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EVALUATION

EVALUATION OF THE USAID/MADAGASCAR WATER SUPPLY, SANITATION AND HYGIENE BILATERAL PROJECTS: RANO HP ET RANON'ALA

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FINAL EVALUATION OF USAID/MADAGASCAR WSSH PROJECTS:

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HYGIENE BILATERAL PROJECTS: RANO HP ET RANON'ALA**

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LIST OF ACRONYMS

ADS	Automated Directives System
BCC	Behavior Change Communication
CHV	Community Health Volunteer
CU5	Child under the age of 5
DEC	Development Experience Clearinghouse
ESF	Environment Screening Form
FGD	Focus Group Discussion
FY	Fiscal Year
MFI	Microfinance Institution
INSTAT	Institut National de la Statistique
SSI	Semi-Structured Interview
LQAS	Lot Quality Assurance Sampling
ODF	Open Defecation Free
SO	Strategic Objective
PCDEA	Plan Communal de Développement Eau, Assainissement et Hygiène
IR	Intermediate Result
SILC	Savings and Internal Lending Communities
SOW	Statement of Work
GFWS	Gravity Flow Water System
USAID	United States Agency for International Development
VSLA	Villages Savings and Loans Association
WASH	Water, Sanitation and Hygiene
WSSH	Water Supply, Sanitation and Hygiene

EXECUTIVE SUMMARY

EVALUATION PURPOSE

1. This evaluation comes at the chronological end-of-project of the two bilateral Water Supply, Sanitation and Hygiene (WSSH) projects. The objective is to help determine the likely impact of the USAID interventions in improving access to drinking water and adequate sanitation services to beneficiaries; the perception of the population on the approaches used by the projects; and the sustainability analysis of the approach adopted to manage WSSH infrastructures.

PROJECT BACKGROUND

2. The first WSSH project (RANO HP) run from October 2009 to June 2013 and the second WSSH project (RANON'ALA) from October 2010 to September 2013. The present evaluation mission started on December 16, 2013 and fieldwork took place in February and March 2014.

3. The RANO HP project aimed to increase sustainable access to improved water supply, increase sanitation coverage rates, and improve household hygiene practices in 43 communes in twelve districts along the east coast and in southern Madagascar.

4. The RANON'ALA project intended to build on the strategies of the USAID funded RANO HP water and sanitation project, while introducing significant innovations for hygiene and sanitation solutions, market-based financing for water infrastructure, and using information and communication technologies (ICT) for information dissemination, monitoring, and evaluation. In addition, targeted communes overlap significantly with those benefiting from the USAID funded community-based health care project (Santenet2) and food security project (SALOHI).

EVALUATION QUESTIONS, DESIGN, METHODS AND LIMITATIONS

5. Question n°1: To what extent did the population in the intervention zones adopt the improved hygiene practices demonstrated by the projects?

6. Question n°2: To what extent did the approaches used by the USAID implementing partners lead to increased access and use of drinking water and improved sanitation facilities to beneficiaries?

7. Question n°3: To what extent were the population of interventions satisfied on the quality and appropriateness of the services provided by the private partners in managing WSSH infrastructure?

8. The evaluation is based on a mixed method including at the same time quantitative and qualitative works.

9. The quantitative data collection aims at estimating the impact of the projects' activity on the beneficiaries. The consultant adopted the double difference method, as stated in the scope of work (SOW)

allowing the comparison between the data collected with the quantitative survey and the data from the baseline studies.

10. The population of the study is the 36 intervention communes from the intervention zones of the two projects RANO HP and RANON'ALA coming from 6 regions: Analanjirifo, Atsinanana, Vatovany Fitovinany, Atsimo Atsinanana and Anosy. The sampling used two stage clusters, the first stage being the village of intervention. The consultant used the list of fokontany (Smallest administrative unit in Madagascar) from the National Institute of Statistics (INSTAT). The primary units draw is carried out randomly with probability proportional to the fokontany size. The second stage is a random selection of the population within the sampled fokontany. The consultant used the itinerary method for the sampling of households within each fokontany.

11. The qualitative data consists of document reviews, discussions with key persons and focus groups discussions. The results helped to explain of behavioral changes in terms of hygiene, water use and the sanitation allotted to the projects. The explanations of the negative behavior compared to hygiene practices and water and sanitation infrastructures use have been examined during the qualitative survey. The qualitative survey has also captured the lessons learned and the best practices related to the project approaches to upgrade the knowledge and use of sanitation and drinking water putting in. The main results of the qualitative survey have been used to corroborate the results of the quantitative surveys and to supply valid conclusions and concrete recommendations based on observations. Two approaches have been exploited: key informant interviews (SSI with key persons) and Focus Group Discussions (FGD)

FINDINGS AND CONCLUSIONS

12. **The awareness campaigns around the three WSSH key messages have been very successful in terms of hand washing, latrines use and drinkable water protection.** About 6% of the beneficiaries could quote the 3 WSSH messages without any mistakes and the best highest percentage is in the South region (13%) which is, however, a zone of high illiteracy rate. It shows that the knowledge of the WSSH messages does not depend on the level of instruction of the population.

13. **The meetings held in the village by the community health volunteers (CHVs) are the most efficient method of disseminating these WSSH messages.**

14. **Several households applied the knowledge of the WSSH messages e.g. about 66 % of the beneficiary households have soap at home.** However, the results differs by critical moments: about 90 % of the beneficiaries wash their hands before eating; 67 % after defecation; and only 66 % have used some soap during the last 24 hours.

15. **About 61 % of the beneficiary households use latrines, which is 5% higher compared to the baseline.** The largest change is observed in the RANON'ALA zones with a rate going from 76.3% to 90.5%.

16. **About 22 % of the beneficiaries use private latrines while 38.6 % share with others.** The percentage of households using public latrines has decreased (from 1.1 % to 0.2 %) in the RANON'ALA zones while it has increased in the RANO HP zones (from 0.5 % to 2.8 %).
17. **The percentage of households having a child under the age of 5 affected by diarrhea during the last two weeks has significantly decreased** from the baseline in the two projects zones.
18. **Several fokontany have shown Open Defecation Free (ODF) certificates.** However, some fokontany consider the certificate like a diploma. There was no structure in charge of controlling the ODF standards compliance thus the continuation of the open defecation practices by some villagers.
19. **The rate of latrines possession has greatly improved** by more than 40 times from the baseline 0.84% to 3.49%.
20. **Half of the beneficiary households declare that they have latrines;** however there is a fairly high variation between the agro-ecological zones, from 10.6% in the South to 74.9% in the North-East.
21. Despite all the efforts put by the projects in terms of sensitization and promotion of improved sanitation, 7.0% of the beneficiary still let their children defecate in open air.
22. **Less than 1.5% of the households have soap and water at the latrine location.** The percentage is lower in the RANO HP zones.
23. **Most latrines are yet in rudimentary quality.** About 76.2% of the latrines have walls, a roof and a door; if 11.8% do not have a door and 7% are just holes in the ground.
24. **Financing the construction of latrines is taken up by the household itself (81.7%) and by friends/benefactors (14.8%) with an average cost of \$59¹ for improved latrines and \$2 for the non-improved.** Not one single household has ever used the Savings and Internal Lending Communities (SILC) or Village Saving and Loans Associations (VSLA) channel to get a loan to build latrines despite the fact that the percentage of membership in these savings structures and rural credit unions are fairly high mainly in the RANON'ALA zones.
25. **About 19% of the households in the RANON'ALA and RANO HP intervention zones have access to drinkable water infrastructures implemented by these projects.** By income, 44% of the user households belong to the category of highest income.
26. **However, availability of water is sporadic,** only 8.2% have used these water sources all year round. About 56 % of the households claim to be victims of water supply cut off that generally lasts for a

¹ About Ar. 141,000 at exchange rate of \$1=Ar 2,400

period of 2 to 3 months a year, which can be extended to 7 months or more on account of technical breakdowns of the service or insufficient flow.

27. Other donors have also invested in improved water supply systems in the intervention areas of these two WSSH projects essentially in the intervention zones of RANON'ALA.

28. **The implementation of the infrastructures by the projects has permitted reducing the distance and the average duration to fetch water.** Currently, 94.4% of the user households use the improved water sources located at less than 100 meters from their house. The average duration of the trip back and forth has significantly diminished by 20 minutes from 26 to 6 for the user households compared to the reference households.

29. **The percentage of the household members of the SILC/VSLA is 15% in the projects zones.** Among these SILC/VSLA members, 18% are supplied from individual pumps / public fountains against 13% for non-members.

30. **The SILC/VSLA membership interests more women than men.** The membership rate rises by 20% for women against 14.5% for men and this difference is statistically significant.

31. **The adoption of the approach to pay for water services set up by RANO HP and RANON'ALA has increased by 15 times the water consumption expenses** of the households compared to the other water sources within the projects zones. Availability is more important than costs because among the different improved water sources, the water supplied by RANON'ALA and RANO HP projects is the most expensive. This difference is very important in the South-East zone.

32. **The best water storage processes recommended by the projects include containers having the prevention features for water contamination in the household:** the existence of tap on the container or the use of containers with lid or containers having a narrow opening less than 10 cm of diameter. About 40% of the households using the projects' infrastructures practice this process of improved storage compared to 19% during the baseline surveys.

33. **About 78% of the households using the projects' infrastructures process water before use and the main practice are boiling (97% of the households).** Sur'eau is barely used for the following reasons: unavailability of the product in the local markets (31% of the households), ignorance of Sur'eau (25%) and the high price of the product (24%).

34. **The RANO HP and RANON'ALA projects are among the pioneers of the public-private partnership in the management of drinkable water infrastructures** and their financing in Madagascar. The projects have supported local private operators with a view to develop economically feasible business plans and water service of affordable quality to the most vulnerable population.

35. However, most of the sites have problems with the Canzee pumps functionality. Also, many sites based on the gravity flow water system (GFWS) currently encounter water quality problems as if the hydrogeology feasibility studies were poorly conducted.

36. **The management of the water supply infrastructures contracts by private enterprises also encounters implementation difficulties in some sites.** In the 9 communes visited, 4 are aware or in possession of the Development, Investment, and Business Plan of WSSH infrastructure document which is the term of reference in order to provide water supply service that meets the users' expectations.

37. **The lack of WSSH operational technical service within the sampled communes is a handicap in carrying out the water management control by the commune.** The limited collaboration of the projects with the Government counterpart, due to the US sanctions, has had negative impacts on the project achievement.

38. Also, the limited collaboration between the commune and the manager on the sensitization of the households led to situations of misunderstanding that are harmful to sustainable supply of drinkable water.

39. **All the WASH committees in the visited communes are not fully functional after the project withdrawal.** Their members lack motivation to carry out awareness campaign in the villages and periodical planning of WSSH actions.

40. **The communes have not officially delegated the infrastructures management to the fokontany but in reality,** the fokontany authorities have more responsibilities for quality control and service management because of the remoteness of the villages involved compared to the commune administrative centers.

41. **Local authorities depend on other projects dealing with environment protection** in their locality to elaborate the environment protection plans and the follow-up of its implementation.

1. EVALUATION PURPOSE & EVALUATION QUESTIONS

1.1. EVALUATION PURPOSE

42. This evaluation comes at the chronological end-of-project of the two bilateral Water Supply, Sanitation and Hygiene (WSSH) projects. The objective is to help determine the likely impact of the USAID interventions in improving access to drinking water and adequate sanitation services to beneficiaries; the perception of the population on the approaches used by the projects; and the sustainability analysis of the approach adopted to manage WSSH infrastructures.

1.2. EVALUATION QUESTIONS

43. Question n°1: To what extent did the population in the intervention zones adopt the improved hygiene practices demonstrated by the projects?

Question n°2: To what extent did the approaches used by the USAID implementing partners lead to increased access and use of drinking water and improved sanitation facilities to beneficiaries?

Question n°3: To what extent were the population of interventions satisfied on the quality and appropriateness of the services provided by the private partners in managing WSSH infrastructure?

1.3. PROJECT BACKGROUND

44. The RANO HP project, Award Number 687-A-00-09-00045-00 is a bilateral project implemented by Catholic Relief Services (CRS). The project started on September 15, 2009 and ended on June 30, 2013. In FY 2012, due to budget constraints, USAID reduced the project funding from \$7.98 million to \$5.68 million.

45. The RANON'ALA project, Award Number 687-A-00-10-00041-00 is a bilateral project implemented by CRS. The project started on October 01, 2010 and will end on September 30, 2013. In FY 2011, USAID reduced the project funding from \$6.82 million to \$4,95 million because of a cut in the water budget.

46. The present evaluation mission started on December 16, 2013 and fieldwork took place in February and March 2014.

1.4. STRATEGIC OBJECTIVE AND INTERMEDIATE RESULTS OF USAID

1.4.1.RANO HP

1.4.1.1. GENERAL OBJECTIVE

47. The rural communities in Madagascar have a wide access water and sanitation services which are reliable and economically sustainable for health, security and prosperity.

1.4.1.2. STRATEGIC OBJECTIVES

48. There are four strategic objectives (SO) :

- SO1: Improvement of the organization and the governance of water and sanitation sector as well as the collaboration with the private sector at the communes level;
- SO2: Improvement of the Sustainable access to quality water for multiple users;
- SO3: Improvement of the sanitation and hygiene services,
- SO4: Collaboration with the Ministry of water to elaborate and implement strategies aiming at the improvement of water and sanitation quality, impact and equity in Madagascar.

1.4.1.3. INTERMEDIATE RESULTS

IR 11: The organization and the governance of water and sanitation sector as well as the collaboration with the private sector at the commune level are improved by educating the communities on water and sanitation code and elaborating feasible action plans.

IR 12: Increasing investments by the private sector and households for water and sanitation sectors.

Activities to meet IR 11 and IR 12

- Develop financing mechanisms allowing access to credit for service providers and consumers,
- Implement or reinforce village savings groups and credits associations (VSLA),
- Support the emergence of supply services companies related to water and sanitation close to the targeted communes and
- Develop innovative strategies to subsidize the water supply for the poorest groups.

IR 21: Improvement of the access to improved water supply and use of insecticide treatment of the houses

IR 22: Use of the water coming from protected sources for many purposes

IR 23: Participation of local associations in the buffer area in the watersheds and the public water supply networks.

Activities to achieve IR 21, IR 22, IR 23

- Build or renovate water places in partnership with private sector enterprises,
- Promote demand for technologies on « POU » water treatment and
- Structure communities to implement support activities focusing on the various uses of water.

IR 31: Adoption of improved behavior in terms of sanitation, hygiene and water storage by the households.

IR 32: Improvement of the sanitation public services by the communities and setting up of schools and health centers that are WASH lovers at the community level.

Activities to reach IR 31 and IR 32:

- build latrines,
- sensitize households on hand washing at critical moments and on safe water storage,
- build public sanitation infrastructures (laundry stands, showers, toilets) and
- set up garbage collection management systems.

