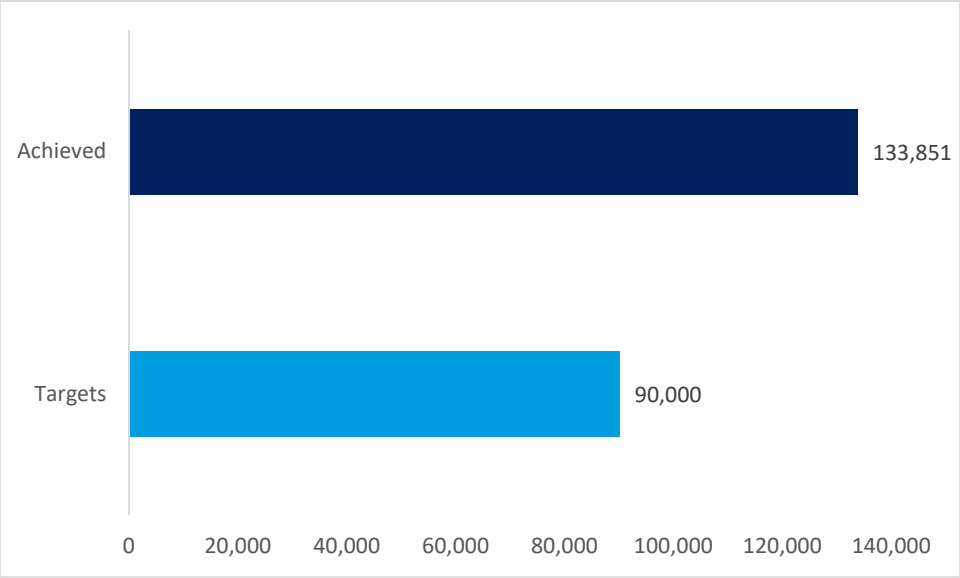


Figure 15. Number of people gaining access to safely managed drinking water services as a result of US government assistance

Picture 8. Access to safely managed water, Andranomanelatra Commune , Vakinankaratra

Regarding people receiving safely managed drinking water, RANO WASH reached 133,151 people against a LOP target of 90,000, for an achievement rate of 147.9 percent. Most of the beneficiaries of private connections are women, who account for 57.9 percent of the beneficiaries, compared to 42.1 percent for men. The result is the same in all six project intervention regions, with women representing between 50.9 and 64 percent of safely managed drinking water beneficiaries. By age, among all the beneficiaries, people between six and 30 years old are in the majority among the beneficiaries of private connections, making up more than 45.3 percent of the beneficiaries, followed

by children under six years of age, who represent 24.5 percent. This result is the same in all the project's target regions, which record the same proportions for all age groups.

Beneficiaries noted an improvement in water quality for safely managed or basic drinking water, which was one of the RANO WASH priorities, as illustrated by the following statement.

> "*The impact of the project on the beneficiaries: in general, we note that the beneficiaries are satisfied because the water is clean, healthy, and has not to go far to get their supplies. Then the inhabitants obtain water according to their needs, according to the quantity they want. Women are no longer tired of looking for water and doing the laundry. The husband can help his wife do all the cleaning. And all young people and children are healthy. People with disabilities have no trouble getting water, and all their clothes are clean.*" **Deputy Mayor, Ambiabe commune**

Another outcome that community members appreciate is related to the time spent accessing clean water. Before the project, people were spending much time accessing drinking water because they needed to walk far from their houses for this. Community members recognized that with the RANO WASH project, people can have private connections and access clean water without leaving their houses or having social connections for multiple households nearby. This strategy and collective water points and kiosks have significantly brought clean water close to beneficiaries. Women focus group participants confirmed these results, exemplified by the following statement.

> "*The project is beneficial and meets the expectations of the population whose water can be accepted every day. In addition, we save time and effort due to the short distance. People who do not have financial means for water connection can access neighbors' water through social connections.*" **Women's focus group in Ambatomarina**

Most importantly, people recognized that RANO WASH contributed to providing quality water to community members, which has reduced waterborne diseases in their community, as confirmed by the following statement.

> "*We can say that the biggest change we have known through the support received from the RANO WASH project is the reduction of diarrhea and fever. Because in the past we took water from the river but now we receive drilling, and we benefit from clean drinking water.*" **Marginalized group discussion, Ambiabe**

3.3.2 Access to sanitation

Access to sanitation was measured in terms of limited sanitation services and basic sanitation services. For these two main outcome indicators, RANO WASH exceeded its targets.

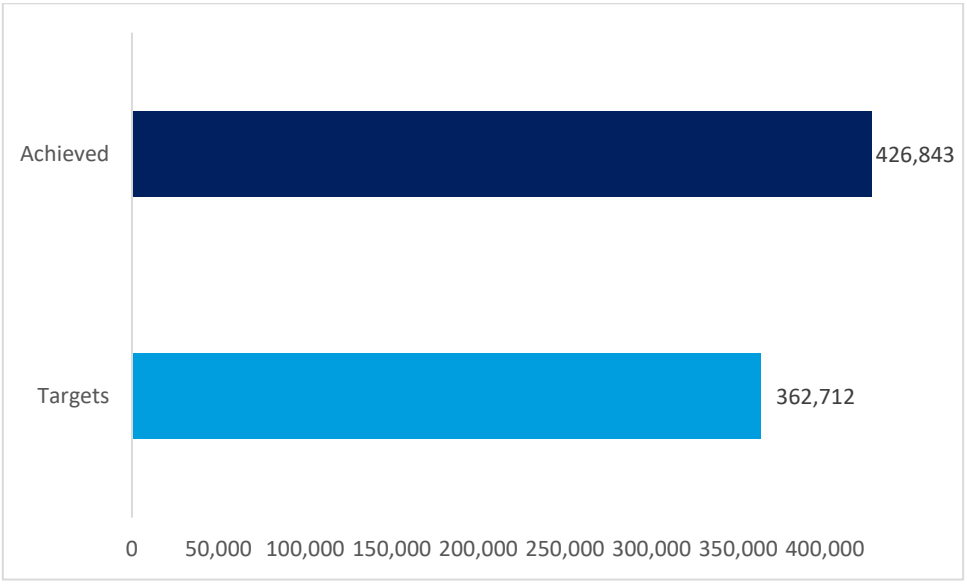


Figure 16. Number of people gaining access to a basic sanitation service as a result of US government assistance

The results regarding access to basic sanitation services are summarized in Figure 16. Overall, RANO WASH reached 426,843 people with basic sanitation services against 362,712 targeted for the life of the project. Concerning access to limited sanitation services, RANO WASH reached 315,651 people against 264,401 targeted for the life of the project. Most latrine beneficiaries are women, who represent 51.1 percent of all beneficiaries, compared to 48.9 percent for men. For shared latrines, women represent a total of 63.9 percent of all beneficiaries compared to 36.1 percent for men.

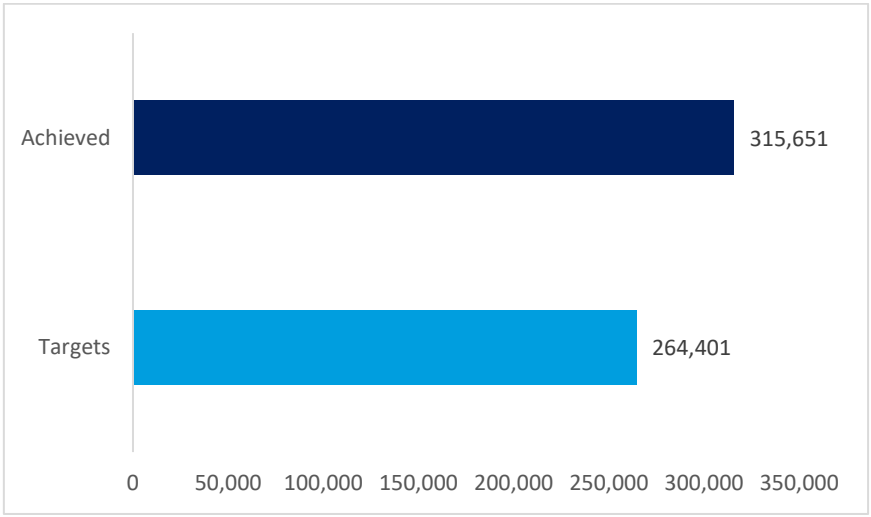


Figure 17. Number of people gaining access to a limited sanitation service as a result of US government assistance

All age groups are found among latrine beneficiaries, for both non-shared and shared latrines. For non-shared latrines, most beneficiaries are between 31 and 45 years old, representing 51.1 percent of beneficiaries, and for shared latrines, most beneficiaries are between six and 30 years old, representing 50.7 percent of all beneficiaries. This situation could be because most of the working population is in the 31–45 years age group and could have more means to afford non-shared latrines.

These good results could be explained by the behavior change campaign conducted by the RANO WASH project, local authorities, and civil society to improve the use of latrines and end open defecation in the community.

> "*There was also a door-to-door awareness campaign on the construction of modern latrines and the negative nature of outdoor defecation. There have also been checks such as on-site visits and check door-to-door latrine after the campaign*". **Vulnerable group discussion in Morarano Chrome**

> "*Cleanliness and sanitation are reflected at the community level. The population begins to become aware of sanitation thanks to the knowledge obtained during the behavior change campaign. After the campaign, each of the community members, including men, women, and young people, take their responsibility* ". **Women's focus group in Ambatomarina**

In addition to behavior change campaigns organized by RANO WASH and local authorities, communes' authorities also began visiting households to check whether the households had a latrine and to control the quality and cleanliness of these latrines. Communes authorities started imposing fines on households without latrines or with poor-quality latrines in the community to encourage each household to have a clean latrine. Fines are defined in concertation between public authorities and communes, under the responsibility of communes.

> "*The authorities followed up on the construction of WC construction by each household. It is up to the controller to make a first verification, and he makes a report to the authorities, who subsequently fine irresponsible households. The latter will be forced to pay [$8.6] 30,000 MGA For fear of that, everyone has managed and built latrines*". **Women's focus group in Andranomanelatra**

Picture 9. Latrine and tippy tap, Andrainjato commune, Haute Matsiatra

3.3.3 Behavior change

The RANO WASH behavior change strategy aimed to promote five key behaviors: handwashing with soap, use of toilets, use of safe water, food hygiene, and menstrual hygiene. The strategy was implemented at three levels with subsequent approaches:

- At the household level, with the Grow-Up Sticker approach.
- At the community level to stop open defecation and achieve ODF status, and then scale up with the other behaviors. Several approaches were used, such as community-led total sanitation (CLTS), sani-market with local masons, collaboration with VSLA to improve income and be able to afford the purchase of WASH services and products, and improving hygiene practices.
- At the institutional level to improve access to WASH services in schools and healthcare facilities.

The following indicators were used during the project to measure changes in hygiene and sanitation practices. Table 5 summarizes all the outcome-level indicators, achievements, and LOP targets.

Table 5. Achievements and LOP targets for behavior change outcome indicators

Indicator	Target	Achieved	Percentage Achieved
Proportion of households with soap and water at a handwashing station commonly used by family members	35 percent	34 percent	**96 percent**
Number of communities verified as open defecation–free (ODF) as a result of US government assistance	5,429	5,543	**102 percent**
Proportion of communities verified ODF that remain ODF following verification	75 percent	95 percent	**126 percent**
Proportion of targeted communities triggered through community-led total sanitation that become verified ODF	90 percent	74 percent	**82 percent**

Picture 10. First model household in the commune of Vohitrindry, Fitovinany

The results show that 34 percent of households in the RANO WASH target area have a handwashing station with water and soap commonly used by household members. The LOP target for this indicator was 35 percent, which means an achievement rate of around 96 percent for this indicator. A focus group discussion participant confirmed this result:

Picture 11. ODF celebration in Bejofo Commune, Alaotra Mangoro

RANO WASH / Photos : Dahery Razaka Rafenomanana

> "*For us, we have already applied the change in our behavior towards water, hygiene, and sanitation such as the use of handwashing and improved latrines. There is really a change because we have the public fountain here; there is no need to go to the river*". **Vulnerable group discussion in Morarano Chrome**

A total of 5,543 communities were verified ODF because of the RANO WASH project, against a target of 5,429 communities (102 percent achievement rate). At the beginning of the project, RANO WASH aimed to have 75 percent of these communities verified ODF after follow-up. To date, 95 percent of the communities verified ODF were still ODF after follow-up, which is a good achievement for the project in eliminating open defecation in the targeted communities. The following statement from a mayor confirms the RANO WASH contribution to eliminating open defecation.

"*It has been found that RANO WASH supported the environment because the defecation in the wild ended. Before, we were afraid of trampling on excrement when we went to the forest. Everyone has latrines. At the city level, we promote the use of public toilets*". **Mayor, Andranomanelatra**

Picture 12. Young entrepreneur in washable sanitary pads, Betafo commune, Mandritsara, Vakinankaratra

Another change noted in the community is the increased use of reusable menstrual pads by women in the targeted communities. As part of hygiene menstrual promotion, RANO WASH trained local seamstresses so that they could design, produce, and sell these in the community. This solution addressed insufficient money as a barrier for women to access menstrual pads. As a result, women acknowledge that they can now easily access and use these pads.

"There is change: before, we used fabrics or old linen. But when RANO WASH arrived, we were taught to use reusable hygienic pads, and that brought a big change to us women". **Women's focus group in Beforona**

As discussed under the gender and social inclusion section, RANO WASH targeted men and women when sensitizing community members on menstrual hygiene. Consequently, social norms on menstrual hygiene have evolved, and men and women can speak about it publicly. Many communities have developed a market for sanitary pads. Within households, men and boys are more understanding and empathetic toward girls and women, and they promote their access to and use of appropriate products and services. At the same time, girls and women no longer feel ashamed during their menstrual periods and can more easily express their needs regarding access to products or the use of private spaces.

3.4 EVALUATION QUESTION 4: TO WHAT EXTENT CAN THE RANO WASH PROJECT BE EXPECTED TO CONTINUE OR BE SCALED UP BY COMMUNES, PRIVATE SECTORS, AND LOCAL COORDINATION MECHANISMS AFTER IT ENDS?

3.4.1 System approach and sustainability

The project's systems strengthening approach tackles sustainability by design by focusing on strengthening the WASH system's actors and factors (including technology, financing, coordination, and service delivery). The focus on governance and sector functions (such as planning, budgeting, and monitoring) at all levels, the STEAH model's ability to monitor and support WASH services, and improved citizen participation through an active CSO network and feedback mechanisms all work to address institutional sustainability. The close collaboration between public and private sectors in water supply and management and sanitation could cause lasting project effects.

> "*We have organizational structures. It starts with ASUREP, OSCEAH, STEAH. They are among the structures that ensure the right water management. When the project goes, they will continue to work with the commune.*" **Mayor, Morarano Gara commune**

This statement was confirmed by a WSP representative:

> "*The structure of resources and processes are implemented as the existence of STEAH staff at the level of the municipality and who collaborate with the WSP private sector. The association of drinking water network users (ASUREP) is set up in the municipality and all these structures guarantee the continuity and sustainability of the project.*" **SLC, Ivato**

The system-strengthening approach of the RANO WASH project led to increased domestic financing of the WASH sector through the increase in the WASH budget of communes, which contributes to sustain RANO WASH outcomes after the project closeout.

> "*First of all, it is sure that we will continue the extension of the participatory budget. In other words, we will improve and ensure the increase in municipal revenue with the optimization of tax collection.*" **Mayor, Morarano Gara commune**

3.4.2 Improving household livelihood and sustainable access to WASH services

The VSLA approach, which allows households to acquire funding for water connections or latrines, reduces the risk of inaccessibility to WASH services because of low income. The VSLA model is very sustainable because savings and loan groups are organized to function with limited support from the project, and the probability of these groups continuing beyond the project is very high.

> "*There was the implementation of 'Voamami.' But I tell you in all honesty, this structure has really brought change within our communities. People who are strong in management really stand out in Voamami. I tell you in all honesty, even if the project is no longer there, it will continue. People already have what it takes to continue this path. The members of the association also participate in the awareness of sanitation and hygiene. We must commit to educating and adopting healthy behaviors awareness before becoming a member of the Voamami.*" **Chief, Fokontany Morarano Gara**

Because VSLA groups were used to contribute to awareness campaigns and behavior change communication, this activity will continue beyond the project. Additionally, VSLAs contribute to

creating access to more income for households and thus will better prepare participants to continue accessing WASH services beyond the project life. The project also trained and supported village agents. These village agents will continue to create new groups and support older groups as they receive incentives from those they support. Moreover, the project organized training of trainers for these village agents in financial literacy so that they could provide financial literacy training and activities for their groups. This will strengthen sustainability for the VSLA model and the use of WASH services and products.

Picture 13. Water user with private connection in Ambila Lemaintso Commune, Atsinanana

Picture 14.. Rakotoniaina, a mother in Ivato Centre, signing the subscription contract a for water private connection with the water service provider ATTR, represented by its Director, Mr. Alain Pierre RAZAFINDRATSIMBA, H

3.4.3 Private sector engagement and sustainable supply of WASH services

Concerning access to water, the private management of the water management model could allow the systems to function sustainably. Most private companies managing water systems have received technical and managerial training to expand the business model, including marketing strategy, service coverage, and business plans with forecasting. In addition, RANO WASH linked WSPs to financial institutions and suppliers so that they could receive credits to develop their businesses. Because these private companies will profit from the water supply system, the likelihood of the water system continuing to function and provide clean water to communities is high. To ensure the sustainable quality of services, STEAHs have been trained to monitor the quality of services provided by WSPs. Water user groups also serve as a point of contact to collect citizen complaints about the quality of services and report back to the communes, which can take the necessary actions to push WSPs to improve the quality of the services they provide to citizens.

Concerning access to sanitation and hygiene, the market-based sanitation approach implemented by RANO WASH could lead to sustainable access to latrines by community members. Local masons were trained in the construction of latrine slabs and marketing strategy. They were organized in a network for group purchase of input to ensure good prices and more profit for them. This approach could motivate local masons to continue constructing and supplying latrines to the population beyond the RANO WASH project life. The approach was similar for local seamstresses, who received appropriate training to sustain the delivery of menstrual pads to women beyond the project life.

3.5 EVALUATION QUESTION 5: WHAT ARE THE LESSONS LEARNED, BEST PRACTICES, AND MOST SIGNIFICANT CHALLENGES TO THE SUCCESS OF THE RANO WASH PROJECT?

3.5.1 Success

RANO WASH has recorded multiple successes throughout project implementation in the three SOs and the system-strengthening approach implementation. Some of the most important successes noted during the final evaluation are summarized below.

1. **Coordination at the national, regional, and local levels.** National coordination has improved by setting up a special coordination unit within the MEAH and holding coordination meetings in 2022. Regional coordination at the level of the six regions has been a success. Other regions have modeled the approaches made in the RANO WASH intervention regions. This local governance approach contributed to accelerating results for SO2 and SO3. Coordination at the commune level has improved, and the communes are collaborating with local structures such as STEAHs, SLCs, ASUREPs, and WASH CSOs.
2. **Increased community participation in WASH planning and management.** RANO WASH supported communes to improve citizen participation in WASH local governance. Consequently, all the targeted communes involve citizens through community participation mechanisms such as ASUREPs and SLCs. These community participation mechanisms are functional, and the structures accompany communes in the management of the WASH sector. These structures also support the communes in managing the accountability mechanism. Citizens can provide feedback and complaints to these structures that report to the communes to improve the WASH sector.
3. **Strengthening the overall WASH system in Madagascar.** Due to the RANO WASH system-strengthening approach, the MEAH is better coordinating the overall WASH system in Madagascar. The national WASH monitoring system (SE&AM) functions smoothly, with most targeted communes consistently reporting through SE&AM, and data is submitted at the regional and central levels. Communes have developed a specific communal WASH development plan and budgeted for the WASH sector. Most communes have consistently increased their WASH budget throughout the RANO WASH implementation and were using the WASH budget to increase access to WASH services.
4. **Increasing interest by the private sector to engage in water supply**. At the beginning of the project, the RANO WASH team needed to convince people to adopt the market-based approach and the payment for water supply services. During regional fairs, RANO WASH launched calls for spontaneous applications. As a result, 91 companies expressed their interest in around 90 municipalities.
5. **Increasing interest by communes to be certified ODF.** In terms of hygiene and sanitation, achieving ODF status for municipalities has been one of the greatest successes. This was possible due to the exchanges between the teams through continuous learning. A significant increase in ODF communes occurred in 2021 and 2022.
6. **Improving gender outcomes in the WASH sector was a key success of the RANO WASH project.** RANO WASH changed the social perception of menstruation. All community members, including men, are aware of women's menstruation constraints and the need to access menstrual pads and showers. This issue is discussed among men and women in the targeted communities. Additionally, men, women, youth, and vulnerable groups have equitable access to WASH services. Women and youth also participate in the WASH sector's local governance (through accountability mechanisms) more than before the RANO WASH project.