IR 41: Reinforced collaboration with the Ministry of water in order to elaborate and implement strategies aiming at the improvement of the quality, impact and equity of water and sanitation in Madagascar by the implementing strategies improving gender equity in the activities of the Program

IR 42: Reinforced collaboration with the Ministry of Water to elaborate and implement strategies aiming at the improvement of the quality, impact and equity of water is reinforced by publishing and integrating the results of the operational researches and lessons learned from the current program planning

IR 43: Reinforced collaboration with the Ministry of Water by contributing to the improvement of water and sanitation national policy.

1.4.1.4. REPORTED ACHIEVEMENTS

- 63,325 people provided with sustainable access to water from an improved source.
- 1,001 water connections were constructed and/or rehabilitated by the private sector.
- 97,685 people using latrines constructed by households/ communities without subsidies.
- 241 villages certified as Open Defecation Free.
- 26 communes established Community Water & Sanitation Business Plans.
- 352,785 people (cumulative) reached by water, sanitation and hygiene programs.

1.4.2. RANON'ALA

1.4.2.1. GENERAL OBJECTIVE

49. The objective of RANON'ALA project is to let vulnerable communities in the districts of Mananara, Mandritsara and Soanierana Ivongo have access to safe drinking water and sanitation and which are economically viable for better health and water resources management.

1.4.2.2. STRATEGIC OBJECTIVES

- SO1: The access to water infrastructures at the commune level improved
- SO2: The appropriate and various uses of drinking water supply and sanitation services increased
- SO3: The water resources are protected and managed sustainably.

1.4.2.3. INTERMEDIATE RESULTS

SO1: The access to water infrastructures at the Communes level is improved. 57% of the households have access to water infrastructures in 14 communes

IR 11 : The communes collaborate with the private sector to improve water and sanitation infrastructures management: 14 communes have water and sanitation management committee

Output 1.1.3: The knowledge of Water Code by the local authorities has increased; 280 local authorities and key persons trained on water code.

Output 1.1.4: The Communes business plan in terms of water and sanitation has been created (PACEA), 14 communes have their business plan

IR 12: Communities use long-lasting models to invest in water and sanitation:

- 7 new enterprises provide water products and services
- 14 new enterprises provide health products and services
- 67 operators and households are linked to the IMF services

Output 1.2.2: Savings and Internal credit Communities are operational: 2,700 persons are members operational Savings and Internal credit Communities

IR 13: Households' access to water supply and households' coverage have increased: 102,000 persons have access to improved water points

Output 1.3.2: Improved water structures are built: 4,271 individual water connections and 326 wells and drills are operational.

SO2: Appropriate and various uses of drinkable water and sanitation supply have increased

- 20% of the households use the 3 key messages of WASH
- 16% of the households have children under the age of 5 suffering from diarrhea 2 weeks before the survey.

IR 21: Communities and households adopt improved hygiene practices

- 57% of the households use a recommended water treatment method
- 26% of the households use safe water storage

IR 22: Communities and households adopt improved and appropriate sanitation behavior:

- 57% of the households having children under the age of 5 have given up outdoor defecation
- 25,146 households have access to an improved health system
- 78% of the households have eliminated children's excreta in a healthy manner
- 28% of the households having children under the age of 5 wash hands with soap at critical moments.

SO3: The water resources are protected and managed continuously: 65% of water resources have protection measures implemented.

IR 31: The population fully appreciates the water resources management: 25% of the households have one member or more involved in water resources management

Output 3.1.1: The threats and opportunities of integrated water resources management are understood: 14 communes have a detailed water resources protection plan based on an initial assessment of the threats and opportunities

IR 32: Main stakeholders are involved in the sustainable management of water resources: 14 communes/communities having a management plan of water and sanitation associated with an environmental component.

Output 3.2.1: The capacity of the local stakeholders to protect water sources has increased: 28 community organizations participate in water sources protection.

1.4.2.4. REPORTED ACHIEVEMENTS

- 81,620 people provided with sustainable access to water from an improved source.
- 13 functioning gravity-fed water supply systems constructed or rehabilitated
- 239 functioning boreholes with hand pumps constructed or rehabilitated
- 17,858 households using latrines constructed by households/ communities without subsidies.
- 105 villages noted as Open Defecation Free.
- 10 communes established Community Water & Sanitation Business Plans.
- 38% of households participate in water resources protection

2. EVALUATION METHODS & LIMITATIONS

50. The evaluation is based on a mixed method including quantitative and qualitative works. The quantitative data collection aims at assessing the impact of the two WSSH project activities on the access and use of WSSH services. The technique adopted for the evaluation is based on the double difference method allowing a comparison of the data collected during this evaluation with the data collected during the baseline studies.

51. The sample is the 36 intervention communes of the two projects RANO HP and RANON'ALA from 6 regions which are: Sofia, Analanjirifo, Atsinanana, Vatovany Fitovinany, Atsimo Atsinanana and Anosy. For the first stage, the statistical unit is the Fokontany within the intervention communes. The consultant used the list of Fokontany provided by the 2009 INSTAT census cartography. The survey population is composed of 464 Fokontany. For the second stage, the statistical unit is the household. All households within the sample Fokontany constitute the survey population.

52. With Lot Quality Assurance Sampling (LQAS) method, the sample size for each primary unit is set at 19 households thus the needs for 21 primary units per stratum. The primary units are drawn using a simple random with equal probability, proportional to the Fokontany size. The random sampling of households is carried out systematically by using the itinerary method. The draw pace is the division of the total number of households in the Fokontany by the sample size (19 households per village).

53. The consultant also collected data from a comparison group of households, which were selected randomly with equal probability among the households within a selected Fokontany where the projects collected baseline data but have not benefited from the projects' actions. The following chart gives the primary samples situation.

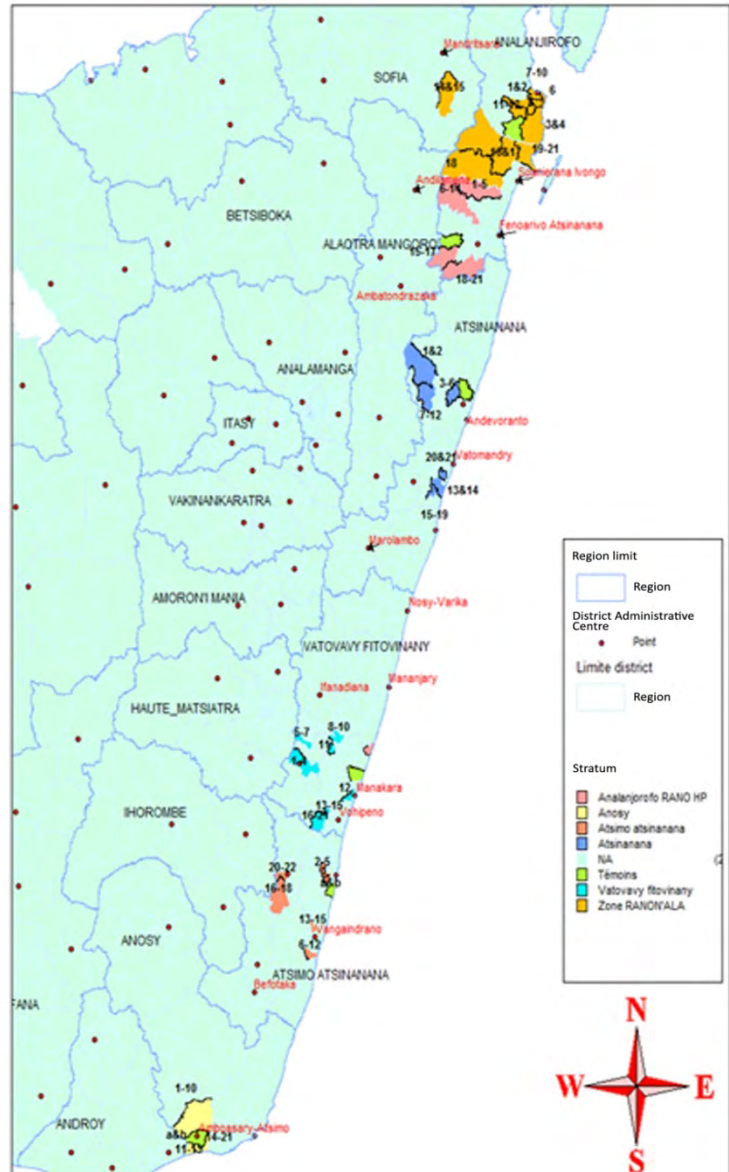


Table 1: Structure of the Primary Samples

Stratum	Total population (2008/2009)	Total Nb Fokontany	Nb Fkt Baseline	NB of Fkt required for the Evaluation	Nb Fkt to be drawn
Zone Ranon'ala	150,128	158	25	21	-4
Zone Rano HP					
Analanjirofo	84,815	44	15	21	+6
Atsinanana	53,678	54	14	21	+7
AtsimoAtsinanana	55,759	43	11	21	+10
VatovavyFitovinany	86,964	100	12	21	+9
Anosy	44,987	65	9	21	+12

54. In the quantitative data analysis, the samples have been divided into agro-ecological areas as follows:

- North East: stratum 1 and 2 (Sofia and Analanjirofo Regions)
- East : stratum 3 (region Atsinanana)
- South East: stratum 4 et 5 (Vatovavy fitovinany and Atsimo Atsinanana Regions)
- South : stratum 6 (Anosy Region)

55. For the qualitative approach, the data extracted from the documentary review, discussions with the key informants and focus groups discussions have helped towards the explanation of behavioral changes in terms of hygiene, water use and sanitation. The links between behavior, hygiene practices and water and sanitation infrastructures use have particularly been examined during the qualitative survey. The qualitative survey has also captured the lessons learned and the best practices related to the project approaches to upgrade the knowledge and use of sanitation and drinking water. The main results have been used to corroborate the results of the quantitative surveys and to supply valid conclusions and concrete recommendations based on observations. Two approaches have been used: semi- structured interviews (SSI) with key informants; and Focus Group Discussions (FGD).

Semi-structured Interview

56. Five sets of interview guide have been elaborated for the SSI:

- Interview guide aiming at the USAID staff;
- Questionnaire guide for the implementation partners' technical staff at the national and local level;
- Interview guide with the regional representatives of the Ministry of Water, the regional coordinators of Diorano-WASH;
- Interview guide for the commune and village authorities, the local WASH committees, the Basic Health Centre chiefs, etc
- Interview guide for the private sector responsible for the management of water supply and sanitation infrastructures.

57. The number of key informants has been determined by the data saturation point when the evaluation team could not get any more new information.

58. The questions in the SSI guides have been structured around the following topics:

- The favorable factors and the constraints on the adoption of better hygiene practices by the population.
- The reasons for satisfaction and dissatisfaction on the quality and pertinence of the supplied water and sanitation services.
- Effectiveness of community initiatives aiming at the protection of water resources.
- The changes in the organization and governance of water and sanitation sector at the commune level.
- The impact of the access to drinkable water and improved sanitation.
- The best practices and the lessons learned based on the two projects approaches.
- Collect of concrete recommendations for the post-project stage and similar projects in the future.

Focus Group Discussion (FGD)

59. The focus group protocol has been elaborated to cross-check the attitudes and experiences of the responders on the effectiveness of behavioral change strategies, the access to water and sanitation services. The evaluation team has organized focus group discussions with 5-9 persons in the following categories: (a) the mixed groups of water and sanitation users, (b) the groups of non-users, and (c) the groups of beneficiary women.

60. The evaluation group has given particular attention to sensitive information related to gender and WASH through FGD with women.

61. The main subjects discussed during the FGD sessions and linked to the evaluation questions are as follow:

Module 1: Access to drinkable water (30 minutes)

- Positive and negative observed changes of water access and use by the beneficiaries ; precise the most affected categories of population : children, women, poor households, etc.
- The constraints and the incentives to the adoption of better hygiene practices and latrines.
- Assessment of water management services by the users : give the reasons of satisfaction/ dissatisfaction (use of scores).

Module 2: Hygiene Practice and use of latrines (1 hour)

- Changes of hygiene practices and use of improved latrines (and non improved) by the population. Precise the most affected categories of population: children, women, poor households, etc.
- Quality of services from private sector managing the WSSH infrastructures;
- Constraints and the incentives to the adoption of better hygiene practices and latrines.
- Recommendations for the promotion of improved sanitation use and to modify the behavior to improved hygiene practices.

62. Responses coming from SSI and FGD were coded to facilitate data processing, as explained in the section “Analysis of qualitative data”.

63. The limits of the survey and the qualitative approaches are the following:

- The sampling effect may be very important for some variables related to the projects results.
- The topics being studied (hygiene, defecation...) do not always make the interviewed persons feel comfortable and that might influence their answers.

64. The terms of reference of this evaluation has suggested the use of the double difference method to estimate the impacts of this program on the indicators.

3. FINDINGS, CONCLUSIONS & RECOMMENDATIONS

3.1. FINDINGS

3.1.1. THE POPULATION OF THE STUDY

65. The household heads are men for 84.7% and women for 15.3%. The average household size is 5.3 (4.7 for the North East and 6.2 for the South East).

66. The household average monetary income is Ar. 1,100,000 (\$ 491) for the projects beneficiaries and Ar. 1,071,000 (\$ 478) for the witness households. The average income for each person is then Ar 209,000 (\$93) for the beneficiaries and Ar 206,200 (\$92) for the comparison households. The main sources of income are agriculture, wage earning, trade, and craft industry.

67. About 9.4% of the projects beneficiary households are members of a credit system, 4.8% for the comparison group.

68. About 23.8% of the projects beneficiary households practice monetary savings against 19.3% for the comparison group. These savings are put onto:

- SILC/VSLA for 23.6% (39.5% in the South East)
- Financial institution for 19.2%
- Home for 56%

69. The savings are intended for production activity (33.6%), to face the lean period (32%), for social issues such as diseases (16.2%), and for children's schooling (9.5%).

3.1.2. DOUBLE DIFFERENCE METHOD

70. The double difference estimates the impact of the project through the indicators. The measured changes without the project are estimated by $T=T_1-T_0$. The measured changes with the project intervention are estimated as $X=X_1-X_0$. These are the first differences which allow calculating the second difference i.e. the impact due to the project which is equal to $X-T$.

- T_0 the indicator level at the comparison fokontany at the beginning of the project
- T_1 the indicator level at the comparison fokontany at the end of the project.
- X_0 the indicator level at the level of the project beneficiaries at the beginning of the project.
- X_1 the indicator level at the level of the project beneficiaries at the end of the project.

Table 2: Results by key indicators

INDICATORS	Difference		Double difference	
	Beneficiary	Witness		
Percentage of household using improved water source				
Overall	9.24	3.22	6.03	*
RANON'ALA	21.19	10.03	11.16	
RANO HP	2.64	1.18	1.46	
Average quantity of water fetched per household				
Overall	7.9	9.84	1.94	
RANON'ALA	21.77	20.7	1.07	
RANO HP	0.22	6.57	6.35	
Percentage of household practicing the treatment of drinking water				
Overall	7.2	8.44	15.65	***
RANON'ALA	15.8	2.68	18.47	***
RANO HP	4.95	9.55	14.5	***
Average time to fetch water in minutes				
Overall	12.7	10.41	2.28	
RANON'ALA	20.39	6.08	14.31	
RANO HP	8.42	11.74	3.32	**
Percentage of household practicing drinkable water treatment				
Overall	13.46	30.43	16.97	***
RANON'ALA	13.1	20.32	7.21	
RANO HP	13.65			***
Percentage of household using water in production activities				
Overall	1.92	7.4	5.48	***
RANON'ALA	2.12	2.61	0.49	
RANO HP	1.81	8.84	7.02	***
Percentage of households having a child under the age of 5 abandoning the excreta in a hygienic way				
Overall	17.76	21.69	3.94	
RANON'ALA				
RANO HP	11.78	17.59	5.82	
Percentage of household having a child under 5 affected by diarrhea				
Overall	17.02	12.28	4.74	
RANON'ALA	15.31	21.9	6.6	
RANO HP	19.07	10.1	8.97	**
Percentage of household practicing safe water storage (covered recipient or of small opening)				
Overall	14.39	14.71	0.33	
RANON'ALA	24.55	4.38	20.17	***
RANO HP	8.77	17.81	9.04	*
Percentage of household practicing safe water storage (covered recipient or of small opening)				

Overall	13.09	14.04	0.95	
RANON'ALA	23.8	4.38	19.43	**
RANO HP	7.17	16.94	9.76	**
Percentage of household using latrines				
Overall	9.35	24.73	15.38	***
RANON'ALA	17.21	14.39	2.81	
RANO HP	5.01	27.83	22.82	***
Percentage of household using private latrines				
Overall	1.33	11.8	10.47	***
RANON'ALA	0.46	8.69	8.23	
RANO HP	1.81	12.73	10.92	***
Percentage of household using shared latrines				
Overall	9.18	13.24	4.07	
RANON'ALA	18.23	5.71	12.53	
RANO HP	4.17	15.5	11.33	***
Percentage of household using public latrines				
Overall	0.94	1.56	0.62	
RANON'ALA	1.29	-	1.29	
RANO HP	2.17	2.02	0.15	
Percentage of household using latrines with wall and door				
Overall	10.9	16.23	5.33	
RANON'ALA	19.1	19.73	0.62	
RANO HP	6.37	15.19	8.81	**
Percentage of household using latrines with water and soap				
Overall	0.43	1.31	0.88	
RANON'ALA	0.55	2.33	2.88	
RANO HP	0.97	1.01	0.04	
Percentage of household practicing hand washing at critical moments				
Overall	0.88	1.05	0.18	
RANON'ALA	0.32	1.5	1.18	
RANO HP	1.19	0.92	0.27	
Percentage of household having children under 5 practicing hand washing at critical moments				
Overall	2.11		2.11	***
RANON'ALA	0.13		1.13	
RANO HP	2.79		2.79	***
Percentage of household able to quote 3 WASH messages				
Overall	6.38	0.03	6.34	***
RANON'ALA	2.12		2.12	
RANO HP	8.73	0.04	8.69	***
Percentage of household able having children under 5 able to quote 3 WASH messages				
Overall	9.18	0.82	10	***

RANON'ALA				
RANO HP	8.26	0.87	9.14	***
Percentage of household having some soap at home				
Overall	3.27	3.77	0.5	
RANON'ALA	0.97	3.39	2.42	
RANO HP	5.62	5.92	0.3	
Percentage of household having a child under the age of 5 who have abandoned OD				
Overall	2.13	14.17	12.04	**
RANON'ALA	16.02	13.85	2.17	
RANO HP	1.95	20.82	18.87	***
Quantity of water used per person per day				
Overall	3.62	0.64	2.98	
RANON'ALA	1.34	0.9	0.44	
RANO HP	4.66	1.38	3.28	
Percentage of household using improved sanitation (private or shared)				
Overall	2.32	0.26	2.07	**
RANON'ALA	2.69		2.69	
RANO HP	2.12	0.33	1.79	*

Level of significance: *** :1%; **: 5% *: 10%

71. The double difference provides a clear insight of the changes from the two projects by indicators. The following indicators are the most affected by the projects' interventions:

- The percentage of households using improved water with an improvement of 15.65% ;
- The reduction of 3.32% in the average length of time it takes to fetch water;
- The percentage of households processing drinking water which records an improvement of 16.97% for both (7.02% for RANO HP);
- The percentage of households having a child under 5 who has diarrhea (8.97% for RANO HP);
- The percentage of households practicing a safe water (container with a cover over it or with little opening) which has improved to 20.17% in the Ranon'ala zone.

72. **The households using latrines have increased by 15.38% in general (22.82% for RANO HP).** In the same way there are 10.47% more households who use private latrines and 11.33% more households who use shared latrines in the RANO HP zones. About 8.8% more households in the RANO HP zone use latrines with walls and a door (significant at 5%).

73. **About 2.11% more households having children under 5 practice hand washing in critical moments.** The knowledge of the WASH key messages by households increased by 6.34% (8.69% in RANO HP zone). About 18.87% more households having a child under 5 claims to have given up open defecation in the RANO HP zone vs. 1% in the baseline.

3.2. QUESTION N°1: TO WHAT EXTENT DID THE POPULATION IN THE INTERVENTION ZONES ADOPT THE IMPROVED HYGIENE PRACTICES DEMONSTRATED BY THE PROJECTS?

3.2.1. SENSITIZATION ON THE THREE WASH KEY MESSAGES

74. About **78.8% of the beneficiaries claim to have received sensitization to the 3 WASH key messages, against 64.8% among the comparison group.** Among those, 80% received it more than 6 months ago through village meetings (70.3%); door to door campaigns (14.5%); from CHV (50%); and by the WASH committees (8%).

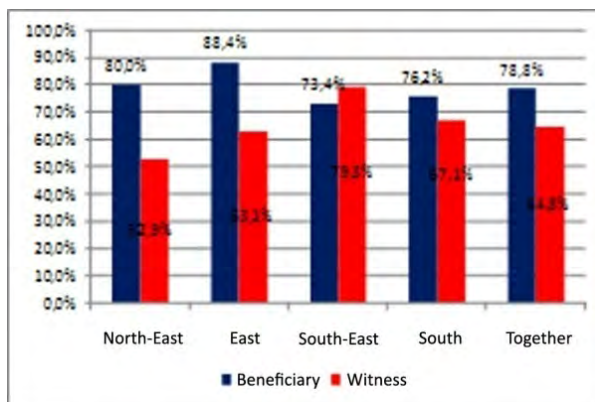


Figure 1: Sensitization on the 3 WASH messages

75. SILC/VSLA are not mentioned at all as participants in the awareness campaign although the reports on the activities of the two projects state that SILC/VSLA are in charge of promoting the 3 messages and the practices as well. Indeed, the sensitization sessions conducted for the SILC/VLSA benefit only the members, which in turn do not convey the messages to the community.

76. The capacity of the projects' beneficiary households to quote the 3 key messages is as follows:

- Three messages : 6,9%
- Two messages : 20,3%
- One message : 23,1%
- No message : 49,7%

77. **The South region has the largest proportion of people being able to quote the 3 messages (13.8%); yet that zone has the highest proportion of illiterate people (53.8%).** It seems that the capacity to memorize the messages does not depend on the level of instruction of the individual. And it is in the South East that there has been the largest number of people unable to quote any message (76.1%).

78. **The RANO HP zones has shown the largest changes on retaining the 3 WASH key messages (10 times more households than the baseline);** and where the households having a child under 5 have been more able to quote the 3 WASH messages (Figure 3 and Figure 4). Overall, there are 5 times more households able to quote the 3 WASH key messages by the end of the 2 WSSH projects.

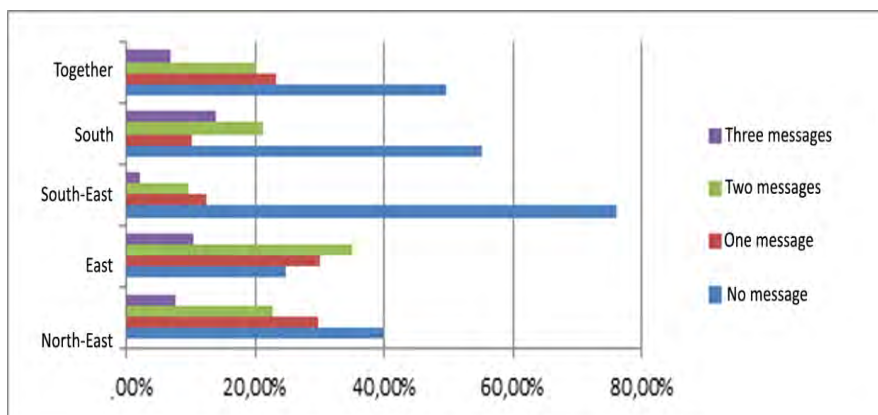


Figure 2: Aptitude to quote the 3 WASH key messages

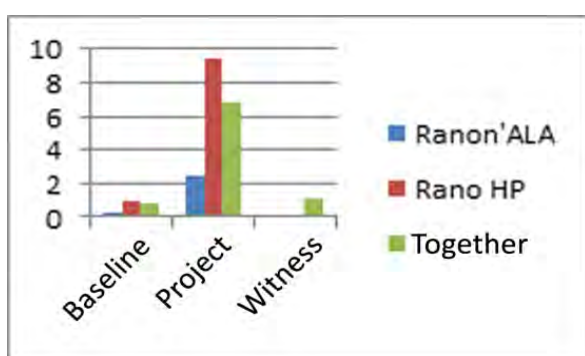


Figure 3: Percentage of households able to quote the 3 WASH key messages

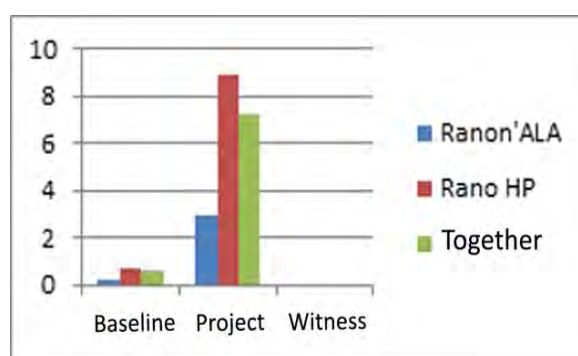


Figure 4: percentage of the households CU5 able to quote the 3 WASH key messages

79. Households from the comparison fokontany having a child under 5 do not seem to have benefitted from the 3 WASH key messages at all, neither have they remembered them.

80. **About 65.2% of the beneficiary households have soap at home**, i.e. 9% point higher than the households in the comparison group (56.1%). Among these soap users, 70.6% of the beneficiary households had declared buying soap at once a week.

3.2.1.1. HAND WASHING

81. **About 78.8% of beneficiary households claim to have been sensitized about hand washing against 64.8% for the comparison households.** Almost 80% of the beneficiaries who have received hand wash sensitization did so more than 6 months ago either in village meetings (70.3%), by door to door actions (14.5%), by the CHV for 50% or by WASH committees (8%).

82. **About 66.1% of interviewed beneficiaries have claimed that they have washed their hands with soap in the last 24 hours** and three main reasons are put forward concerning the failure to wash hands

- No soap (45.1%)
- Soap is expensive (15.4%)
- Not necessary (14.4%)

83. Hand washing at critical moments is important. The breakdown by moment is shown in the Figure 5. Hand washing at the critical moment message does not seem to be well conveyed because although **89.7% of the projects beneficiaries have claimed to wash their hands before eating and 67.3% after defecation, only 66.1% said that they have washed their hands with soap in the course of the last 24 hours.**

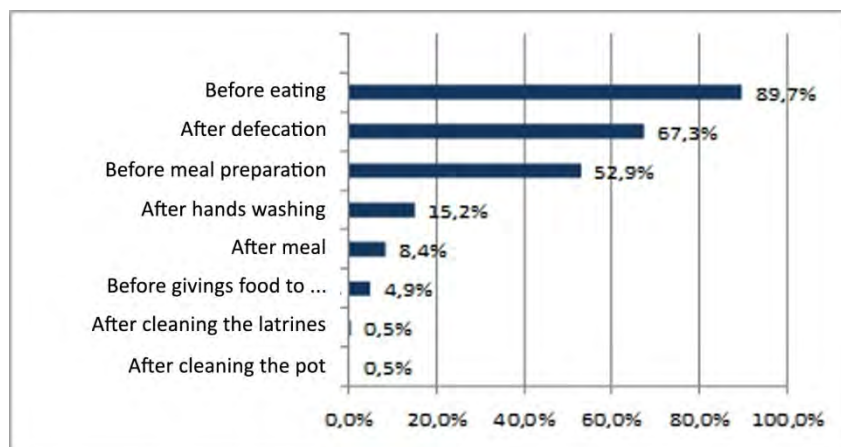


Figure 5: Percentage of the households washing hands at critical moments

Table 3: Distribution of the Beneficiaries by the Moment of Hand Washing with Soap

Agro ecological zone	North-East	East	South-East	South	Overall
Before eating	39.0%	40.6%	20.3%	11.8%	31.6%
After washing the children/changing diapers	1.8%	0.6%	9.3%	3.1%	3.9%
After cleaning the sanitary pot				0.2%	0.0%
Before preparing the meal	6.8%	12.6%	13.5%	7.3%	9.4%
Before feeding the children	0.2%	1.4%	0.4%	0.9%	0.5%
After meal	0.7%	1.2%	0.2%		0.5%
Never/I don't know	4.0%	7.8%	34.8%	47.1%	16.8%
Others	2.1%	4.3%	3.8%	1.2%	2.7%
Total	100.0%	100.0%	100.0%	100.0%	100.0%

84. Although 67.3% of the households claim that they wash their hands after defecation, **the proportion of households owning latrines with accessible water and soap has in general decreased slightly from 1.08% to 0.58%.** The decrease is quite substantial in the RANO HP zones, and the main issue reported by the households is the high price of soap.

Table 4: Percentage of households having latrine with water and soap

	Baseline	Project
Ranon'ALA	1.24	1.44
Rano HP	1.06	0.11
Overall	1.08	0.58

3.2.1.2. USE OF LATRINES

85. In this section, “improved latrines” refers to latrines that have a platform (earthen, wooden or in concrete, in paving stone, Sanplat or English toilet) with walls and a roof, not necessarily with door.

86. Overall, **86% of the beneficiary households claim that they have received sensitization about the use of latrines**, 81.5% among the comparison households.