3.5.2 Challenges

1. **Limited government budget for the WASH sector.** The MEAH has insufficient budget to support the population's WASH needs and key activities such as the sector review and operationalization of the sector monitoring system. This limits the accountability of MEAH staff and does not ensure the continuity of sector achievements, making MEAH dependent on partners and external funding. This situation was a challenge for the RANO WASH system-strengthening approach. The MEAH and communes faced challenges in mobilizing domestic funding for day-to-day activities, relying only on the project to support these activities.
2. **Delay in signing delegation contracts with the private sector by communes and ministries.** This was one of the main challenges noted by RANO WASH, delaying the provision of clean water because construction or rehabilitation works could not start without these contracts signed. This delay reduces the commitment of the private sector to invest even more because they fear the security of their investment.
3. **Lack of resources to pay water bills by schools and health centers.** This created conflict between the institutions, municipalities, and WSPs. The lack of resources is a blockage because the actors do not know who should pay since it is not included in the institutions' budget. This could be explained by the lack of clarity on who should pay, the lack of collaboration between the communes and the institutions, and the difficulty in the decentralization process with the parallel existence of deconcentrated technical services, creating an institutional blur. This confuses the allocation of budgets for WASH services at the institutional level and the communes' accountability to WASH stakeholders, especially when they encounter problems with WSPs.

3.5.3 Lessons learned

The RANO WASH implementation has generated multiple lessons learned, reported as annexes of the performance reports submitted to USAID. This final evaluation report summarizes key lessons that could help future WASH programs in a similar context.

1. **Collaboration between national, regional, and communal stakeholders to achieve WASH outcomes through domestic funding.** One of the main successes of the RANO WASH project is the commitment by the communes to increase their WASH budget. This was achieved because of the close collaboration of all actors, including the Ministry of Finance; the Ministry of Water, Sanitation and Hygiene; the communes; and other local governance actors, to increase fiscal revenues and properly plan and budget for WASH purposes.
2. **The government at the central and communes levels should provide sufficient guarantees to private companies so that they can engage their investment to support access to WASH services.** In the regions where the delegation contract was already signed after the fair, some private companies invested in multiple communes, whereas when the guarantee is not yet provided, private companies are reluctant to engage their funds. Providing this guarantee with an appropriate training package (such as entrepreneurial and marketing techniques, water quality, and environment) is key to improving WASH outcomes, especially sustainable access to clean water.
3. **Supporting and using SE&AM for the WASH sector monitoring and evaluation is key to having data for sector planning.** RANO WASH supported the MEAH in revitalizing the SE&AM to have timely data and use these for sector decision-making. To date, the SE&AM is fully functional on the DHIS2 platform, and the communes consistently report on SE&AM. However, implementers should be vigilant about the central level providing feedback to regions and communes to improve the system's functionality and how data are used to inform decision-making in the WASH sector at all levels (central, regional, and communal).

4. **Conducting stakeholder mapping to understand who does what in the WASH ecosystem and who can bring what in improving WASH outcomes is key.** The RANO WASH team found that knowing all the WASH ecosystem stakeholders, what each of them could offer, and their level of engagement to achieve WASH outcomes was key to ensuring sustainable success for the project. A more comprehensive stakeholder analysis can help identify the ecosystem's central actors and their role in the network, which is uniquely connected to many others and the gatekeepers.
5. **Coordination of WASH activity with communes playing a central role in the WASH ecosystem is key to ensuring sustainable outcomes.** With the decentralization process, communes are supposed to play a central role in local development. The RANO WASH project has placed the communes at the center of its strategy, managing the coordination mechanism of the WASH sector, involving all the stakeholders and the local consultation mechanism. This was key to ensuring RANO WASH's success and sustaining its outcomes.
6. **The gender transformative approach is important.** It is important to have a gender approach that can change norms such as taboo around menstrual hygiene, limited participation of women and girls, youth in community debates and decision-making bodies, and non-access of youth and women to jobs that they aspire to.

Picture 15. Older persons can finally enjoy drinking water in the commune of Mandialaza, Alaotra Mangoro

RANO WASH / Photos : Dahery Razaka

4 RECOMMENDATIONS

Based on the final evaluation findings, the evaluation team made the following recommendations to improve the implementation and outcome of WASH programming in similar contexts.

1. **Conduct a stakeholder network analysis at the beginning of the project to understand the WASH ecosystem and the role played by each stakeholder**. RANO WASH conducted a mapping of the WASH stakeholders but did not conduct a stakeholder network analysis, which can help identify the central actors in the ecosystem, the role they play in the network, which of them are uniquely connected to many others, and the gatekeepers. Conducting the WASH stakeholder analysis will guide the project to know who to involve when discussing the WASH issue locally.
2. **Communes and local leaders should play a central role in the WASH ecosystem at the local level.** RANO WASH learned that making communes the central actors in the WASH ecosystem was successful for the project. This approach helped obtain sustainable outcomes because communes will continue, after the project closeout, to engage with other stakeholders, including the private sector, to improve access to WASH services.
3. **The program should have a component to advocate to the central government to support people leaving hard-to-reach areas to access WASH services.** RANO WASH used a private sector engagement approach for water supply, and private companies flagged that hard-to-reach areas were not profitable for them and, therefore, expanding the connections to this area was challenging. The central government and communes should find a way to subsidize at least the infrastructure extension cost to serve hard-to-reach areas. The government should understand the importance of creating a more favorable environment for private sector engagement. The MEAH should engage in discussions with investors to address needs equitably to increase their investment and ensure greater coverage. Additionally, whether for sanitation or drinking water, the government should find a model for subsidizing WASH services in partnership with private operators to consider the most vulnerable.
4. **The WSPs and other private sector actors should explore solutions for hard-to-reach areas.** For example, WSPs should explore flexible repayment schedules for connections that address the fluctuating incomes of self-employed and informal sector earners. The private financial inclusion sector should also investigate creating options such as microloans, allowing households to pay off the loan in installments and the monthly water bill over an agreed period.
5. **Scale up the market-based approach for sanitation.** RANO WASH's results are impressive, but ensuring the sustainability of these services requires more robust, odorless latrine models. Future WASH programming should continue what RANO WASH started to refine the business model and start-up to test the assumptions in the pilot.
6. **Frequently review the MEAL system, including the targets versus achievement against the program budget, and make necessary adjustments, including revising the targets.** RANO WASH held multiple MEAL review sessions, but the targets were not reviewed and submitted for USAID approval. Analyzing the program performance and the available budget, the team would have reviewed the targets to be more realistic according to the project's capacity to achieve them.

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ANNEXES

ANNEX 1: FINAL EVALUATION TERMS OF REFERENCE

1. INTRODUCTION

1.1. PROJECT CONTEXT

Madagascar reports some of the worst water and sanitation statistics in the world and is moving away from the 2030 goal of universal access to WASH services. The impact on health outcomes is clear: diarrhea is a leading cause of child mortality and UNICEF estimates that 49% of children under five are chronically malnourished. The Joint Monitoring Program for Improved Drinking Water shows that 65% of rural populations live without access to a viable source of drinking water; 81% without access to an improved sanitation facility; and 52% practice open defecation.

Due to rapid population growth, the number of people practicing open defecation increased by 65.2% between 1990 and 2015, increasing the risk of fecal-oral contamination and increased exposure to environmental enteropathy. Approximately 90% of the poorest wealth quintile live without access to an improved source of drinking water; less than 1% of the poorest wealth quintile own a hygienic latrine (ENDSOMD, 2013).

The challenges to accelerating and expanding the use of improved and sustainably managed WASH services are threefold: weak WASH governance, monitoring, and management capacity; weak private sector/WASH supply; and unhealthy behavior/low demand for WASH services.

To address these issues, the Rural Access to New Opportunities in Water, Sanitation and Hygiene (RANO WASH) project, implemented by Care International in consortium with CRS; WaterAid, BushProof and Sandandrano, aims to increase equitable and sustainable access to water, sanitation and hygiene; maximize the impact on human health and nutrition; and preserve the environment in 250 rural communes in six priority regions Vatovavy Fitovinany, Atsinanana, Alaotra Mangoro, Amoron'i Mania, Haute Matsiatra and Vakinankaratra.

1.2. SUMMARY OF THE RANO WASH PROJECT

The Rural Access to New Opportunities for WASH (RANO WASH) project in Madagascar is a five-year project funded by the United States Agency for International Development (USAID) from 2018 to 2022 with 9 months no cost extension. RANO WASH develops systematic partnerships with national and regional governments, water and sanitation institutions, communities, private sector actors, and civil society organizations.

The project strengthens governance and monitoring of the WASH sector at all levels (national, regional and communal), engages the private sector in the investment, implementation and management of WASH services, strengthens small-scale operators such as local masons and tailors, youth who have developed innovative WASH service models and products to become professional WASH service providers, supports communes to acquire ODF (Open Defecation Free) status, and accompanies households in the application of healthy behaviors.

Gender and Social Inclusion are considered a cross-cutting theme. The RANO WASH project is implemented by Catholic Relief Services (CRS), WaterAid, Sandandrano, BushProof and led by CARE, which provides overall leadership and implements activities on the ground.

The goal of RANO WASH is to improve the health of the inhabitants of 250 communes in the regions of Alaotra Mangoro, Amoron'i Mania, Atsinanana, Haute Matsiatra, Vakinankaratra and Vatovavy Fitovinany. The project has 3 sub-objectives and a cross-cutting objective related to gender and social inclusion described below:

1. Strengthen governance and monitoring of water and sanitation for sustainable and equitable WASH service delivery:
    - Strengthen government and stakeholder engagement and accountability for sector development.
    - Improve sector monitoring, analysis and learning to influence policy.
    - Strengthen sub-national systems at the commune level to facilitate inclusive planning and improved sector coordination.
2. Increase and improve private sector engagement in WASH service delivery.
3. Promote the adoption and acceleration of health behaviors and the use of WASH services.
4. Promote gender and social inclusion in all components of the RANO WASH project.
    - Promote the engagement of men, women, and youth as decision-makers in policy spaces by strengthening responsive and gender-sensitive governance in the WASH sector to raise their voices in community-based organizations supported by the project.
    - Engage the private sector in the provision of WASH services and products that are available and accessible to different community groups, including vulnerable groups, by promoting the economic empowerment of women and youth.
    - Implement a transformative approach to facilitate healthy behaviors and gender equity across the WASH sector to enable gender equality and social inclusion within households and communities.

The RANO WASH project has been implemented for 5 years with a 9-month no-cost extension that was validated by USAID primarily due to challenges related to the Covid 19 pandemic that negatively impacted project implementation due to health restrictions.