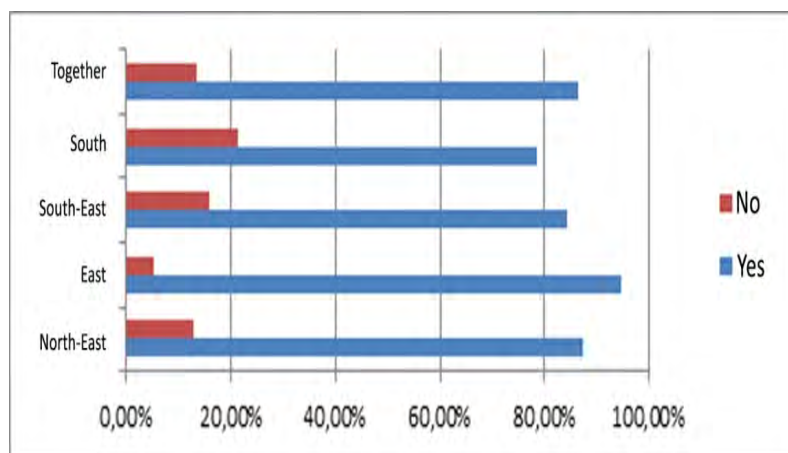


Figure 6: Proportion of beneficiary households who received sensitization on the use of latrines

87. **Village meeting is the most used vehicle for Behavior Change Communication (BCC)** mentioned by 76.9% of the beneficiaries. These BCC sessions are often conducted by the CHV (53.5% of the case for the beneficiary households vs. 36.1% for the comparison households).

88. **About 60.6% of the beneficiary households claim that they use latrines now**, which makes a significant advance of 5% compared to the baseline. The most important change occurs in the RANON'ALA intervention zone where the rate has evolved from 76.3% to 90.5%. Overall, 22.05% of the beneficiaries use private latrines of which 38.56% use shared latrines. The percentage of households using public latrines has decreased from 1.12% to 0.2% in the RANON'ALA zones while it has increased slightly in the RANO HP zones.

89. The percentage of beneficiary households having children under 5 who have abandoned open defecation has globally improved in the two projects zones although it is not quite significant for the RANO HP zones.

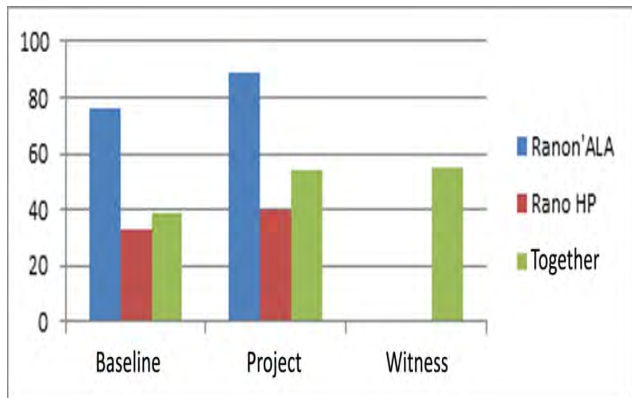


Figure 7: Percentage of the household having children under 5 and having abandoned the open defecation

90. When the beneficiary households were asked about where their children under 5 defecated the last time: **“in open air, within the precinct of the house”** was the most outstanding answer for **47.3%**; followed by “in open air off the premises” for 23%. So, despite all the efforts made by the projects in matter of sensitization and improved sanitation infrastructures promotion, 70.3% of the beneficiary households themselves still let their children defecate in open air.

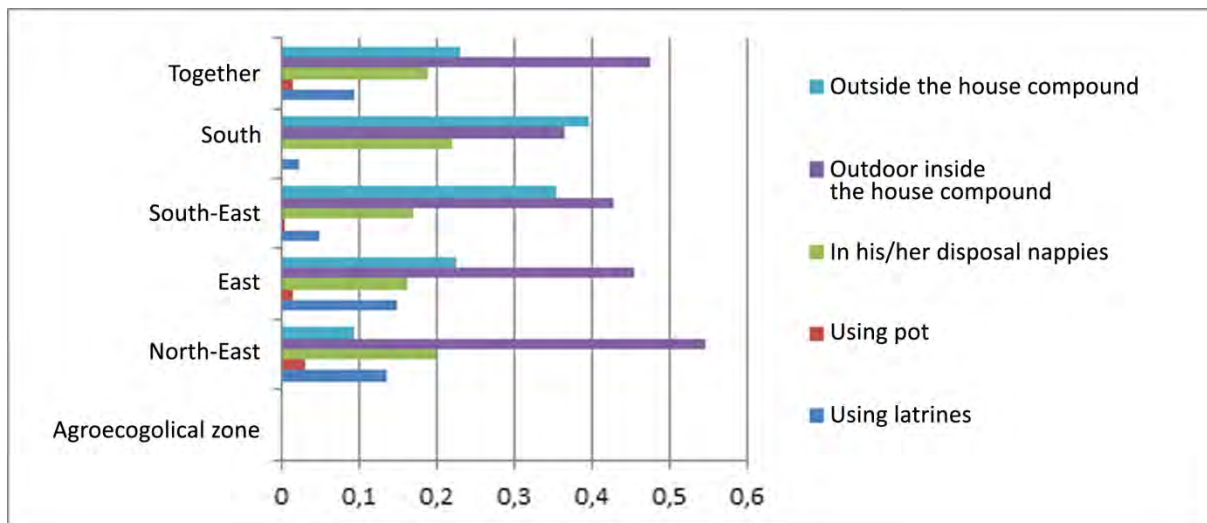


Figure 8: Distribution of beneficiary households having a child under 5 by the place of defecation

91. Overall, 91% of the latrines have been built after 2011, essentially as decided by the head of the family. The construction is motivated especially by health and BCC.

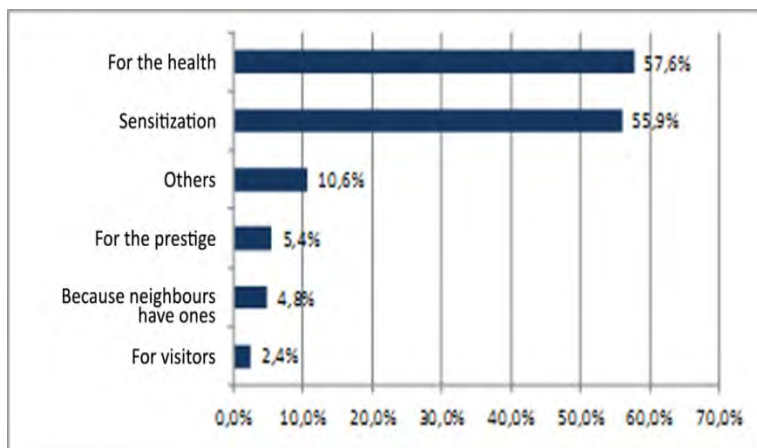


Figure 9: Main motive for construction/renovation of latrines

3.2.2. THE ODF CERTIFICATION

92. Numerous sample fokontany of this study have shown ODF certificates in mint condition but the field observations have raised questions about:

- The way the ODF certification process is understood by the Fokontany most of which receive the certificate like a diploma that has been delivered once and it is finished.
- The lack of structures in charge of controlling the ODF standards compliance so as to keep that status permanently.

3.2.3.CONCLUSIONS ON QUESTION 1

1. The sensitization actions carried out by RANON'ALA and RANO HP projects have been very successful for the promotion and the knowledge of the three WASH messages, especially the communication that were undertaken by the CHV in the village meetings. The results are very tangible both in the case of hand washing and in the use of latrines although they could have been more performing if the projects had been able to work on the level of primary schools and basic health centers and if the SILC/VSLA had also been able to contribute in sharing much more the messages they had received from their groups toward their communities. The knowledge of the three WASH key messages was particularly successful in the South zone having a great deal of concentration of illiterates and which proves that the aptitude to memorize those messages does not depend on the level of instruction of the individual.
2. Although a high proportion claim that they wash their hands after defecation, washing hands with water and soap seems to have somewhat decreased because of the cost of the water (to be paid for) and the price of soap.
3. The greatest change in the use of latrines has been noted in the RANON'ALA intervention zones of and a trend toward sharing the use of latrines is confirmed in several regions. However, the practice of letting the children under 5 defecate in open air always persists in virtually all the zones despite the efforts made by the projects in matter of sensitizations and promotion of improved sanitary infrastructures. The objectives of getting the SILC/VSLA contribute to finance the improved sanitary infrastructures have not been attained because most households would not simply agree to borrow money to built latrines.
4. The respect of the fokontany for the ODF certification seems to be misunderstood to such extent that several fokontany would loose their certification in case of inspections.

3.3. QUESTION 2 : THE ACCESS AND THE USE OF DRINKABLE WATER AND IMPROVED SANITATION BY THE BENEFICIARIES

3.3.1.CHANGE OF THE ACCESS TO IMPROVED SANITATION

3.3.1.1. POSSESSION OF LATRINES

93. Overall, the rate of possession of latrines has dramatically improved by 415%, from 0.84% to the baseline 3.49%. There is an improvement of 1 to 4 compared to the comparison group. It is particularly the area in which the two projects have much excel in both the awareness campaign against open defecation and the supports for the construction of sanitary facility infrastructures.

94. About 49.5% of the households own latrines of which 93.6% are without improvement and 6.4% with Improvement:

- 13.3% of those latrines are provided with hand washing device.
- 11.9% with brooms
- 4.4% equipped with aeration system

The features of those latrines are:

- 76.2% with walls, roof and door
- 11.8% without any door
- and 5% having neither roof or door

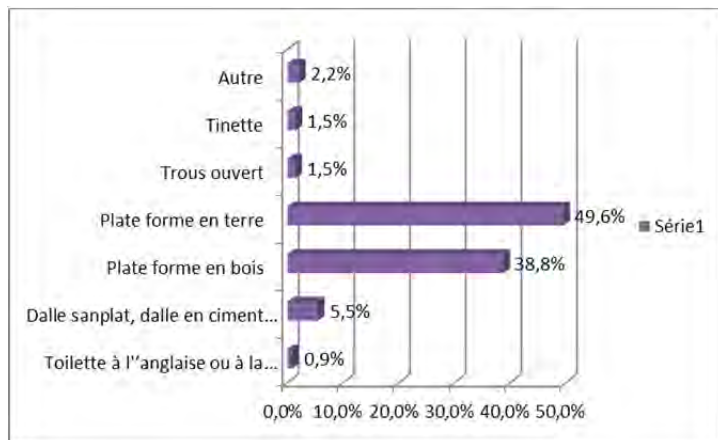


Figure 10: Characteristic of latrines

95. Half of the beneficiary households claim to own latrines with a fairly substantial variation between the agro ecological zones, from 10.6% in the South to 74.9% in the North East. In the North East and in the East, comparison households show a rate of latrines possession superior to the beneficiary households, but these differences are not significant. About 76.2% of the latrines are provided with walls, with a roof and with one door even through 11.8% have no door and 7% are just bare holes.

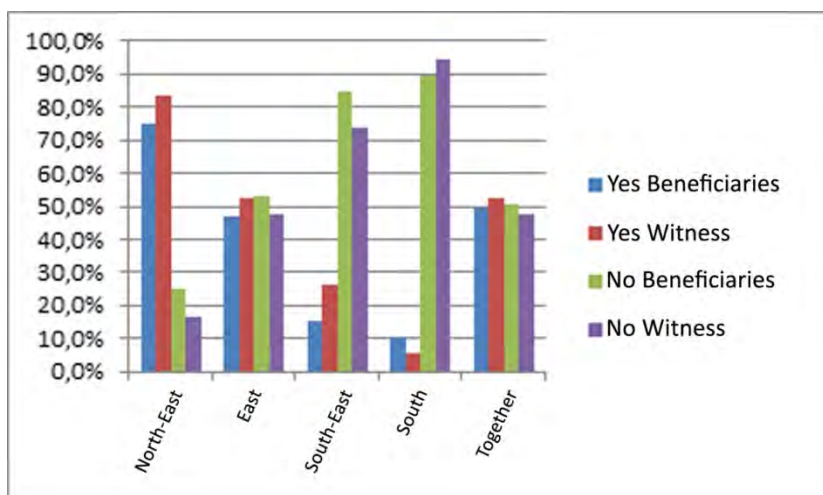


Figure 11: Distribution of households according to the possession of latrines

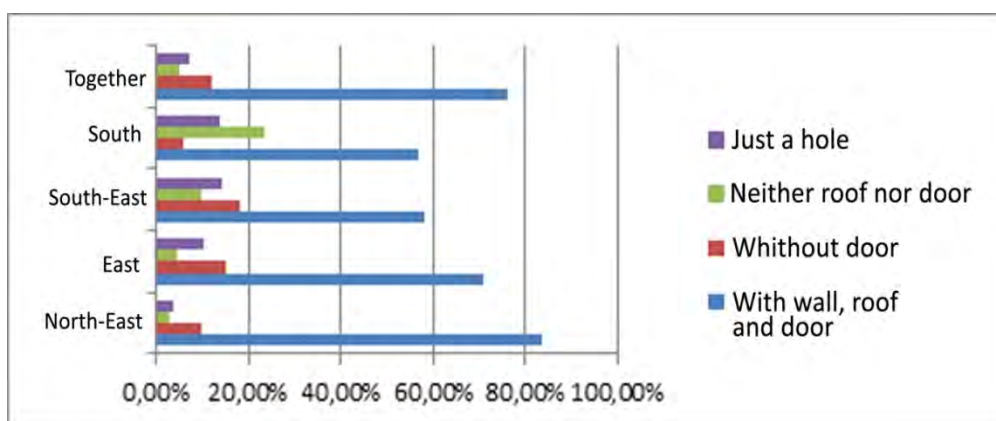


Figure 12: Distribution of beneficiary households by the aspect of the latrines

3.3.1.2. THE CONCEPT OF IMPROVED LATRINES

96. According to WASH typology, only 6.4% of the latrines of the beneficiary households can be classified as improved with a peak of 29.4% in the South. Although the North shows a high rate of possession of latrines, the quality of their latrines leaves room for improvement given that only 5.1% can be classified as improved.

Table 5: Distribution of Beneficiary Households by the type of latrines

Agro ecological zone	Type of latrines		Total
	Improved	Not improved	
North East	5.1%	94.9%	100.0%
East	9.6%	90.4%	100.0%
South East	9.1%	90.9%	100.0%
South	29.4%	70.6%	100.0%
Together	6.4%	93.6%	100.0%

97. According to the beneficiaries, improved latrines should be washable (27.4%) with paved stone (26.4%), shouldn't stink (10.5%), and should have good aeration (3.2%). But a large proposition of households in the South (72.60%) claim that they do not know what improved latrines should be like as latrines are not part of the usual sanitary facilities in the area where they live.

Table 6: Perception of the Quality of Improved Latrines by the Beneficiary Households.