1.3. RANO WASH PROJECT COVERAGE

The RANO WASH project target 250 communes in seven regions in Madagascar with a total population of 3 184 508 individuals as shown in the table below.

Table 1: *List of regions and districts targeted by RANO WASH project and number of inhabitants in the project target area.*

Region	District	Number of households	Number of individuals
ALAOTRA MANGORO	AMBATONDRAZAKA	59 977	245 330
ALAOTRA MANGORO	AMPARAFARAVOLA	62 923	268 697
ALAOTRA MANGORO	MORAMANGA	55 477	233 779
AMORON_I_MANIA	AMBOSITRA	43 349	194 975
AMORON_I_MANIA	FANDRIANA	25 842	127 959
AMORON_I_MANIA	MANANDRIANA	9 994	47 451
ATSINANANA	BRICKAVILLE	43 536	161 189
ATSINANANA	MAHANORO	10 383	40 959
ATSINANANA	TOAMASINA II	56 784	206 881
ATSINANANA	VATOMANDRY	40 004	153 079
FITOVINANY	IKONGO	23 581	117 347
FITOVINANY	MANAKARA ATSIMO	58 537	272 057
FITOVINANY	VOHIPENO	26 856	128 437
HAUTE MATSIATRA	AMBALAVAO	18 115	83 743
HAUTE MATSIATRA	LALANGINA	10 176	55 006
HAUTE MATSIATRA	VOHIBATO	18 720	96 161
VAKINANKARATRA	ANTANIFOTSY	56 476	257 992
VAKINANKARATRA	ANTSIRABE_II	52 607	232 247
VAKINANKARATRA	BETAFO	36 010	162 126
VATOVAVY	IFANADIANA	16 871	79 053
VATOVAVY	MANANJARY	4812	20 040
Total		**731 030**	**3 184 508**

RANO WASH project reached a diversified list of beneficiaries including citizen, communes, private companies, civil society organizations as summarized in the table below.

Table 2: *Number of direct and indirect beneficiaries per category*

Type of beneficiaries	Number of direct beneficiaries	Number of indirect beneficiaries
Households receiving water	**188 274**	**0**
Households receiving sanitation services	**555 974**	**0**
Local masons	**636**	**582 106**
Seamstresses	**436**	**455 381**
Water point managers (private companies)	**36**	**188 698**
Communes	**250**	**3 184 508**

RANO WASH also reached key government structures including the Ministry of water, hygiene and sanitation, the ministry of public health and other key ministries. The project also reached local structures for participation (SLC), civil society organizations, Common initiative Groups (GIC).

2. PURPOSE AND OBJECTIVES OF THE FINAL EVALUATION

2.1. FINAL EVALUATION OBJECTIVES

The final evaluation will be conducted to document the progress made by the project, capitalize on implementation approaches, and document successes and lessons learned. The evaluation aims to collectively analyze the progress and achievements of the team in implementing the RANO WASH project since its inception, and to assess the relevance of the results and progress achieved. The final evaluation is expected to take place in Madagascar from November 1, 2022, through February 28, 2023. The evaluation focuses on expected results but also on unanticipated changes, both positive and negative.

The objectives of the evaluation are to:

- To assess the progress made, both quantitative and qualitative, through the annual action plans implemented, towards achieving the expected results as defined in the results framework, and in relation to their relevance to existing national policies and programs.
- Assess the sustainability of these results, and the contribution of activities/projects to the outputs/outcomes defined by the government.
- Assess the relevance, efficiency, and effectiveness of the project in relation to priorities and needs, the extent to which the implemented project meets the objectives and targets set at the time of its design, and the extent to which the achievements are consistent with the Malagasy government's WASH strategy.
- Analyze lessons learned from the implementation of the RANO WASH project.
- Capitalize on good practices that could be replicated in a Phase II or similar project in Madagascar.

2.2. FINAL EVALUATION DELIVERABLES

The main deliverables expected from the final evaluation include, but is not limited to:

- A Terms of reference
- Data collection tools
- Enumerator training manual
- Final evaluation report
- A brief on the main impact or outcomes of the project with key recommendations (2 to 3 pages)

- A PowerPoint presentation of the final evaluation for the dissemination workshop

2.3. FINAL EVALUATION SCOPE AND EVALUATIVE QUESTIONS

- To what extent has the RANO WASH been appropriate and relevant for WASH system strengthening and access to WASH service? (In terms of appropriateness and relevance, the evaluation team reviewed how well the design of the project and its theory of change corresponded to the needs identified on the field.)
- To what extent has the RANO WASH project affected the overall WASH system in Madagascar through the building blocks pillars? (To address this question, the evaluation team first assessed the efforts or approaches used to affect the WASH ecosystem, access to WASH services and attitudes and behavior, and then assessed how the RANO WASH affected these aspects of WASH in Madagascar.)
- To what extent has the RANO WASH project contributed to population access to WASH services and positive attitudinal and behavioral changes among citizens? (To address this question, the ET must assess whether RANO WASH participants receive quality WASH services and are actively participating to improve WASH outcomes in their community.)
- To what extent can RANO WASH project be expected to continue and/or be scaled up by communes, private sectors and local coordination mechanism after it ends? What evidence exists to demonstrate this sustainability?
- What are the lessons learned, best practices, and most significant challenges to the success of the RANO WASH project?

2.4. PERFORMANCE INDICATORS TO BE ASSESSED

The final evaluation will assess the key outcomes indicators as summarized in the table below.

Table 3 : *List of indicators to be assessed*

Indicator #	Indicator Title	Indicator Type
0.1	% of people in intervention communes with access to basic drinking water services	Impact
0.2	% of people in intervention communes with access to a basic sanitation service	Impact
0.3	% of households in intervention communes with children under age 5 reporting an incidence of diarrhea within last two weeks	Impact
SO 1: Governance and monitoring of water and sanitation strengthened for delivering sustainable WASH services		
1,1	# of intervention communes increasing WASH budget	Outcome
1,2	Value of new funding mobilized to the water and sanitation sectors as a result of USG assistance	Outcome
IR1.1 Strengthened government and stakeholder commitment and accountability to sector development		
1.1.1	National Sector Development Action Plan implemented	Outcome
1.1.1.1	National body for WASH sector coordination operational	Outcome
IR1.2 Improved sector monitoring, analysis and learning, influencing policy		
1.2.1	% of intervention communes reporting in the national WASH monitoring system (SE&AM)	Outcome
IR1.3 Strengthened sub-national systems		
1.3.1	# of water and sanitation sector institutions strengthened to manage water resources or improve water supply and sanitation services as a result of USG assistance	Outcome
1.3.2.1	# of intervention communes engaging with private sector to provide WASH services	Outcome

Indicator #	Indicator Title	Indicator Type
IR1.4 Increased community control over WASH services		
1.4.1	# of WASH users groups operational in intervention communes	Outcome
SO 2: Private sector engagement in WASH service delivery increased and improved		
IR2.1 Improved WASH products, technologies, services and business models		
2.1.1	# of new/improved WASH products and technologies implemented with RANO WASH support	Outcome
2.1.2	# of new water and sanitation services provided with RANO WASH support	Outcome
IR2.2 Improved design, construction and management of WASH infrastructure		
2.2.1	# of people gaining access to basic drinking water services as a result of USG assistance	Outcome
2.2.2	# of people gaining access to safely managed drinking water services as a result of USG assistance	Outcome
2.2.3	# of people gaining access to a basic sanitation service as a result of USG assistance	Outcome
2.2.4	# of people gaining access to a *limited* sanitation service as a result of USG assistance	Outcome
2.2.5	# of people benefiting from the adoption and implementation of measures to improve water resources management as a result of USG assistance	Outcome
IR2.3 Strengthened technical & business skills and competencies		
2.3.2	% increase in sales for RANO WASH-supported enterprises (average % increase in net sales for enterprises following business training)	Outcome
SO 3 : Adoption of healthy behaviors and use of WASH services accelerated		
3,1	% of households with soap and water at a hand washing station commonly used by family members	Outcome
3,2	# of communities verified as "open defecation free" (ODF) as a result of USG assistance	Outcome
IR3.1 Improved hygiene and sanitation BC solutions through applied research		
IR3.2 Improved implementation of WASH BC at all levels: communities, government and private sector		
3.2.1	% Communities verified ODF that remain ODF following verification	Outcome

2.5. FINAL EVALUATION USE AND USERS

The evaluation results and processes will be used and shared by relevant stakeholders, including Consortium members (CARE, CRS, WaterAid, Sandandrano, BushProof), subgrantees, INGOs and NGOs working in the WASH sector, the Malagasy government through the Ministry of Water, Sanitation and Hygiene (MEAH), donors (USAID) Communes and private water supply system managers to identify progress made by the RANO WASH project, identify good practices and lessons learned throughout implementation, and identify project weaknesses and pitfalls to avoid in future project implementation. The following table outlines the documents expected to be produced from the evaluation findings and processes (i.e., reports, presentations, etc.), the purpose of the outputs, and the intended users.

Table 4. Planned reports and deliverables

Deliverable format	Deliverable objective	users	Responsible	Dateline
Methodology report	Present the detailed methodology that will be implemented by the consultant	Consortium members (CARE, CRS, WaterAid, Sandandrano, BushProof)	Consultant	November 2022
Final data collection tools	Evaluate the nature and content of the information to be collected	Consortium members (CARE, CRS, WaterAid, Sandandrano, BushProof)	Consultant	November 2022
Final Evaluation Report	Present the evaluation results, final conclusions and recommendations	CARE, CRS, WaterAid, Sandandrano, BushProof, USAID, MEAH	Consultant/PCT	March 2023
brief document that summarizes the major results and lessons learned from the project (2-4 pages)	Present the evaluation results, final conclusions and recommendations	USAID, MEAH, Municipalities, Private Sector, Local Participation Structures	Consultant/PCT	March 2023
PowerPoint presentation of the main findings and recommendations of the final evaluation	Present the evaluation results, final conclusions and recommendations	USAID, MEAH, Communes, Private Sector, Local Participation Structures	Consultant/PCT	March 2023
3-5 key lessons learned	Document the actions taken for the purpose of the evaluation	CARE, CRS, WaterAid, Sandandrano, BushProof, USAID, MEAH	Consultant/PCT	March 2023
Databases, quantitative and qualitative surveys and other data		CARE, CRS, WaterAid	Consultant/PCT	March 2023

3. METHODOLOGY

3.1. TARGET POPULATION

Some of the key stakeholders that should be targeted through primary data collection are:

- Households, beneficiaries of drinking water, sanitation and hygiene services
- Communes of intervention of the project,
- Private companies managing drinking water supply systems.
- Local masons supplying latrine slabs.
- Seamstresses providing menstrual hygiene kits for women.
- Local consultation structures (ASUREP, OSC; LSC)
- The municipal authorities
- Community leaders
- The Regional and/or district-level Directorates of the MEAH, and

The data collection process will include electronic data collection for the quantitative surveys using the CommCare platform while the qualitative survey will use Dictaphones to record conversations after consent from respondents. Prior to data collection, the data collection tools, and methodology will be tested in the field.

3.2. LITERATURE REVIEW

The evaluation team will conduct a lot of literature review as part of the current final evaluation. The main documents the team will consult include but not limited to:

- Project document (including the initial proposal, the approved proposal for the no cost extension, the annual workplans, approved budgets, MEAL plans, etc.)
- All evaluation and assessment reports (Baseline reports, midterm review and midterm evaluation, initial or need assessment, etc.)
- Project performance reports (quarterly and annual reports including all the annexes and success stories reported to USAID throughout the project implementation)
- Learning study reports for all the learning questions included in the approved learning agenda, pause and reflect reports and any other learning document including briefs as well.
- Capitalization workshop reports.
- Any other relevant literature on the system approach for WASH programming, WASH in Madagascar, private sector engagement in WASH, etc.

All these documents will be reviewed and analyzed, by the MEAL consultant, to inform the final evaluation report.

3.3. SAMPLING PLAN

The sampling plan is specific to the target population and research method use. This section is presented per target population with a specific section for qualitative survey.

3.3.1. Sampling plan for the household survey

The household survey includes indicators related to water service beneficiaries mainly, as well as households with handwashing facilities. The sampling method that will be used is a multi-stage survey (4 to be precise).

1. At the first level, regions will be drawn. For the annual study, all 6 regions will be selected.
2. In the second stage, the communes will be drawn. The sampling of the communes will be done by simple random sampling.
3. In the third stage, villages will be drawn. Since the survey also assesses access to water, the list of villages with a water system will form the sampling frame and villages will be drawn by simple random sampling.
4. Finally, in the fourth stage, households will be drawn using the ballpoint pen method. Once the villages to be interviewed have been identified, the collector will go to the center of the village or to the main intersection of the village. Using a ballpoint pen thrown in the air, the agent will choose the direction to go and then the first house can be selected by chance. A sampling step should be defined corresponding to the total number of households in the village divided by the number of households to be interviewed in the village. If we pause N the total number of households in the village and n the number of households to be interviewed and p the sampling step, then we have $p = \frac{N}{n}$. This sampling step corresponds to the number of households that must be counted after each interview to select the next household. For example, if we obtain that the sampling step is 5, this implies that the data collector will have to interview one household out of 5 in the village considered.

The size of the defined sample is **1339 households** that will be distributed among the six (06) regions of intervention of the project including Vatovavy Fitovinany, Atsinanana, Alaotra Mangoro, Amoron'i Mania, Haute Matsiatra, and Vakinankaratra.

The sample was calculated using the following formula:

$$n = \frac{D * (Z_\alpha + Z_\beta)^2 * (P_1 x(1-P_1) + P_2 x(1-P_2))}{(P_2 - P_1)^2}$$

- **n** = Minimum required sample size.
- **D** = Sampling effect (fixed at 2 since we will use cluster sampling).
- **P1** = Estimated level of an indicator measured as a proportion at baseline
- **P2** = Expected level of the indicator either at the final evaluation or for the project area so that the quantity (P2 - P1) is the order of magnitude of the change it is intended to detect.
- **Zα** = Z-score corresponding to the degree of confidence one wishes to have that an observed change in size (P2 - P1) would not have occurred by chance (α - statistical significance level). For a 95% confidence interval, Zα is 1.645)
- **Zβ** = Z-score corresponding to the degree of confidence one wishes to have to reliably screen for a change in size (P2 - P1) if such a change has indeed occurred (β - statistical power = 0.80, Zβ = 0.84).

The sample size is given below:

P_1 (estimated baseline level)	50,0%
P_2 (estimated FE level)	57,0%
P_2-P_1 (estimated change over time)	7%
Z_α (Z score at desired statistical significance) .95	1,645
Z_β (Z score at desired statistical power) .80	0,84
D (design effect)	2
$(Z_\alpha + Z_\beta)^2$	6,175
$P_1(1-P_1)$	0,250
$P_2(1-P_2)$	0,245
$(P_2-P_1)^2$	0,005
Sample size (n) of measurement unit	**1248**
Probability of getting at least one measurement unit per HH	100%
Sample size (households)	**1248**
N=total HHs in the program area	35000
Adjusted sample size of HHs for finite population	**1205**
Security factor (contingency)	10%
Sample size (households) [without HH replacement sample design]	**1339**

For data collection purposes, one enumerator will interview an average of 10 households every day for 10 days, making a total of 100 households per enumerator. RANO WASH will need about 14 enumerators for the household survey.

3.3.2. Sampling plan for the communes' survey

The communes to be interviewed will be selected using a two-stages cluster sampling method, each region being considered as a cluster as following.

- In the first stage, the regions will be drawn. All 06 target regions of the project will be involved in the study and will therefore be selected.
- In the second stage, the communes will be selected directly. Given that the list of communes exists in each of the regions, the communes will be selected by simple random sampling. The simple random sampling assumes that the regional MEALs will generate random numbers between 1 and Ni (Ni being the number of communes in region i. If the number of communes to be surveyed in region i is set to ni, then the ni communes with the smallest numbers will be retained in the sample.

About 150 of the 250 communes will be fully covered by this study. The data collection approach will combine interviews with the mayor or STEAH with document review and direct observation to capture all the information expected from the survey. For example, when assessing the functionality of the accountability mechanism, the data collector will ask the question to the respondents but will also need to verify the effectiveness of the mechanism through the existence of feedback records at the commune level. Similarly, even if the respondent can confirm that the commune has engaged the private sector for WASH, it would be interesting to see the engagement documents, such as management contracts or memoranda of understanding between the mayor's office and the private sector.

The table below summarizes the number of communes to be interviewed per region.

Table 5: Distribution of the number of communes sampled per region

Regions	# of communes in the region	# of communes in the sample
ALAOTRA MANGORO	51	31
AMORON_I_MANIA	30	18
ATSINANANA	51	31
HAUTE MATSIATRA	20	12
VAKINANKARATRA	33	19
VATOVAVY	65	39
FITOVINANY		
Total	**250**	**150**

Using the list of communes in each region, regional officials should randomly select the communes to be interviewed at the numbers described in the table above. The agents in charge of collecting data from the communes should be distributed according to the number of communes to be interviewed in each region. On average, one agent is expected to interview approximately 30 communes. It will be up to the regional managers to assign the agents in an equitable manner, as some agents may obviously work in two different regions.

For data collection, on average, one enumerator will interview about 30 communes, making a total of 5 enumerators for the communal survey.

3.3.3. Sampling plan for the qualitative survey

Key informant interviews

The sampling for the qualitative approach will be using the purposeful sampling method. Thus, people suspected of having information relevant to the study will be targeted for interview. For example, mayors, water system managers, RANO WASH staffs and community leaders will be the primary targets for key informant interviews. At the district and regional levels, officials in charge of the WASH

sector will also be interviewed. At the outset, the evaluation team intends to interview approximately 54 people as follows.

Table 6: *Distribution of the sample per key informant groups*

Regions	Mayors	Water system managers	Community leaders	Regional or district-level representative
Alaotra Mangoro	2	3	2	2
Amoron'i Mania	2	3	2	2
Atsinanana	2	3	2	2
Haute Matsiatra	2	3	2	2
Vakinankaratra	2	3	2	2
Vatovavy Fitovinany	2	3	2	2
Total	**12**	**18**	**12**	**12**

Focus group discussions

In total, there will be 18 focus groups and 180 people to interview, with an average of 10 participants per group. The table below summarizes the number of focus groups to be conducted and the total number of participants that will be reached.

Table 7: *Distribution of the number of focus groups and participants per region*

Regions	Number of groups	Number of people		
		Men	Women	other vulnerable groups (people with disabilities, elderly, etc.)
Alaotra Mangoro	3	10	10	10
Amoron'i Mania	3	10	10	10
Atsinanana	3	10	10	10
Haute Matsiatra	3	10	10	10
Vakinankaratra	3	10	10	10
Vatovavy Fitovinany	3	10	10	10
Total	**18**	**60**	**60**	**60**

Regional teams will be responsible for identifying participants for the focus groups. The groups will be separated by gender. Thus, there will be women's groups and men's groups, to allow everyone to express themselves freely. For the group discussions, the data collection team will consist of two people so that there will be a facilitator for the discussions and a note taker.

For both focus group discussions and key informant interviews, a team of 2 enumerators could cover each region. Each of them will conduct key informant interviews and facilitate focus group discussions. So, Overall, for the qualitative surveys, a total of 12 enumerators will be hired and trained.

3.4. DATA ANALYSIS PLAN

3.4.1. Data analysis plan for quantitative survey

Using statistical package such as R or SPSS, CRS will analyze quantitative data using both descriptive (univariate analysis, bivariate analysis including crosstab analysis, multivariate analysis) and inferential statistics (Statistical test – parametric and non-parametric tests, analysis of variance, linear and logistic regression, etc.) tools.

Prior data analysis, data will be weighted using extrapolation coefficients calculated using the formula below:

If consider an individual i, Pi the probability for individual i to be selected in the sample, Ci the extrapolation coefficient used to weight data,

$$C_i = \frac{1}{P_i}$$

So, the extrapolation coefficient is the reverse of the inclusion probability in the sample.

3.4.1. Data analysis plan for qualitative survey

All the information from the interviews and focus group discussions will be transcribed. Then the scanning process will follow the steps outlined in the table below:

Initial read through text data	Identify specific segments of information	Label the segments of information to create categories	Reduce overlap and redundancy among the categories	Create a model incorporating most important categories
→	→	→	→	→
Many pages of the text	Many segments of the text	30 – 40 categories	15 – 20 categories	3 – 8 categories

Adapted from Creswell, 2002, Figure 9.4, p. 266

The evaluation team will use Atlas Ti for qualitative data analysis.