Agro ecological zone	In your opinion, what are the good characteristics of good latrines?						
	No stench	Good airing	Can be used by children	washable	Existence of paving stones	I have no idea	Others
North East	11.4%	4.6%	0.3%	29.7%	36.1%	12.5%	5.5%
East	11.7%	2.7%	1.1%	24.7%	31.0%	14.4%	14.4%
South East	10.4%	1.3%	0.9%	27.8%	13.8%	37.6%	8.2%
South	4.4%	1.5%		15.4%	2.6%	72.6%	3.6%
Together	10.5%	3.2%	0.5%	27.4%	26.4%	24.9%	7.1%

98. The basic characteristics of improved latrines have been checked among the beneficiary households and the results indicate that 27.2% have lid over the hole, only 4.4% have aeration system and 13.3% are associated with hand washing device.

3.3.1.3. THE SAVINGS SYSTEMS AND ACCESS TO IMPROVED INFRASTRUCTURES

99. Although the two projects had been operating during the political crisis period, USAID took the risk of investing in the SILC / VSLA to facilitate the financing of the construction of improved sanitary infrastructures by the beneficiaries.

100. **The financing of the latrines construction is taken care by the household themselves (81.7%)** and by supporters / charities (14.8%) with an average cost of Ar 141,100 for the improved latrines and Ar 4,800 for the non-improved ones. However, not one single household has ever used the channel of SILC / VSLA to get a loan to build latrines although the membership percentage in these savings structures and rural credit unions are fairly high, especially in the Ranon'Ala zone.

3.3.2.CHANGES OF THE ACCESS TO DRINKABLE WATER FOR THE BENEFICIARIES

101. The comparative analysis of the survey results on the beneficiary and non-beneficiary households about water supply infrastructures done by the projects, has shown what changes in the access to drinkable water can be attributed to RANO HP and RANON'ALA Projects. For reference, households who live in the projects areas are termed as beneficiary households. Among these beneficiary households, those using the services of the water supply implemented by the projects are called user households; and households surveyed outside the projects zones will be the comparison households.

3.3.2.1. ACCESS TO DRINKABLE WATER

102. Only 10.7% of the households in the RANON'ALA and RANO HP Projects zones (approximately 14,200 households) have access to the water supply infrastructures implemented by these two projects. This rate is nil in the South zone where RANO HP Project has not interfered in the process of drinkable water supply and has concentrated on the WASH awareness campaigns.

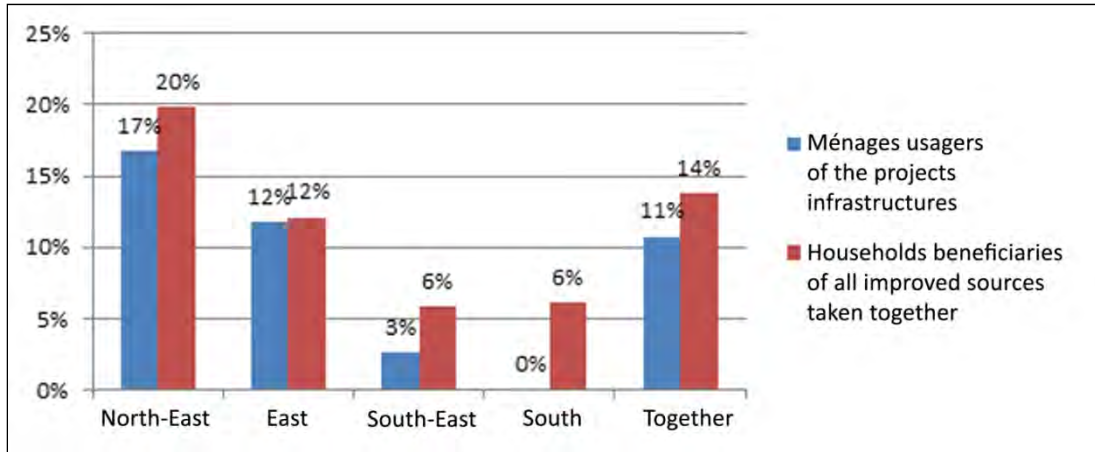


Figure 13: Rate of access to improved water source in the project zones

103. Water connections and pumps supplied by the projects are more accessible to the wealthier group of people as 44% of the user households belong to the categories of households who are on the highest quintile of income; while only 13% of the users are part of the low income social classes (Figure 24). This trend is respected no matter what the type of water supply the household uses.

104. About 82.7% of those user households have used exclusively improved source all year round against 7.3% who have had to go back momentarily to non-improved sources. The beneficiaries in the South East zones are penalized most by the instability of drinkable water source during the year given that 55.7% of the users claim to be the victims of Supply cut offs. They are cut off generally for a period of 2 to 3 months a year but which would extend to 7 months or more, because of technical problems of the water supply service or because of the insufficient water flow.

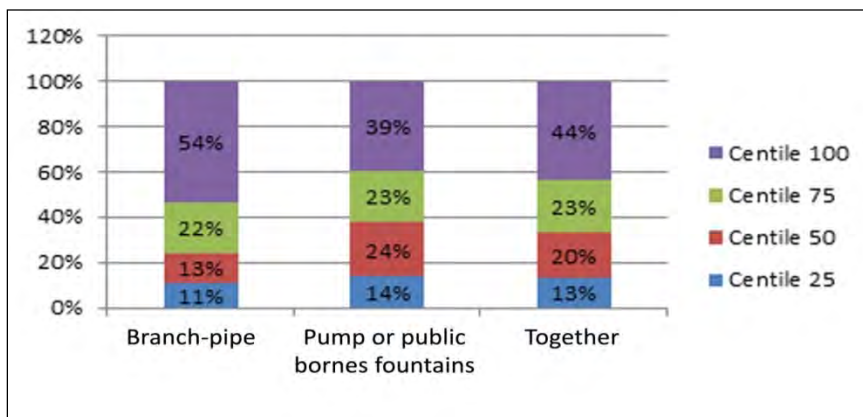


Figure 14: Distribution of the users of the infrastructures of the projects by income.

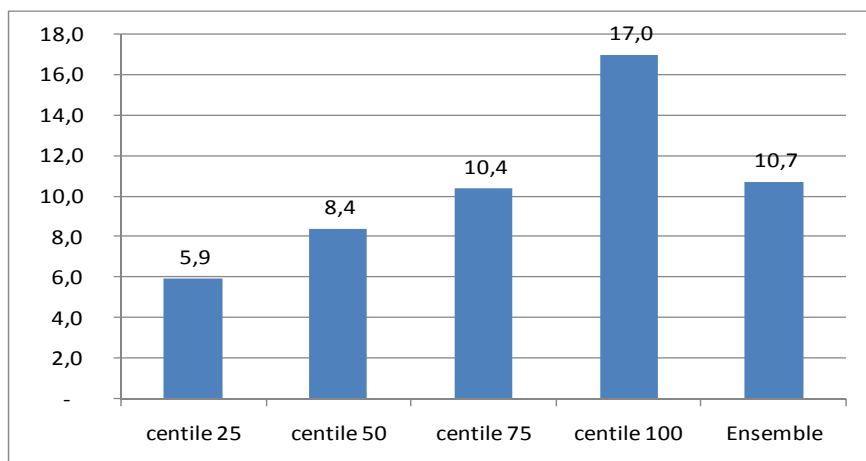


Figure 15: Rate of access to the infrastructures of the projects by income group

105. Other operators have also set up some improved water supply systems in their intervention zones. **In general, the access rate to improved water sources is 13.8% for the households in these zones.** Compared to the 2009 reference situation, the access rate to improved water sources in the projects operating zones has shown an increase of 6.3 points, a significant increase from the baseline (**Figure 16**).

106. Compared with the no-project situation (comparison group), that increase is quite important, reaching 10.1 points. **However, the improvement of the access to the improved water sources is essentially observed in the RANON'ALA operation zones as the increase of the access rate in the RANO HP zones is not significant compared to the reference situation at 5%.** On the other hand, the access rate to the improved sources is not significantly different across the gender of the head of the household.

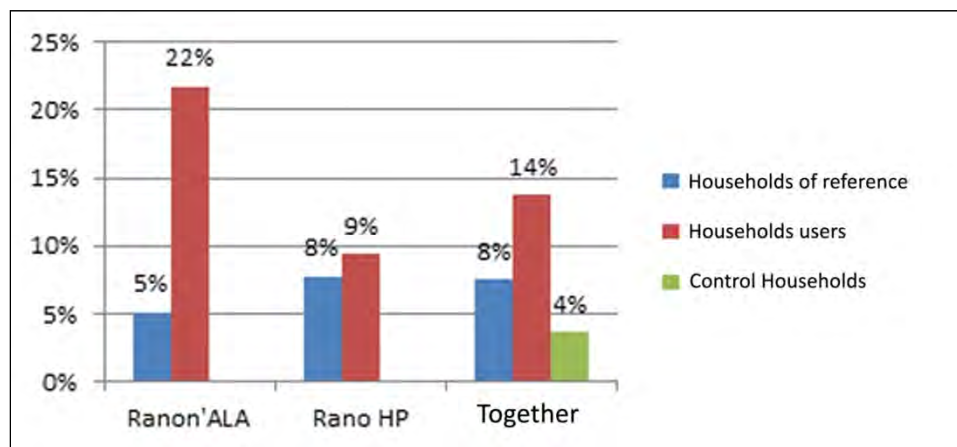


Figure 16: Evolution of the access rate to improved water sources

107. **The implementation of water supply structures by the projects has permitted to reduce the distance and the average duration of the time spent to fetch water:** 94.4% of the user households use the improved water sources located less than 100 meters from their place of residence. Among the non-

beneficiary households the rate is 41.8%. The South East zone being the sites where water sources are the farthest.

108. **The average duration of the trip back and forth has distinctly diminished by 20 minutes for the user households compared to the reference households.** However, this proximity improvement of improved sources is not significant at 5% compared to the comparison group in which the duration of the trip is of similar level (Table 7).

Table 7: Average Duration of Time Spent Fetching Water (Minutes)

	Reference households	User households	Comparison households
Zones of Ranon'Ala	13	3	
Zones of Rano HP	27	8	
Overall	26	6	6

3.3.2.2. USE OF DRINKABLE WATER

109. **Compared to the standard of 30 liters a day per person, the average water consumption by the users of the services set up by the projects is low, at 11 liters a day per person.** This consumption level hardly varies between the zones and does not differ from the individual consumption of the comparison households and the reference households.

110. **In comparison to the reference households, the percentage of the households opting for a multiple use of the water has not improved among the user households.** The proportion of the user households estimated at 4% is higher but it is statistically a moderate improvement. In the Rano HP zones, the percentage of households adopting a multiple use of the water has diminished from 9% to 4% between 2009 and 2014.

3.3.2.3. HOUSEHOLDS SAVINGS AND INVESTMENT FOR WATER SUPPLY

111. To help the most vulnerable populations invest in the access to drinkable water and in the sanitation activities, the RANON'ALA and RANO HP projects have promoted the development of Savings and Internal Lending Communities (SILC) and Village Savings and Loans Association (VSLA) among the households in their operation zones. These systems should have increased the financing capacities of the households' economic activities and needs.

112. **The percentage of household members of the SILC / VSLA is 15% in the projects zones vs. 11% in the comparison zones.** Among those members of SILC / VSLA, 18% are served with individual water connections or public fountains against 13% for non-members; and this despite the fact that the use of the SILC/VSLA funds for WASH activities (e.g. latrines construction or paying for water connection) does not appear to be among the primary savings destinations. The first uses of the deposited savings in the SILC / VSLA are especially the financing of production activities according to 44% of households, and the prevention of the food shortage period (30% of households).

113. Become a member of a SILC / VSLA interests much more women than men. The rate of membership amounts to 20% for the women against 14.4% for the men and this difference is statistically significant at 5%.

Table 8: Membership of SILC/VSLA by sex

Statistic Chart on membership of SILC/VSLA	N	Membership rate	Type gap	Standard error	Interval of confidence at 95%	
					Lower	Upper
Man	2,028	0,14	0,35	0,007	0,129	0,159
Woman	366	0,20	0,40	0,021	0,163	0,246
Total	2,394	0,15	0,36	0,007	0,139	0,168

114. **The adoption of the for-fees water service approach implemented by RANO HP and RANON'ALA has result in an increase by 15 times of the household water consumption expenses compared to the other households in the comparison group.** The annual water consumption expenses by the user households are estimated to 2% of the annual average income, that is Ar. 26,000 (12 USD) per year. These expenses are particularly high in the South East zone in comparison to the other zones and represent 6% of the annual income of the user households.

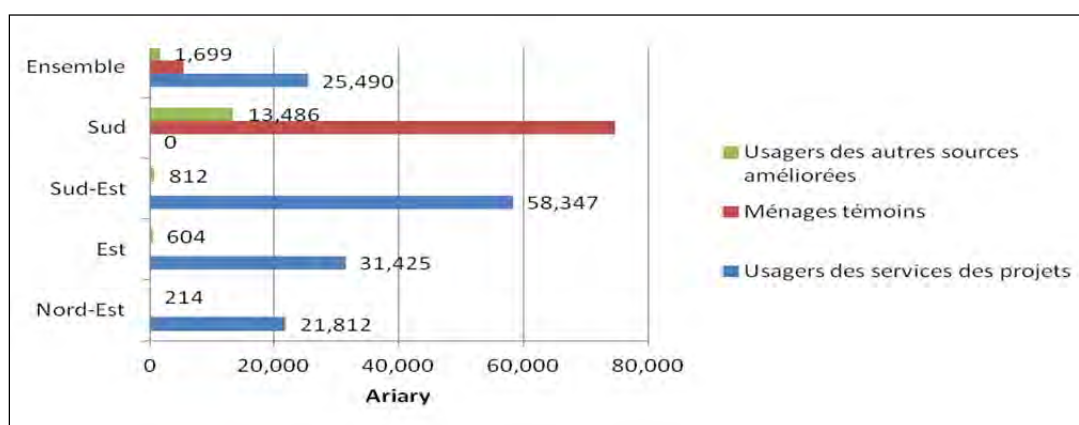


Figure 17: Annual water consumption expenses by the categories of households

115. Among the improved sources; water supplied by the RANON'ALA and RANO HP projects is more costly than the costs of water supply from other operators. That difference is very important in the South East zone.

116. **The expenses to get an individual water supply connection are more important and constitute a serious constraint to the access to the projects' water supply services according to the qualitative surveys of this evaluation.** The average cost of connecting a house less than 100 meters from the water main grid is estimated to be 86,500 MGA (39 USD), which is about 8% of the average annual income of the household users. The percentages vary across zones, e.g. from 1% to 10% of the annual income in the North East.

3.3.2.4. FAVORABLE AND NON-FAVORABLE FACTORS TO ACCESS DRINKABLE WATER

117. The results from the quantitative analysis, the focus group discussions, and the interviews with key resource persons are summarized in Table 9, specifically showing the key factors which contribute to or are obstacles to the access to drinkable water.