4. REPORTING FORMAT

At the end of the final evaluation, RANO WASH will prepare a report and submit to USAID for approval. The final evaluation report should include:

- **A title:** A title that conveys the name of the project, the location, the period of implementation, and the main impact or findings of the report.
- An **executive summary that focuses on both process and impact** (except for baseline studies where we do not expect to see impact data) that is no longer than 2 pages and is formatted so that it can be printed as a stand-alone 2-page document about the project.
- **An impact statement at the beginning of the report, including 3-5 key impacts/outcomes:** What has changed because of the program? What has happened in the world and why does it matter?
- **A specific section on methodology:** This section should outline the evaluation questions and the methodological choices made to answer them. It should include ethical considerations and describe how the evaluators proceeded to protect participants and preserve personal and confidential information.
- **Findings:** the report should present the main final evaluation findings that respond to all the evaluative question stated in the methodology section.
- **3-5 key lessons learned:** These should be short, replicable and show the most important aspects of what the program/analysis found. They should be relevant and new to those outside the program. This section should also include key points about what should be improved next.
- **3-5 points describing how the project made an impact / 3-5 recommendations:** It is important to have lay descriptions (no technical jargon) of what a project did to make an impact**.** The point is to demonstrate the strengths of the most effective, relevant, and scalable approaches and tools. If this is an analysis and not an evaluation, this section should contain 3-5 key recommendations on what the project/program/initiative should do based on the findings.

- **Shareable Data:** Data, collected by the external evaluation, and conclusions and recommendations must be submitted with the final report. All databases, qualitative surveys, and other data are the property of CARE and must be included in the final deliverables. The sources of all data must be identified, conclusions must be based solely on the data presented in the report, and recommendations must correspond directly to the conclusions.

5. SANITARY AND ETHICAL CONSIDERATION

5.1. COVID19 MEASURES

All staff and volunteers involved in the final RANO WASH evaluation must follow all COVID-19 prevention measures. This includes always wearing a mask in the field during workdays, providing a mask to interviewees, maintaining a physical distance of at least 2 meters, and frequent hand sanitization.

In addition, interviews should preferably be conducted outdoors, if possible, or in a well-ventilated space to limit or reduce the risk of contamination. Finally, the team will monitor the environment and any restrictions and adjust for safety and health considerations in accordance with local and national government regulations.

5.2. ETHICAL CONSIDERATIONS

In accordance with international ethical guidelines, RANO WASH will ensure that all study participants have been fully informed about the nature of the study, including the risks and benefits, and have had the opportunity to ask questions. They will be guaranteed voluntary participation, confidentiality and informed consent. All eligible households will provide written informed consent which will be obtained on the same day as the interview. In case a respondent could not provide written consent, the enumerator will sign a disclaimer stating that he fully read and explained the informed consent to the respondent and that the respondent was given opportunity to ask question and provided verbal consent to proceed with the interviews.

Prior to data transfer and analysis by the expert team, the data will be de-identified (names will be removed). De-identified data will be transferred between team members using secure methods with minimal risk of personal data leakage. When presenting the results of the study, particular care will be taken to ensure that the information presented is sufficiently aggregated so that no individual can be identified.

6. ROLES, RESPONSIBILITIES, AND EVALUATION SCHEDULE

6.1. ROLES AND RESPONSIBILITIES

During data collection and analysis, the primary roles of RANO WASH programmatic staff and any implementing partners directly involved in the project are as informants and reviewers. They may review and provide feedback on data collection tools, instruments, and all other deliverables before they are finalized. **They should not collect primary data or be involved in the translation, analysis or interpretation of data**.

The following table outlines the key roles and responsibilities of RANO WASH staff and the consultant during the assessment process:

Table 8: Roles and Responsibilities of the Evaluation Team(s)

Person / Unit / Organization	Activity
MEAL Consultant (Berenger)	Develop the TOR for the study, contribute to the selection of the consultant, review the detailed methodology proposed by the consultant, review the data collection tools, propose a structure for the report, review the draft report proposed by the consultant
Chief of Party, Deputy CoP	Review and validate the TOR, review and validate the detailed methodology and tools, review and validate the final evaluation report, respond to consultant interviews as key informants
Program team (technical leaders)	Review and enhance TOR, Review and enhance methodology and data collection tools, review and enhance report, respond to consultant's interviews as key informants
RANO WASH Regional Team	Respond to the consultant's interviews as key informants, facilitate the consultant's work in the field, organize meetings between the consultant and local authorities, accompany the data collection.
Consultant for the final evaluation	Develop study methodology, develop data collection tools, conduct data collection and analysis, write final evaluation reports.

6.2. TIMEFRAME

The following table delineates the timelines and steps in the evaluation process:

Table 9: Evaluation Timeline and Stages.

Evaluation activities	*July 2022*	*August 2022*	*Sept. 2022*	*Octobe r 2022*	*Nov. 2022*	*Dec. 2022*	*Jan. 2023*	*Feb. 2023*
Elaboration and validation of the terms of reference	X							
Review and validation of the terms of reference		X						
Send request for technical and financial proposal			X					
Meeting with RANO WASH to discuss protocol, methodology, sampling, tools and timeline (Inception meeting)				X				
Duplication and finalization of tool development				X				
Presentation of the start-up report with details for feedback, comments and proposals for improvement (with tools)				X				
Validation of the start-up report				X				
Preparation of field trips and collection					X			
Investigator training, pre-testing					X			
Field trip for data collection					X			
Submission of the draft report with the report on the conduct of the							X	

Evaluation activities	July 2022	August 2022	Sept. 2022	Octobe r 2022	Nov. 2022	Dec. 2022	Jan. 2023	Feb. 2023
investigation + Presentation of the draft report								
Submission of all final deliverables (final report in French and English, own data, photos and PPT presentation)								X
Workshop to disseminate the results of the study to all stakeholders.								X

ANNEX 2: DATA COLLECTION TOOLS

KII AND FGD GUIDES AND SURVEY

2.1 MAIN EVALUATION QUESTIONS

EQ#	EVALUATION CRITERIA	KEY EVALUATIONS QUESTIONS
1.	**Relevance**	• What is the contribution of the project to the achievement of national objectives and to the improvement of the WASH system in Madagascar?
		• How does the project's community-based approach meet the needs and demands of the beneficiaries in a disaggregated manner (for men and women, youths, people with disability and other marginalized groups) and the community response?
		• How relevant are the tools/instruments/inputs applied by the project to facilitate access to WASH services?
2.	**Effectiveness**	• To what extent has the project achieved its outputs and outcomes?
		• How were the intervention areas selected and how has RANO WASH implemented the program in these areas?
		• What are the targeting strategies for identifying project beneficiaries, both male and female?
		• What are the emerging effects of the project on male and female beneficiaries? These may include health and nutrition aspects.
		• To what extent has the project achieved its outputs and objectives as defined in the project documents, work plans and with reference to the project baseline?
3.	**Efficiency**	• To what extent did the project use available funding according to the agreed-upon work plan to achieve the projected objectives?
		• What is the role of the projects management structures and to what extent are they optimally used for decision making?
		• How efficient were the timing and quality of project monitoring and reporting?
		• What are the factors and constraints that affected project implementation, including managerial, organizational, institutional, and socio-economic issues in addition to other external factors unforeseen in the project design?
4.	**Sustainability and Impact**	• To what extent are the project outcomes likely to be sustainable beyond the life of the project (both at the community and government levels)?
		• Based on the results (relevance, efficiency, effectiveness, sustainability, and impact), recommend whether expansion of this project can be justified.
5.	**Networking/ Linkages**	• What is the level and degree of implication of beneficiaries (accountability mechanism) and stakeholders (government and donor partners, etc.) in the implementation of the project?
		• What were the synergies and overlaps between the project and other WASH-related initiatives in the project areas and how do all these initiatives complement each other?

EQ#	EVALUATION CRITERIA	KEY EVALUATIONS QUESTIONS
		• What were project's knowledge management strategy, outreach, and communications with all stakeholders?
6.	**Lessons Learned / Conclusions**	• What are the areas for improvement in program planning, particularly with respect to goal setting, relevance, and institutional capacity for decision making and project implementation? • What are the important lessons or conclusions that can be drawn from the project in terms of effectiveness, efficiency, sustainability, and networking?

2.2 SECONDARY EVALUATION QUESTIONS

QUESTIONS	TARGETS GROUPS
1. Relevance	
EQ 1.1. : What is the contribution of the project to the achievement of national objectives and to the improvement of the WASH system in Madagascar?	
• How did RANO WASH engage communities/beneficiaries in needs identification and prioritization? Was it timely? • How did RANO WASH engage the authorities (MEAH - MEN - MSP at the national and regional level) in the implementation of the project for their ownership and continuity of activities even after the project left? What has worked well? What needs to be strengthened more? • How did RANO WASH engage private operators (water operators, local operators such as local masons and seamstresses or others, financial institutions, and others) in the implementation of the project for their ownership and continuity of activities even after the departure of the project? What has worked well? What needs to be strengthened more? • How were the differential needs taken into account in the identification, prioritization and adaptation/contextualization (women, men, youth, elderly, disabled)? • How was the coordination between the RANO WASH project and other stakeholders both at the local and national level? Did you have any difficulties in ensuring this coordination and what recourse did you have?	Project team, MEAH/DREAH
• What is the role of your agency/organization with respect to water, hygiene and sanitation in this region/location?	Local authorities, private sector
• Let's talk about your experience and knowledge of RANO WASH work in this locality. To what extent are you involved in the RANO WASH project? How did you get involved? • What were the priority needs of the local communities and how did RANO WASH establish/assess these needs? • Did you play a role in the relevance and timeliness of this project? Please specify? • Do you have any recommendations for RANO WASH in this regard?	Local authorities
• Can you tell us a little about the challenges in water, hygiene and sanitation? • How do you feel about the relevance of the RANO WASH project in addressing the problems you face in water, hygiene and sanitation? • What is the overall state of hygiene (cleanliness of your environment, practice of personal hygiene, hand washing, practice of food hygiene, use of latrines, use of safe water, intimate hygiene of women and girls) in your community and locality today? • To your knowledge, what activities have been carried out by the RANO WASH project in your area to improve hygiene in your community?	FGD

QUESTIONS	TARGETS GROUPS
• How has the RANO WASH project contributed to improving hygiene in your locality? • To your knowledge, what activities have been carried out by the RANO WASH project in your area to improve the use of improved latrines by communities and households? • To your knowledge, what activities have been carried out by the RANO WASH project in your area to stop open defecation? • How would you describe the benefits of the RANO WASH intervention to improve sanitation in your community? Please elaborate with specific examples and initiatives?	
• How was your company selected to contribute to the RANO WASH project? How would you describe your satisfaction with the selection approach used? What approach would have been better in your opinion for the selection of companies to be involved in the project?	Private sector
EQ 1.2. : How does the project's community-based approach meet the needs and demands of the beneficiaries in a disaggregated manner (for men and women, youths, people with disability and other marginalized groups) and the community response?	
• To what extent did the project reach the targeted beneficiaries (e.g., men, women, elderly, youth, disabled, etc.)?	Local authorities, Project Team
• How were differential needs taken into account in the identification, prioritization and adaptation/contextualization (women, men, youth, elderly, disabled)?	Project team, MEAH/DREAH
EQ 1.3 : How relevant are the tools/instruments/inputs applied by the project to facilitate access to WASH services?	
• In your opinion, how has the RANO WASH project improved your access to clean water so far? • What kind of support for access to safe water has RANO WASH provided to you so far?	FGD
• Let's talk about the relevance and timeliness of the RANO WASH project in this community. • What activities have been carried out by the RANO WASH project in your geographical area of expertise? • Would you say that the RANO WASH project is an effective assistance for the target beneficiaries and aligned with the explicit priorities and needs of the local community? Is it timely and contextually appropriate? Please explain how/why for each of the intervention areas? • Do you think there were better ways to support project beneficiaries, what would you have recommended to RANO WASH?	Local authorities
2. Effectiveness	
EQ 2.1. To what extent has the project achieved its outputs and outcomes?	
• How would you describe the level of achievement of the expected results/outputs of the RANO WASH project? • How would you describe the level of achievement of the RANO project objectives?	Local authorities, Private sector
EQ 2.2. How were the intervention areas selected and how has RANO WASH implemented the program in these areas?	
• What were the gaps, challenges, and risks of geographic targeting (access, security, weather, etc.), how were they addressed, please provide evidence? • What were the key lessons learned from geographic targeting for future use?	Project Team, MEAH/DREAH
EQ 2.3. What are the targeting strategies for identifying project beneficiaries, both male and female?	
• What criteria were established to identify beneficiaries? What process was adopted for the identification/targeting of beneficiaries, how effective was it?	Project Team, MEAH/DREAH

QUESTIONS	TARGETS GROUPS
• How did you integrate gender equity in the targeting of beneficiaries, how effective was it (women, vulnerable populations IDPS, refugees, returnees, disabled, etc.)? • What were the main challenges, gaps, and risks in targeting beneficiaries, how were they addressed, and how would you do it differently in the future?	
EQ 2.4. What are the emerging effects of the project on male and female beneficiaries? These may include health and nutrition aspects.	
• To what extent / in what way has RANO WASH made a difference (positive / negative, short / medium and long term) in the lives of program beneficiaries (men, women and youth) in terms of increasing access to WASH services? Please explain how and why for each of the following: - How has RANO WASH supported/impacted the direct and indirect beneficiary populations (including men, women and youth) in terms of immediate impact? - How is RANO WASH making a difference in improving access to water in the targeted communities? - How is RANO WASH making a difference in improving governance of the WASH sector in your area? - How is RANO WASH making a difference in changing hygiene behavior? - How is RANO WASH making a difference in supporting private operators to promote their commitment/investment in the provision of equitable and sustainable services?	Local authorities, Private sector
• What are the changes and improvements in the governance processes of local communities as a result of the RANO WASH intervention? What changes have been observed?	FGD
EQ 2.5. To what extent has the project achieved its outputs and objectives as defined in the project documents, work plans and with reference to the project baseline?	
• To what extent is the implementation of project activities making solid progress toward achieving its objectives and outcomes as originally planned? What internal/external factors are impeding the achievement of objectives and what implementation and/or targeting adjustments can you recommend (see RANO WASH results framework)? • What were the gaps, challenges, and risks (security, logistics, government policy, etc.) for you/your partners and how were they addressed? Share evidence of innovative solutions? • What were the successes? Why or why not? • What implementation and contextual factors are associated with greater / lesser effectiveness in achieving project objectives? What facilitated / hindered (logistics, environment, government partners, local practices) project / partner performance (outcomes / outputs)? Please share examples? • What were the unexpected things (positive and negative)? • What did the project do to correct shortcomings and leverage successes?	Project Team, MEAH/DREAH
3. Efficiency	
EQ 3.1. To what extent did the project use available funding according to the agreed-upon work plan to achieve the projected objectives?	
• Are the project activities being implemented as planned and described in the proposal and detailed implementation plan? If not, what types of activities were not implemented as planned? Why or why not? • Are project resources being used in the best possible way to achieve the objectives? Why or why not?	Project Team, MEAH/DREAH
EQ 3.2 What is the role of the projects management structures and to what extent are they optimally used for decision making?	

QUESTIONS	TARGETS GROUPS
• How has RANO WASH coordinated effectively with key stakeholders at different levels, from national to local? • To what extent did coordination facilitate / hinder the implementation of the RANO WASH program / project? • What measures/mechanisms were in place for geographic coordination and collaboration to avoid duplication and ensure value for money? How effective were they? • What are the expectations of the different collaborative partners, what are the gaps and challenges, and what do you think needs to be improved in coordination at different levels?	Project Team, MEAH/DREAH
EQ 3.4. What are the factors and constraints that affected project implementation, including managerial, organizational, institutional, and socio-economic issues in addition to other external factors unforeseen in the project design?	
• What were the efficiency challenges and how could the project address them?	Project Team, MEAH/DREAH
4. Sustainability and Impact	
EQ 4.1. Based on the results (relevance, efficiency, effectiveness, sustainability, and impact), recommend whether expansion of this project can be justified.	
• What signs of change can you associate or attribute to RANO WASH program activities? What factors seem to promote apparent change or discourage planned change? Look for specific examples? • Looking ahead, which of the accomplishments to date are likely to be sustained or expanded without additional external support? Which of these would require additional support? • Are structures, resources, and processes in place to ensure that the benefits generated by the project continue once external support ceases? • What signs of change can you associate or attribute to the RANO WASH program activities? What factors seem to promote apparent change or discourage planned change? Look for specific examples	Project Team, MEAH/DREAH
• As a result of the support received through the RANO WASH project, what would you describe as the main changes you have experienced as beneficiaries from your participation in the project to date? • In your opinion, is the project's approach effective in bringing about positive and sustainable change? Are there gender differences in the project's outcomes related to access to water? • What do you wish the RANO WASH project had done differently to support your access to water? Why or why not?	FGD
• What changes have occurred for the regional, communal and local government authority as a result of its involvement in the project? Give examples and/or initiatives. • Looking ahead, which of the advances made to date are likely to be sustained or expanded without additional external support? Which of these would require additional support? What do you see as the key factors that could support or hinder the sustainability of the results achieved to date? • What can the project do differently to improve implementation and maximize impact and effectiveness? • What can the project do differently to improve implementation and maximize impact?	ALL
5. Networking/ Linkages	
EQ 5.1. What is the level and degree of implication of beneficiaries (accountability mechanism) and stakeholders (government and donor partners, etc.) in the implementation of the project?	

QUESTIONS	TARGETS GROUPS
• In your opinion, how did RANO WASH coordinate effectively with key stakeholders at different levels? - How did RANO WASH coordinate with you/your organization during the implementation of this project? - How would you describe the impact of this coordination on the quality of the project? - How effective was this coordination in terms of targeting beneficiaries, program design, avoiding duplication, facilitation, problem solving, etc.? - What are the expectations of the different partners? What are the gaps and challenges and what do you think needs to be improved in coordination at different levels? - What were the main lessons learned from the coordination for future use?	Local authority, Private sector, Local authority
• How did RANO WASH engage communities/beneficiaries in needs identification and prioritization? Was it timely? • How did RANO WASH engage the authorities (MEAH - MEN - MSP at the national and regional level) in the implementation of the project for their ownership and continuity of activities even after the project left? What has worked well? What needs to be strengthened more? • How did RANO WASH engage private operators (water operators, local operators such as local masons and seamstresses or others, financial institutions and others) in the implementation of the project for their ownership and continuity of activities even after the departure of the project? What has worked well? What needs to be strengthened more? • How was the coordination between the RANO WASH project and other stakeholders both at the local and national levels? Did you have any difficulties in ensuring this coordination and what recourse did you have?	Project team, MEAH/DREAH, Local authority
EQ 5.3. What were project's knowledge management strategy, outreach, and communications with all stakeholders?	
• What innovations did the project implement to achieve its programming objectives (collaboration, learning, adaptation)? • What are the key performance lessons from RANO WASH? Any documents/experiences you could share?	ALL

ANNEX 3: LIST OF STAKEHOLDERS INTERVIEWED

Day	Status[3]	Name	Position	Organization/ affiliation	Contact/mail	Format	Place
RANO WASH project team							
10-Jan-23	YES	RATOARIJAONA Avo	Deputy Chief of Party	Project Coordination Team of RANO WASH, CARE Madagascar	avo.ratoarijaona@care.org	In person	CRS Antananarivo Office
10-Jan-23	YES	RAKOTO-HARISOA Rodolphe	Senior WASH Governance Advisor	Project Coordination Team of RANO WASH, CARE Madagascar	Rakoto-HarisoaRodolphe@wateraid.org	In person	CRS Office Antananarivo
9-Jan-23	YES	RAFIDIMANANTSOA Amede	SENIOR PRIVATE SECTOR ADVISOR	Project Coordination Team of RANO WASH, CARE Madagascar	amedeabdereman.rafidimanantsoa@crs.org	In person	CRS Office Antananarivo
9-Jan-23	YES	RASAMOELINA Harisoa	Senior Wash Behaviour Change Advisor	Project Coordination Team of RANO WASH, CARE Madagascar	harisoa.rasamoelina@care.org	In person	CRS Office Antananarivo
7-Dec-22	YES	RAKOTOMALALA Heritiana Alain	Senior program manager	RANO WASH Project, WaterAid Madagascar	HeritianaRakoto@wateraid.org	In person	RANO WASH Office Alaotra Mangoro
9-Dec-22	YES	RANDRIATSITOHAINA Jean Marcelin	Regional Coordinator, RANO WASH Vakinankaratra	RANO WASH Project, Catholic Relief Services	jeanmarcelin.randriatsitohaina@crs.org	In person	RANO WASH Office Vakinankaratra
Ministry's team (DREAH)							
9-Dec-22	YES	Lovasoa Randrianarivony	Director	Regional Directorate of Water, Sanitation and Hygiene Vakinankaratra	+261 38 01 000 34	In person	DREAH Office Vakinankaratra