Table 9: Key-factors to access drinkable water

FAVORABLE FACTORS	UNFAVORABLE FACTORS
Intensive awareness campaign on WASH by house visit, by CHVs and in collaboration with local authorities from the WASH committees.	Not enough appropriate sensitization on the importance of access to water by the village community authorities.
Household satisfaction with the water quality compared to the other traditional water sources.	Reddish color of the water supplied by the services of the projects, frequent cut off which constitutes the major reason for not using the improved services according to 59% of the households.
Improved water source at proximity compared to the traditional water sources.	Existence of water holes (improved or not) at proximity but for free.
Promotion measures of installment payments of the water connection according to the purchasing power of the household and to the harvest times when the households earn more incomes.	High price at the pump compared to the household income; which causes the diminution of the monthly consumption and the recourse to other water sources that are for free.
	Low purchasing power according to 11% of households, which forces some households to limit their water consumption to the strict minimum and which delays the application for the supply connection.
	Non-payment of water bills by some users of social supplies, unfair distribution of consumption per family subscribed to social connections. These problems discourage the other members and cause the services to be cut off for non-payment.

3.3.2.5. WATER STORAGE

118. **The best water storage processes brought by the projects include the use of containers which prevent contaminations of the household water.** The characteristics of these containers are the existence of tap; the use of containers with lid; the narrow opening with diameter less than 10cm. About 40% of households using the projects WSSH infrastructures adopted the improved storage equipment (Figure 16). The rates vary across zones, the East and South zones having the highest rates (61% and 75%). Overall, there is significant increase of 19 points compared to the practices of the households in the reference survey. However, in comparison with the non-beneficiary zones where the practice of improved

storage has reached 37% of the households, the difference is not significant at 5%. The following factors can explain that minor change in the practice of storage actually attributed to the projects.

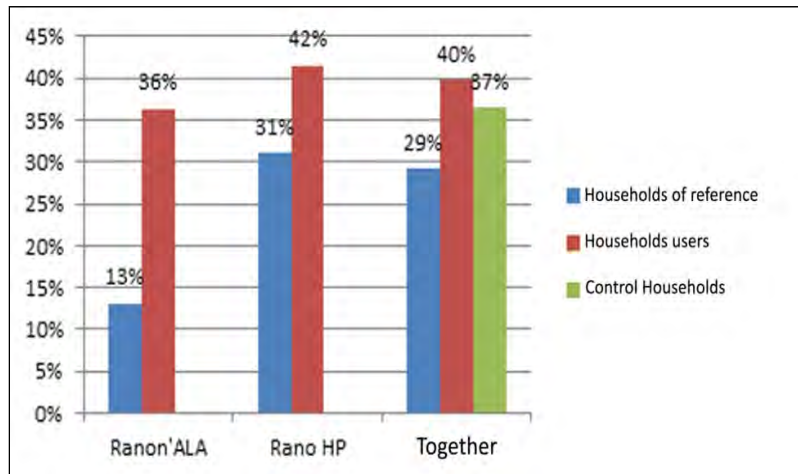


Figure 18: Rate of the use of improved water storage

119. **The coverage of the awareness campaign for the improved processes of water storage is limited to 61% of the populations in the beneficiary zones, of which 15% only have adopted these improved methods.** These campaigns are conducted by the CHVs and by the WASH committees. However, after the projects end, all WASH committees in the visited communes by the evaluation team are in stand-by and have not held any community awareness campaign session. The last BCC received dated back to more than 6 months for 89% of households. Also, the sensitization of the comparison households on the use of improved water storage is not negligible with a rate of 32% and can explain the narrow gap between the adoption rate of improved storage between the users and the witnesses.

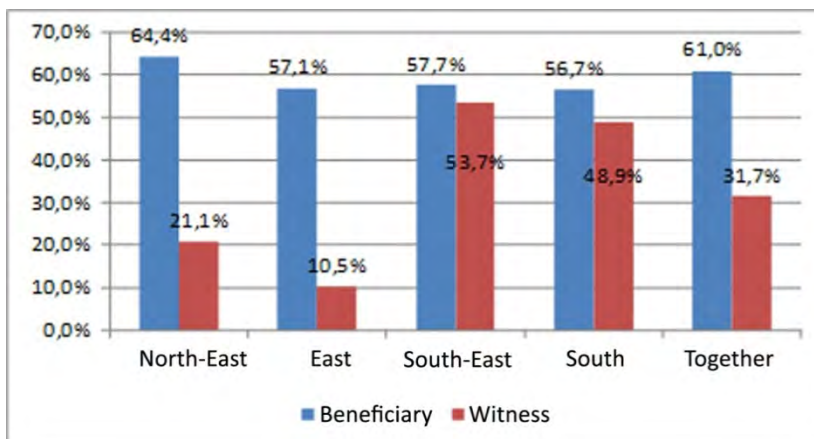


Figure 19: Percentage of sensitized households on the processes of water storage.

120. The levels of BCC are particularly high in the comparison zones of the South East (54%) and the South (49%) compared to the other zones. The sensitization rate for the comparison is very close to the figures for the beneficiaries within the same location. Nearly one third of the comparison households have received that sensitization from the CHV in village meetings held in the comparison fokontany.

3.3.2.6. WATER PROCESSING

121. **About 78% of user households get drinking water processed; with variation between 38% in the South to 92% in the East.** The low adoption rate in the South is worrying given that this zone has a low rate of access to improved water sources (6 %). All family members can benefit from the processed water for more than 90% of the households, except in the South where they give precedence over the children's and sick people's needs of processed water.

122. **The common mode of water processing practiced by the users consists in boiling water (97% of households).** Only 2.4% of the households in the projects zones use Sur'eau product. The use of TULIP filters, Aqua SUR and SODIS recommended by the projects barely exists among the beneficiary households (0.1%). On average, the volume of processed water by households in the projects zones is still low, that is 4.2 liters a day.

123. **In comparison to the reference households, the percentage of user households adopting recommended water processing has distinctly increased from 6% to 75%** (Figure 31). However the adoption rate of improved processing practices is equally noticed among 81% of the comparison households, resulting in non-significant differences.

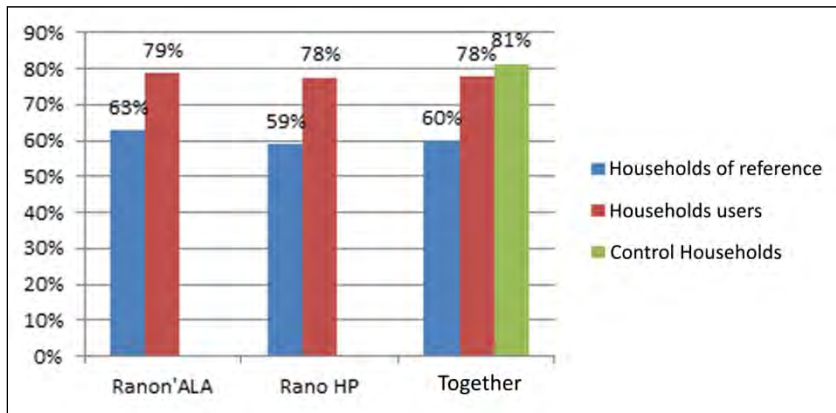


Figure 20: Percentage of households practicing water processing

124. The following factors can account for this low change in water processing practice, as well as the non-significant use of Sur'eau product. Much more households have received sensitizations in less than one month in the comparison zones (15%) compared to the beneficiary zones. The last sensitizations about water processing in the projects zones date back to more than 6 months for 83% of the beneficiary households. So, the frequency of the household sensitization sessions seems to have its importance in influencing the changes of practices in matter of drinking water processing. This lack of sensitization is highlighted by the reasons for not processing water expressed by 95% of beneficiary household who think that (i) it's not their practice to do so, (ii) they have not heard about processing methods, (iii) they judge water processing rather unnecessary

125. **The main reason for not using Sur'eau is the product availability within the areas (31% of households), the knowledge gap about Sur'eau (25%), and the high price of the product (24%).** The

level of the households' income does not however affect the use of Sur'eau as the utilization rate varies little across the income classes.

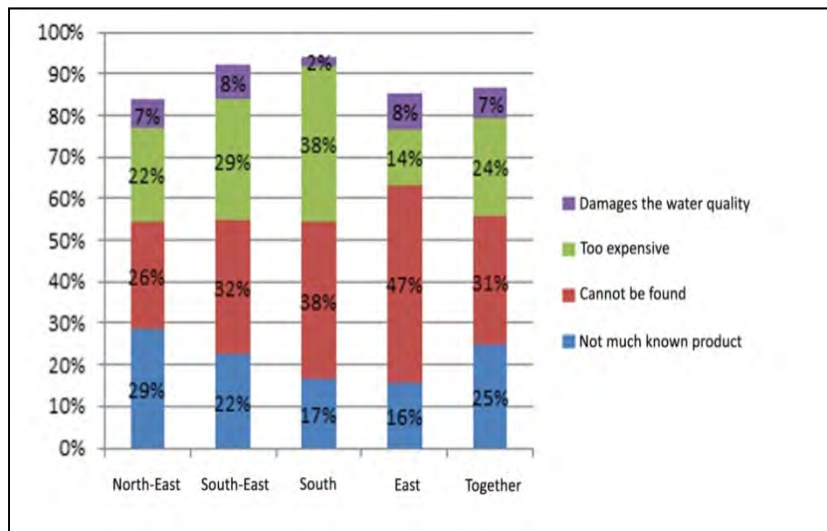


Figure 21: Reason for not using sur'eau

3.3.3.CONCLUSIONS 2A

1. In conclusion, the RANO HP and RANON'ALA projects have contributed to the increase of the access to drinkable water of the households in their intervention zones; that contribution is distinctly significant in the RANON'ALA zones, while it has been relatively low in the Rano HP zones. The water supply services of the projects are extensively used by the households all year round but undergo some important water supply cut-offs which discourage their usage at a large scale.
2. The access of low income households to the water services implemented by the projects is still low compared to high income households. The low purchasing power in reference to the price and to the cost of connection to the water grid remains a serious constraint to the access to improved services. Although the percentage of the expenses of the annual water consumption appears low compared to the income of the household, the adoption of a progressive paying approach has considerably increased the level of expenses on water for the households.
3. The behavioral changes of the households attributed to the projects in terms of consumption, of multiple water use, processing and improved water storage have not yet reached significant levels of households. The lack of continuity of the sensitizations by the WASH committees and by the local authorities to the issues of WASH has reduced the range of behavioral changes of the households in these fields. The SILC / VSLA approach has not facilitated in a more direct manner the financing of water supply and the acquisition of improved latrines on the level of the household members. Yet, the fairly high percentage of the members having access to the improved water services seems to indicate that the SILC / VSLA approach has permitted to convey the interest of having drinkable water.

126. The RANO HP and RANON' ALA projects are among the pioneers of the public-private partnership approach in the management of the drinkable water infrastructures and their financing in Madagascar. The projects have supported local private operators in order to develop some viable economic business plans and some quality water services accessible to the most vulnerable populations. The following sections analyze the different aspects of these innovations, namely (i) how these water supply services managed by the private sector are functioning, (ii) how is the governance of the WASH sector on the commune level in partnership with the private sector, and (iii) how the protection of the water resources by the beneficiary communities is ensured. These innovating approaches have influenced the access to and the use of the quality water services.

3.3.4.FUNCTIONALITY OF IMPROVED DRINKABLE WATER AND SANITATION

127. In the standards laid out by the two projects, an improved water source consists of “a particular connection to the network, a public drinking fountains, wells or protected wells with public or private hand pump; having a flow of drinkable water in conformity with the WHO standards, functional all the year round and all the parts are present and functional (ex: tap, handle). The service is considered to be functional if a community type, an association / enterprise / private person management board (a management structure) have the resources at their disposal to make the water sources work.”

128. Among the water supply services in the 9 communes that were visited during the qualitative evaluation, the water supply project in the commune of Behara was not yet completed and all the drilling sites had problems with the Canzee pumps functionality. If we refer to the definition of a functional service given above, water supply by pumping system (AEPP) in Ivandrika (district of Farafangana) is functional, while 4 out of 7 drinkable gravity flow water system (GFWS) are functional. It should be noted however that none of the people responsible for the management of those services could provide any results of recent water analysis tests as there is no laboratory test kits and water biochemistry analysis center are far.

129. The functionality problem of the water services, summed up in the chart below, are connected mainly to the massive presence of iron and to the salinity of water in the drilling sites in the East and in the North East, to the quality defect of the equipment during the construction, to the inappropriate maintenance of the connection to the mains by the managers and to the difficulties to collect payments by the users.

Table 10: Level of Functionality of the Visited Water Supply Network

RANO HP PROJECT				
REGION AND DISTRICT	COMMUNE	Type of infrastructure	Beginning of exploitation	Problems of quality of the services.
Analanjirifo Fenerive Est	Antsiatsika	GFWS forages functional service	November 2012	The Canzee pumps produce ferrous colored water, salty and with strong smell or does not produce any water. 4 out of 11 pumps are not functional
Atsinanana Vatomanfry	Ilaka Est	GFWS functional service	January 2014	Mono-bloc: leaking welling-up bucket, ferrous colored water, leak in the ceilings of shower in the rainy season, weak flush in WC as soon as showers are in use, sabotage of water pipes and not enough water pipes to replace the used ones.
Vatovavy Fitovinany Ikongo	Ikongo	GFWS functional service	September 2013	Rehabilitation of the water storage pond and of the processing laboratory: leakages of water in different parts of these infrastructures. Poor repair of many equipment i.e.: no taps. Fokontany of Voninkazo: water not drinkable as there is no processing laboratory and the pond containing water is in bad shape.
Atsimo Atsinanana Vandrozo	Vandrozo	GFWS service not functional	January 2013	One of the tanks are leaking. No tap at the connection to mains, weak force of flow.
Atsimo Atsinanana Farafangana	Ivandrika	GFWS Functional Service	January 2012	Some social water supplies shut down on account of non-payment of bills.
Androy Amboasary Atsimo	Behara	AEPP Service functional		The AEPP project is not finished yet.
RANON'ALA PROJECT				
REGION	COMMUNE	Type of infrastructure	Beginning of Exploitation	Problems of quality services
Analanjirifo Mananara Nord	Mananara	GFWS Forages functional service	August 2012	The water has ferrous color. Not enough flow in peak period of consumption
Analanjirifo Mananara Nord	Antanambe	GFWS Forages functional service	September 2013	5 drinking fountains out of 14 are functioning and are open because the households refuse to pay for the water. For the other fountains, 2 canzee pumps non- functional out of 7 for want of operational manager.

3.3.5. GOVERNANCE OF THE WATER SECTOR AT THE COMMUNE LEVEL

130. The WASH sector governance scheme in the two projects intervention sites places the commune in the first rank as task master assisted by the “stakeholders” or WASH committees composed of commune representatives, fokontany presidents, the CSB chief, representatives from NGOs, associations and opinion leaders. All WASH committees in the visited 9 communes are in stand-by after the project closure since the lack of motivation of the members to do the sensitization in the villages and the periodical planning of WASH actions. Among the 7 communes that were visited and having benefitted water infrastructures from the project, only 4 communes have received the Ministry of Water’s approval as responsible and manager of these infrastructures. More importantly, in all the visited communes, none has officially delegated the management of the infrastructures to the fokontany.

131. Nevertheless, the fokontany authorities have more responsibilities for the quality control and the management of the service, because of the remoteness of the benefitting villages from the commune center village. For example, the fokontany manages the payments of the users’ contributions, do the sensitization about WASH and play the mediator roles as disputes between the infrastructures manager and the users rise. The infrastructures management contracts by the private enterprises have been signed by the Ministry of Water for the 5 communes out of 7. The contracts for the management for the communes of Mananara and Antanambe have not been signed since they were sent to the Ministry in December 2012 and in September 2013.

GOOD GOVERNANCE AT THE SERVICE OF THE USERS OF THE WATER

The commune of Antsiatsiaka is provided with a clear project on the use of the communal tax on water consumption, namely the drinkable water supply for a public primary school in the commune.. The performance of the task by the commune is effective and permits a management of proximity of the infrastructures with increasing responsibility of the commune, which ensure that that the demand for water is met.

On sustainability, one fokontany plans to extend the water supply network to a nearby fokontany. The work is in progress and will be financed by funds raised on the purchase of water meters granted for free by one private firm to the commune.

132. However, the infrastructures in those sites are now being managed by two private enterprises which make the water supply service work in the fokontany and in the town of Mananara.

133. Each manager has set up in the communes a staff responsible for the administrative management and the payment collection, as well as one or two maintenance technicians recruited sometimes among the villagers. With the exception of one manager, the staff assigned in the sites has no employment contract. Most of the sales people are provided with control tools.

134. The keys are the prioritization of the infrastructures by the commune and the quality of the persons involved on the management, who must know the reality and the needs of the communities. Thanks to the participative approach adopted by the projects, the involved persons could define the needs and the common objectives in the matter of WSSH, the problems in each village, and the choice of solutions. That participative process has led to draft, validate and spread the community Development Plan, the Investment and Business Plan (PDIA) on drinkable water supply, sanitation and hygiene. In the 9 visited communes, 4 are in the know or in possession of that planning document.

135. The private management of WSSH infrastructure had ensured continuous water supply service which meets the expectations of users (80% of investigated user households). The private enterprises which manage the water infrastructures have almost all honored the obligations of their contract from fixing the price list of consumption, the opening hour of the pumps (except in Ivandrika) and the grant of new connections to the applicants. In four communes out of seven the managers have at their disposal one full- time staff on the site, which has also the responsibility for the sensitization of the populations to use the water service (for fees). The local staff has the capacity to manage the water cut off, the maintenance of the equipment, the collection of the bills of consumption and the responses to the users' complaints.

136. Some weaknesses of the commune to ensure the water management contract were identified. The projects have achieved several trainings and technical assistance for the communal authorities and the WASH committees. The projects provided skills on infrastructure building, invitation to bid for infrastructure manager, tools and skills on how to manage WSSH management services, and on how to make plans of protection of water resources. However, during the changes of the members of the staff at some communes, the transfer of competences is not effective in the case of four communes out of seven.

137. The absence of operational WSSH technical service in all the visited communes is a handicap for the commune to get to efficient management of the water. In such case, the commune does not receive any report on the management thus does not know the economic status of the unit; does not do any control of the quality of the equipment; neither does it control the periodical achievement of the water analysis by the manager. In the case of 4 communes out of 7, the required bank account for fees on the water consumption has not been open yet.

138. There is hardly any collaboration between the Regional Department of Water and the other actors. Because of the restrictions on the collaboration between USAID and the Government of Madagascar, the Regional Department of Water was not involved in the USAID-led WSSH activities at the Commune. This has been especially requested during the technical receptions of the works but these entities were also absent during the validation of the technical studies and did not participate on the follow up of the management of infrastructures.

139. In the field of sanitation and hygiene, the mode of collaboration as well as the respective responsibilities of the Regional Department of Water, of the communal authorities and of the WASH committees are not clearly defined. After the end of the WSSH projects, the local population reported that the sensitization on WASH was conducted in a very punctual way by the commune and the village authorities, but without any approach based on some results e.g. the adoption of CLTS approach or the follow up of sensitized households.

140. Water managers lack compliance to the terms of reference: According to the terms of the contracts for the management of water supply systems in the zones of projects, "The Delegates will take charge of the exploitation, the maintenance, the renewal, the administrative management, the production of documents and the management of works and equipment" are the responsibility of the water managers. Figure 22 shows that almost half of the managers do not comply with the terms of the contract on the

availability of spare parts, the lack of protection of the works, and the shortages of skilled local staff who repair the defects of the system. There is also serious gap on the absence of periodical analyses of the quality of the water and the lack of supervision of the quality of the water service by the Regional Department of Water (RDW). The managers do not have at their disposal the appropriate kits for analyzing the quality of the water in the remote zones. Not a single manager has ever produced a report of activities for the attention of the commune or for the RDW since the beginning of their exploitation.

141. Weak collaboration of the commune and the manager in the sensitization of the households: According to the managers in the visited communes, the level of consumption of water coming from all the functional infrastructures is beyond their capacity of production. With the exception of the town in Mananara, the number of individual and social connections to the mains does not exceed 150 in each visited commune. The seasonality of farming incomes does not allow increasing regularly the connections during a certain period of the year. Some key informants explain this weakness of application by the socio-economic crisis context and the climatic hazards affecting the crops, which limit the purchasing power of most rural population. In addition, the means used by the managers to do some marketing actions and sensitization of the communities are still insufficient to accelerate the investment on the access to water. Out of the 7 visited communes, only 3 communes benefit from the collaboration of the manager with the local authorities so as to carry out the WASH community awareness campaign. The lack of experience of the manager on the community awareness campaign and the lack of motivation of the commune and village authorities especially in the commune without any contract for the management of the water supply system do not favor the increase of the number of users.

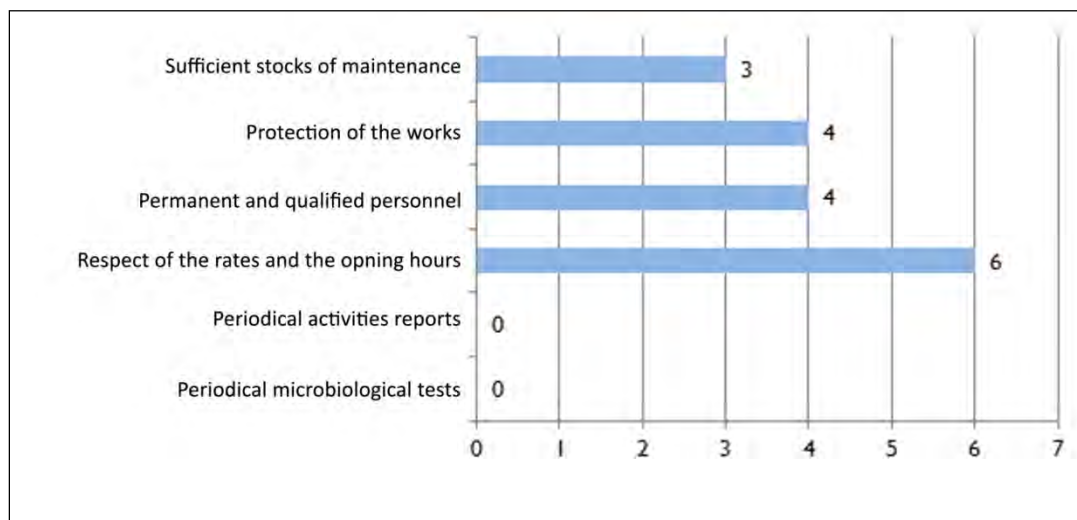


Figure 22: Management Capacity of the visited enterprises.

142. The protection of the water resources is an important component of the two projects so as to preserve the availability of quality water until it reaches the consumer household. The approaches of 2 projects in that field are similar by making the population understand the environment risks connected to the water supply. Several activities reinforcing the capacity of the actors of local wash and the activities of communication for the change of behavior have been carried out so that they could take their responsibility for management of the water resources in a sustainable way. Those actors which include the representatives from the user households have been organized in committees of protection and trained to

produce plans of protection of the resources. So far, among the 6 communes where the water supply system serves the beneficiaries, half of the communes (Ikongo – Vondrozo – Ivandrika) have committees of protection of water resources still in activity after the departure of the projects. The rest of the communes either have not created a structure responsible for the protection or they have set up some committees of protection that have not achieved any activities since their creation.

143. Enforcing a decree issued by the commune and some local laws (Dina) by the communal authorities have been mentioned by some key informants to protect the water source and the infrastructures in 3 communes out of six. Related to the specificities of the sites, the activities of protection include reforestation and the use of fencing around the water source. These initiatives of protection are not assigned only to the committees but have been backed up by external actors such as NGO and even the managers of the water infrastructures. The local authorities lean heavily on other environmental projects within the area in making the protection plans and the monitoring of the implementation.

144. According to some key informants, the impacts of the lack of the protection of the resources do not yet seem to affect the quality and the quantity of the supplied water; except in the sites like Ikongo where the threats of contamination of the water by rice growing up stream have already been identified since the beginning of the exploitation.

3.3.6.CONCLUSIONS 2B

In conclusion, the innovating approaches of RANO HP and RANON'ALA in the private management of water services and the governance of the WSSH sector have opened some opportunities for the communes in having additional capacities on governance. The results of the projects have shown that the management of the water infrastructures using the approach public-private partnership ended up to a quality water service if the following conditions are fulfilled.

- The quality of the water sources complies with the norms and the prescribed functionality
- The full compliance with a strict management of water infrastructures is respected by the private operators namely in the matter of maintenance and the follow up of the quality of the water
- The commune is provided with the necessary capacities and is fully responsible for the sensitization of the populations to the WSSH issues thus the increase on the investment to access drinkable water and the changes of behavior
- The Regional Water Department supports the implementation of the public-private partnership, particularly in order to better control the management of the infrastructures and to regularize the contracts for management.

The initiatives of the protection of the water resources in the zones of RANO HP and RANON'ALA are not enough to guarantee the sustainability of water supply services.

The communal authorities and the committees of protection set up by the projects do not have enough autonomy of organization and of dynamics that allow continuing the implementation of the water resource protection plans.

3.4. QUESTION 3 : EVALUATION OF THE SATISFACTION OF THE POPULATIONS COMPARED TO THE SERVICES OF WSSH

3.4.1.LEVEL OF SATISFACTION OF USER HOUSEHOLDS

According to one user in Ivandrika, district of Farafangana in the South East region; “The water in the Fokontany of Ivandrika is of the best quality, and a quality that does not change all the year round, even in the rainy season.”

145. **About 84% of user households claim to be satisfied with the quality of the water service provided by the infrastructures of the projects.** The rates do not vary very much across zones (between 71% and 92%) of users. The first criterion for satisfaction is the proximity of the water source (connections and Canzee pumps) for 86% of beneficiary and the quality of the water (cleanness, taste, smell, colour, etc...) according to 92% of users.

146. The households appreciate the advantages of the improved water sources compared to the traditional water springs which are most of the time far away, polluted and where the first comers are the first served. The other qualities of the water supply service appreciated by the users during the focus groups also concern the opening hours of the WSSH unit that are fairly suitable and the short duration of the waiting time to get water.

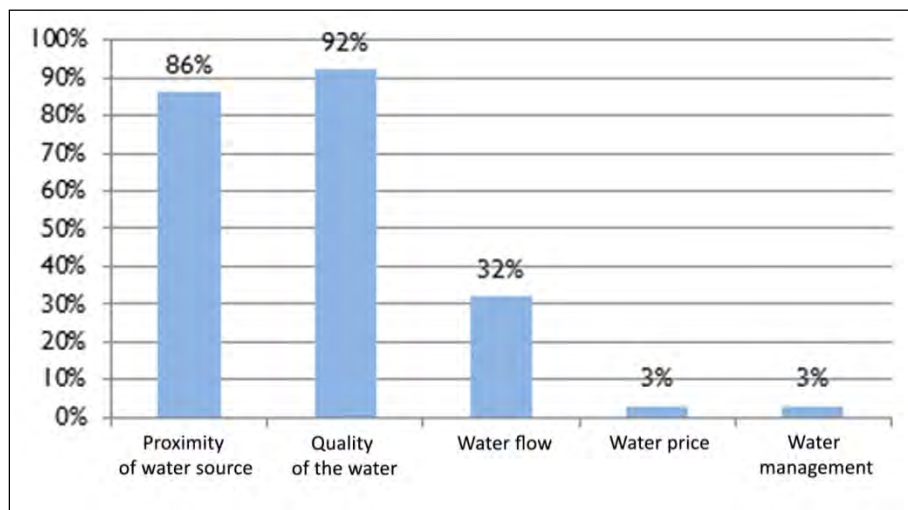


Figure 23: Level of satisfaction of the users of drinkable water

147. **Overall, 46.6% of the beneficiary households are satisfied with their latrines, a percentage almost equal for all the zones.** The reasons for their satisfaction are:

- Intimacy / dignity for 37.3%
- Proximity 20.8%
- Family health 20.0%
- Cleanness 14.6%
- Comfort 2.9%

148. It's the households in the North which appreciate above all intimacy and dignity (39.9%), the South prefers proximity for 36.5% and cleanliness 18.8%, the East gives the priority to the health of their families for 38.3% and comfort for 6.2%.

Table 11: Source of Satisfaction from latrines use

Agro ecological zone	None	Intimacy/ dignity	Clean	Comfort	Family health	Prestige	Proximity	Others
North-East	0.5%	39.9%	15.1%	2.6%	16.7%	0.7%	20.6%	3.8%
East		27.5%	9.4%	6.2%	38.3%	1.3%	15.9%	1.4%
South-East	0.7%	27.6%	15.6%	1.6%	27.3%		25.9%	1.3%
South		25.8%	18.8%		19.0%		36.5%	
Together	0.5%	37.3%	14.6%	2.9%	20.0%	0.7%	20.8%	3.3%

3.4.2.SOURCES OF DISSATISFACTION OF THE POPULATION

149. In generally, the level of dissatisfaction is higher among the users of wells and the public water wells than among the users served by the branched pipes.