[3] *Scheduled and completed*

Day	Status[3]	Name	Position	Organization/ affiliation	Contact/mail	Format	Place
9-Dec-22	YES	ANDRIANARIJAONA Riana	Director	Regional Directorate of Water, Sanitation and Hygiene Haute Matsiatra	andrianarijaona_riana@yahoo.fr	In person	DREAH Office Haute Matsiatra
9-Dec-22	YES	RANDRIAMAMORY Harinaivo Dominique	Director	Regional Directorate of Water, Sanitation and Hygiene Haute Matsiatra	rhdominic@gmail.com	In person	DREAH Office Haute Matsiatra
Private sectors							
8-Dec-22	YES	Mr Jonah	Chief Operating Officer	ACOGEMA Beforona, Alaotra Mangoro Region	+261 33 11 757 24	In person	Office ACOGEMA Beforona
6-Dec-22	YES	Remy Heriarivo	Director	Rano an'ala B Anosibe Ifody, Alaotra Mangoro Region	+261 34 16 771 35 r.heriarivo@yahoo.fr	In person	Office RANO AN'ALA B, Anosibe Ifody
3-Dec-22	YES	ANDRIANARIVELO Anja Tahiana	Chief Operating Officer	LOVA VELU Ilaka Est, Atsinanana Region	lovavelu.sarl@gmail.com	In person	Office LOVA VELU, Ilaka Est
2-Dec-22	YES	RANOROSON ROLAND	Manager	CREAT BTP Ampasimbe Onibe, Atsinanana Region	+261 3414956 18	In person	Office CREAT BTP, Ampasimbe Onibe
8-Dec-22	YES	EL Rica Danny	Manager	LOVA VELU Anivorano Est, Atsinanana Region	+261 34 29 280 04 lovavelu.sarl@gmail.com	In person	Office LOVA VELU, Anivorano Est
2-Dec-22	YES	RANDRIANARINOSY Samoelina	chief operating officer	LOVA VELU Morarano Chrome, Alaotra Mangoro Region	lovavelu.sarl@gmail.com	In person	Office LOVA VELU, Morarano Chrome
9-Dec-22	YES	NASY COLLETTE	Seamstress	Couturiere Commune Mahatsara, Antsinanana Region		In person	Mahatsara
13-Dec-22	YES	Mme Hanitra	Accounting secretary	RANOVELONA Andranomanelatra, Vakinankaratra Region		In person	Office RANOVELONA, Andranomanelatra
12-Dec-22	YES	Tanjona	Local technician	2ADH Antsoatany, Vakinankaratra Region	+261 34 20 663 89	In person	Office 2ADH, Antsoatany

Day	Status[3]	Name	Position	Organization/ affiliation	Contact/mail	Format	Place
8-Dec-22	YES	Raharilalao Fara	WSP agent	LAZA Andranovorivato, Haute Matsiatra Region	+261 34 85 478 31	In person	Office LAZA, Andranovorivato
8-Dec-22	YES	Mr Avotra	Chief of operation	SECOA Andrainjato Est, Haute Matsiatra Region	secoa.fianar@gmail.com	In person	Office SECOA, Andrainjato est
14-Dec-22	YES	RAVOAHANGISOA Lydia	ATEAH and temporary local manager of the company	ECOWIN Commune Andonabe, Vatovavy Region	pecowing@gmail.com	In person	Office ECOWIN, Commune Andonabe
5-Dec-22	YES	RANDRIAMANANKASINA Lala Andriamihaja	Manager	ACOGEMA Ambatomarina, Amoron'I Mania Region	+261 33 11 757 24	In person	Office ACOGEMA, Ambatomarina
Local authorities							
6-Dec-22	YES	RAKOTONASOLO Nosy Arimiza	STEAH	Commune Morarano Gara, Alaotra Mangoro Region	+261 34 49 739 09	In person	Office Commune Morarano Gara
2-Dec-22	YES	Randriatovolana Rodolphe	STEAH	Commune Morarano Chrome, Alaotra Mangoro Region	+261 34 63 786 22	In person	Office Commune Morarano Chrome
13-Dec-22	YES	RASOLOFONDRA-MARIA Andriamiarisoa	Mayor	Commune Andranomanelatra, Vakinankaratra Region	+261 34 74 324 82	In person	Office Commune Andranomanelatra
2-Dec-22	YES	Benesy Paul René	Deputy Mayor	Commune Ampasimbe Onibe, Atsinanana Region		In person	Office Commune Ampasimbe Onibe
12-Dec-22	YES	ANDRIANIRINA Martin	Mayor	Commune Antsoatany, Vakinankaratra Region	+261 34 12 165 32	In person	Office Commune Antsoatany
3-Dec-22	YES	Ratodisoanirina andriamihaja francois	Mayor	Commune Ilaka Centre, Amoron'I Mania Region		In person	Office Commune Ilaka Centre
5-Dec-22	YES	RALASOA MODY ANDRE	STEAH	Commune Ambatomarina, Amoron'I Mania Region		In person	Office Commune Amoron'I Mania

Day	Status[3]	Name	Position	Organization/ affiliation	Contact/mail	Format	Place
8-Dec-22	YES	RATSIMBAZAFY Daniel	STEAH	Commune Andranovorivato, Haute Matsiatra Region		In person	Office Commune Andranovorivato
7-Dec-22	YES	RAMILIARISON Richad Emile	STEAH	Commune Ivato Centre, Amoron'I Mania Region		In person	Office Commune Ivato Centre
Community Leaders							
2-Dec-22	YES	Randriamandimby David	Tangalamena	Commune Morarano Chrome, Region Alaotra Mangoro	+261 34 04 576 64	In person	Morarano Chrome
9-Dec-22	YES	TODILAHY Gervé	Tangalamena	Commune Ranomafana Est, Region Atsinanana		In person	Ranomafana est
7-Dec-22	YES	RABENJATOVO Thomas	Chief of the Fokontany	Fokontany Morarano Gara, Region Alaotra Mangoro	+261 34 88 167 86	In person	Morarano Gara
9-Dec-22	YES	TELOLAHY Joseph	President of the Tangalamena	Commune Mahatsara, Region Atsinanana		In person	Mahatsara
2-Dec-22	YES	FALY Georgette	Deputy Chief of the Fokontany	Commune Ampasimbe Onibe, Region Atsinanana		In person	Ampasimbe Onibe
13-Dec-22	YES	RANDRIAMANANJARA Henri	Chief of the fokontany Andranomanelatra	Fokontany Andranomanelatra, Region Vakinankaratra	+261 34 03 122 04	In person	Andranomanelatra
13-Dec-22	YES	RASOAMBOLATIANA PAULETTE	President OSCEAH	Commune Andranomanelatra, Region Vakinankaratra	+261 33 75 514 33	In person	Andranomanelatra
5-Dec-22	YES	RATSITOROHINA Harinirina	Chief CSB (SLC Member)	CSB Ambatomarina, Region Amoron'I Mania		In person	Ambatomarina
5-Dec-22	YES	ANDRIAMIANDRISOA Gaston David	Chief ZAP (SLC Member)	ZAP Ambatomarina, Region Amoron'I Mania		In person	Ambatomarina
8-Dec-22	YES	RAKOTOMIAMINA Jean Pierre	municipal councillor	Commune Andranovorivato, Region Haute Matsiatra		In person	Andranovorivato
7-Dec-22	YES	ANDRIAMITNTAVY Daniel	SLC	Commune Ivato Centre, Region Amoron'I Mania		In person	Ivato Centre

ANNEX 4. LIST OF DOCUMENTS REVIEWED

#	PROJECT DOCUMENTS
1	RANO WASH - PMP USAID Comment revised 21.12.17 vf vf
2	CARE_RANO WASH_RFA 687-16-000007_FINAL Technical_4.21.2017
3	RANO WASH Mid-Term Review Report Final, June 2021
4	Mid-term performance evaluation of RANO WASH activity, WASH Pals, Final report, October 2021
5	Baseline study, final report, SIMS/MSIS, September 2018
6	Baseline Report for the Regions of, Amoron'I Mania, Haute Matsiatra, and Vakinankaratra, December 2021
7	RANO WASH Annual report FY17
8	Annual Report Project Year 2, FY2018 October 2017 – September 2018, Azzah Al-Rashid, AOR, October 30, 2018
9	FY2018 Quarter 3 Progress Report, April – June 2018, Azzah Al-Rashid, AOR, July 30, 2018
10	FY2018 Quarter 2 Progress Report January – March 2018, Jacky RALAIARIVONY, AOR, April 30, 2018
11	FY2018 Quarterly Report October – December 2017, Jacky RALAIARIVONY, AOR, 6 March 2018
12	Annual Report FY19 October 1, 2018 to September 30, 2019, Quarterly Report 4th Quarter – July 1 to September 30, 2019, October 30, 2019
13	Quarterly Report, 3rd Quarter – April 1 to June 30, 2019, July 30, 2019
14	Quarterly Report, 2nd Quarter – January 1 to March 31, 2019, April 30, 2019
15	Quarterly Report, 1st Quarter – October 1 to December 31, 2019
16	Annual Report FY20, October 1, 2019, to September 30, 2020, October 30, 2020
17	Quarterly Report 3rd Quarter—1 April to 30 June 2020, 30 July 2020
18	Quarterly Report, 2nd Quarter—January 1 to March 31, 2020, May 15, 2020
19	Quarterly Report, 1st Quarter – October 1 to December 31, 2019, January 30, 2020
20	FY2021 Quarterly & Annnual Report, October 30, 2021
21	FY2021 Quarterly Report, April 1 to June 30, 2021, July 31, 2021
22	FY2021 Quarterly Report, 1 January to 31 March 2021, 30 April 2021
23	FY2021 Quarterly Report, October 1 to December 31, 2020, January 30, 2021
24	FY2022 Quarterly & Annual Report, October 30, 2022
25	FY2022 Quarterly Report, 1 April to 30 June 2022, July 30, 2022
26	FY2022 Quarterly Report, 1 January to 31 March 2022, April 30, 2022
27	FY2022 Quarterly Report, 1 October to 31 December 2021, January 30, 2022
28	RANO WASH Genre marker_ End line_Feb2023
29	Gender Analysis, RANO WASH document, April 2019
30	Annex 20. System Strengthening Approach to Increase Commune-level WASH Budget, case study, RANO WASH FY2021 Quarter 4 & Annual Report - Annexes
31	Document d'apprentissage : Place du genre et de l'inclusion sociale dans l'engagement du secteur privepour la gestion du secteur WASH, July 2022
32	Strategic recommendations for RANO WASH, IDE, RANO WASH, CARE, May 14, 2021
33	Monitoring, Evaluation, Accountability, and Learning (MEAL) Plan, Revised May 2019
34	No cost extension,

#	PROJECT DOCUMENTS
35	PROJECT YEAR 3 WORK PLAN, MARS, 2019
36	FY21 ANNUAL WORK PLAN, October 1, 2020 to September 30, 2021, September 11, 2020
37	FY2022 ANNUAL WORK PLAN, Ocober 1, 2021, to September 30, 2022, September 7, 2021
38	FY2023 ANNUAL WORK PLAN, October 1, 2022, to June 15, 2023, 2 September 2022