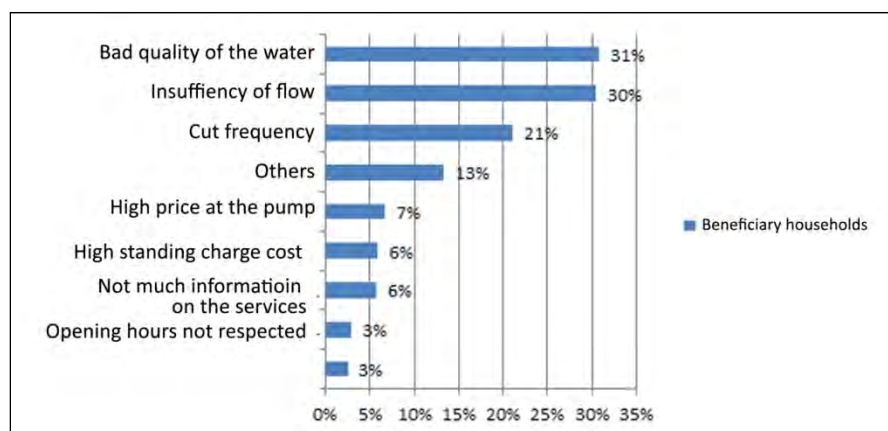


Figure 24: Sources of dissatisfaction of the users of drinkable water

150. In the North East zone, 42% of the unsatisfied users complain about the insufficiency of flow, especially during the peak period for consumers linked to the branch pipes water. About 32% of the non-satisfied beneficiary households also complain about the bad quality of water such as ferrous color and the salty taste. The households explain that they have to boil the water before using it.

151. In the East zone, in addition to the insufficiency of the water flow, 25% of the non-satisfied user households think that the price of the water is too high compared to their purchasing power. The cost of an individual access at home (Ar. 100,000 or 45 USD) stands for nearly 9% of the annual income of the household in that zone. The population prefers the water system network using pipes but requests the possibility of payment by installments of the initial cost. Otherwise, households opt for the access to public infrastructure which allow them paying on-the go and as needed. Some users prefer using other non-improved but free sources.

152. **In the South East zone, 30% of the households dissatisfied with the water service think that the price of the water consumption is high, and 70% of the households claim to be victims of frequent water supply cut.** The annual consumption expenses represent on average 6% of the annual income of the household in that zone which has the lowest income compared to other zones. The frequent water supply cuts are a major hindrance to the households because, according to 59% of the user households, it constitutes the first reason for using a non-improved second source for more than one year. In the South East zone, the case of Vondrozo illustrates the extent of those water cuts which originate from various defects of the infrastructures: water pipes being silted up in the rainy season for some area; leaking water tanks and damages caused by those leakages which require consequent servicing. In addition to these technical hitches, the manager has recorded very few new branch pipes, averaging one branch pipe a month between June 2013 and December 2013.



Figure 25: Leakage from Water Tank in Vondrozo

153. **Despite the importance of the motives for the dissatisfaction of the users, only 6% of the user households have handed in their complaints to the water keeper/manager of the network or to the WASH committee.** About 31% of the households involved think that they have got satisfactory responses to their complaints. The users' dissatisfaction with the handling of their complaints results from the slowness of the rehabilitations of the supply system; and to the shortage of spare parts on the site. In the case of Vondrozo where the shortage of supplies are frequent, the share of the responsibilities for the rehabilitation between the manager and the enterprise which built the infrastructure is not clear and delays the handling of the complaints from the users. Indeed, the water cuts and the leakage of water are due to some defects in the construction of the water supply system which is still under guarantee by the constructor. Nevertheless, the construction enterprise has not done the necessary rehabilitations as of the evaluation period i.e. nine months after the end of the project.

154. To the question “what makes you displeased with your latrines” the beneficiaries answered:

- The lack of comfort: 31.2%
- The smell: 22%
- The sharing of latrines with other households: 16%
- And the filth: 9.8%

155. Some variations between the agro ecological zones should however been noted as regards these reactions.

- The South which complains most about the lack of comfort by 48.2% and about the smell of the latrines by 33.5%
- The North East complains most about having to share their latrines with other households by 17.2%, about filth (11.4%)
- The South cares the least about having to share their latrines with other households (4.1%)

Table 12: Source of non-satisfaction with latrines

Agro ecological zone	What makes you displeased with your latrines?						
	None	Smell	Filth	Long distance	Lack of comfort	Sharing with others	Others
North-East	1.5%	22.2%	11.4%	1.0%	29.6%	17.2%	17.1%
East	0.5%	21.2%	6.9%	2.4%	32.2%	11.6%	25.2%
South-East	1.6%	18.6%		1.4%	40.9%	12.7%	24.8%
South	5.1%	33.5%	6.9%	2.2%	48.2%	4.1%	
Together	1.4%	22.0%	9.8%	1.2%	31.2%	16.0%	18.3%

3.4.3.CONCLUSIONS 3

1. In conclusion, the user households of the infrastructures installed by the projects are satisfied with the quality of the provided services. The advantages of the improved water sources compared to the traditional springs have been put forward by the users to justify this overall satisfaction, namely the proximity of the water sources and the quality of the water.
2. The sources of dissatisfaction of the users vary according to the zones and are mainly connected with the insufficiency of the flow in all the zones especially in those using water gravity systems; the salinity or the ferrous color of the water in the North East zone. These motives for dissatisfaction reflect the problems of functionality of more than half of the visited water supply services. These negative appreciations of the users have not accelerated the increase of the investment to get branch pipes and the use of pumps among the users.
3. The price of access to drinkable water, either per branch pipe or per pump/water source, is still high compared to the average income of the households, especially in the zones with low income like the East and South East zones. That factor of price seems to have limited the number of subscribers and of the pump users involved in the infrastructures
4. The latrines promised by the projects provide satisfaction to the beneficiaries so that they have learnt to appreciate comfort, intimacy and dignity in owning improved latrines, and cleanliness. Most of the latrines in use do not yet meet the norms of improved and there is a call therefore for much more effort. The constructed latrines have been financed by the own funds of the households in most of the cases but they have not had recourses to taking out loans to finance them.

4. RECOMMENDATIONS

156. The implementation of RANO HP and RANON'ALA projects has posed some challenges to the different involved partners. The following recommendations draw the lessons learned and the good practices emerging from this evaluation to direct the strategies and the activities design for similar projects.

157. The strategies and the most efficient approaches to increase the access to drinkable water are:

- Adopt the participative approach with the commune and the involved partners in the prioritization of the WSSH infrastructures;
- Control in a more rigorous way the quality of the feasibility studies and the studies of the construction of water works in order to secure the functionality and the durability of infrastructures;
- Select and place strategically the improved water sources in a way that the distance from the places of residence is shorter thus getting the maximum number of users ;
- Ensure that the community agents and the WASH committees will carry on the sensitization to the WSSH issues and cover a large social stratum in the population ;
- Promote the SILC/VSLA approach on the basis of viable income producing activities and encourage the members to disseminate any sensitizations they received, including communication on WSSH ;
- Suggest water processing methods, which must be easily physically accessible from the beneficiary's location and financially accessible related to the low purchasing power of the households ;
- When adopting the no-water for free approach, adapt the water price index according to the types of supply, the levels of consumption and the levels of local income to facilitate the access to water among the vulnerable stratum of the population ;
- Ensure that the manager of water services will be able to maintain the quality of the drinkable water through regular tests; and the quality of infrastructures including the water distribution network;
- Encourage the collaboration with the regional water department to support the communes and the fokontany in terms of infrastructure building and control of the management of the contracts for the drinkable water supply services ;

158. Recommendations for the after project strategies :

- The manager of the water supply services should carry out marketing actions and promotion of his services in collaboration with the communal or fokontany authorities. These BCC actions are required in order to highlight the advantages of drinkable water irrespective of the compulsory payment of the fees;
- The sustainability of the relaying structures such as the WASH committees and the community agents should be revisited. With no project support, these entities should be able to hold periodical meetings, conduct local BCC activities, and have the necessary tools for their day-to-day operations ;
- Since the SILC/VSLA are supposed to meet regularly for their own financial purpose, they can be the vehicle for the sensitization on WSSH;

- The Regional Water Department should periodically supervise and control the management of the water supply services. In case of failure to implement the contract for management, they should be able to work with local communities and take corrective measures. The technical trainings and supports designed for the local authorities and for the managers of the services should be carried out by the Department.
- Try to reduce the number of local coordination structures to manage local initiatives (Social Development Community Committee - CCDS, WASH committees, Health Committee - COSAN...) because there are few existing local capacities.

159. Recommendations for similar future projects :

- The control of the quality of the WSSH infrastructure built by the project must be clear and strict to ensure its technical viability thus reducing after-project issues that the infrastructure managers and the beneficiaries cannot handle. This requires that the selection of the construction firms must be rigorous to minimize the risks of defects after the period of final reception;
- The manager of the infrastructure should be aware of any issues that are linked to any defects in the infrastructure to better understand the sub-sequent risks;
- If possible, use the last year of the project for sustainability purpose. The overall work plan should be like a 2-3 year phase for setting up of the infrastructures and the coordination/management structures; followed by 1-2 years withdrawal phase to ensure the follow-up of the infrastructure management and to allow the commune and the relaying structures having the skills to conduct their responsibilities. The local communities should setting up a technical service responsible for the follow-up of the quality of the WSSH services;
- The community participation at the moment of construction of the infrastructure will increase local appropriation of the infrastructure and could later help in increasing the number of the water service users.
- To increase the adoption of recommended WASH behavior; the awareness campaign on WSSH should be carried out at some schools, associations and youth centers. Some entities working on the sector had tested this approach for the transmission of WSSH messages.
- The project should ensure close collaboration with and support to the Regional Water Department from the onset. These could be training, provision for required equipment for supervision.
- The strategy of water price index should be based on rigorous analysis such as getting the willingness to pay from the future users; so that the fees would not be seen as major constraints to access WSSH quality services. Regular adjustment could be made, however, taking into account the purchasing power of the users and the sustainability of the service provision.

ANNEXES

ANNEX I: EVALUATION STATEMENT OF WORK

I. EVALUATION QUESTIONS

The Contractor must pose and answer the following questions:

To what extent did the population in the intervention zones adopt the improved hygiene practices demonstrated by the projects?

The WSSH projects conducted behavioral change communication and other activities to induce changes at the beneficiaries' behavior. The evaluation report should highlight any activities and innovations brought by the projects that were likely to result in behavioral change. The evaluation team will identify promising and best practices, lessons learned and challenges faced focusing on what has worked and what has not.

To what extent did the approaches used by the USAID implementing partners lead to increased access and use of drinking water and improved sanitation facilities to beneficiaries?

The analysis must look at the changes at the beneficiaries' level that could be attributable to the projects' interventions. The evaluation question encompasses the impact of the projects on improving the physical and alleviating the financial accesses to, and the use of drinking water and adequate sanitation services by beneficiaries. The evaluation report must highlight any innovations brought by the projects that were likely to result in higher impact. The evaluation team will identify promising and best practices, lessons learned and challenges faced, focusing on what has worked and what has not.

To what extent were the population of interventions satisfied on the quality and appropriateness of the services provided by the private partners in managing WSSH infrastructure?

The Contractor will assess the subjective perception on the population on their satisfaction of the quality of the services provided by the WSSH infrastructure managers. It may encompass but not limited to the satisfaction on the quality of the water, the cleanliness of the facilities, the costs, the schedule of access to the services if any, the quality of the staff, the management transparency, etc.

For the analysis, the contractor must examine the difference across gender in answering the evaluation questions. This evaluation seeks to understand the gender-based characteristics that would affect the use of WSSH services at the households and population level.

II. METHODOLOGY

The Contractor will use a non-experimental design to answer the evaluation questions in Activity A. Because of the absence of onset, randomized assignment of the treatment required for a rigorous impact evaluation, USAID requests the Contractor to use a difference-in difference method to measure the performance of the WSSH projects. To get the before the project data, the evaluation team must use the data collected from the baseline survey by each project before the beginning of their intervention. The information in the baseline is from 2,470 households (1,900 from RANO HP and 570 from RANON' ALA).

These households were randomly chosen within 56 communes in the areas of interventions of the two projects. Both projects used the lot quality assurance sampling (LQAS) method to collect the

data. The reports from the baseline data collection for the two projects are annexed to the current SOW.

For the data collection at the end of the projects, the Contractor may use different techniques rather than LQAS but must justify the advantage of its choice. The Contractor may use data collection to fill any gaps on the baseline data, e.g. with recall interview. The Contractor may also use qualitative methods to collect more in-depth information from other sources such as key-informants; group of users and non-users of WSSH services.

The sampling method(s) must best suit the purpose of this evaluation. It must ensure that the evaluation findings and conclusions are based on empirical evidence and from a statistically representative population. The findings and conclusions must also be disaggregated by type of infrastructures (gravity, pump); by agro-ecological regions (Northeast, East, Southeast, and South); and by gender. The evaluation team will use tablet computers to collect data. USAID will provide this equipment. The goal is to ensure high quality and effective monitoring of data collection, and to reduce the time spent on data entry, cleaning, and data analysis. It is the responsibility of the contractor to train its staff on the proper use of the equipment.

The data processing methodology must be clear and concise. It must show the procedures and tools used to treat and analyze quantitative data, and processes to transcribe and analyze qualitative data, if any. Additional information on the characteristics of the intervention sites can be obtained from the USAID implementing partners. Given the geographic locations of the WSSH projects, the evaluation team members may be required to travel to remote sites, on poor roads and possibly on foot.

III. DELIVERABLES

The Contractor is required to deliver the following:

1. Methodology and Evaluation Plan
2. Completion of fieldwork
3. Descriptive tables and oral presentation of preliminary findings
4. Draft evaluation report
5. Final evaluation report, including all media devices and data

1. Methodology and Evaluation Plan (MEP):

The methodology and evaluation plan will be submitted for approval to the USAID/COR of the evaluation activity no later than 25 days after the effective award date. No later than 10 days after receiving the MEP, USAID will conduct a planning meeting with the evaluation team to discuss and validate the MEP. The Contractor has 5 days after the meeting to revise and submit the final MEP to USAID.

The MEP could be either in French or in English and must not exceed 30 pages excluding annexes. At a minimum, it must include:

- A background section summarizing the findings from a desk review, related to each evaluation question (5-7 pages)
- A refined, detailed evaluation methodology to answer each question: It includes the data collection methods and data collection instruments, the data collection protocol, the sampling process and the selected survey sites, and the limitation of the methodology (10-15 pages). The instruments used in conducting the evaluation such as questionnaire, checklist, and discussion guides are required in the annex. Once approved by USAID, all modifications on the MEP need to be agreed upon in writing by USAID.
- A presentation of the process for quality control: assessments and management (1-2 pages)
- A detailed data analysis methods with the list of the tables of descriptive statistics (2-3 pages)
- A presentation of key implementation challenges and risks related to the evaluation process (1 page)
- A schedule for the evaluation (1-2 pages)
- Annexes including at a minimum
 - o Scope of Work of the evaluation
 - o Location and map of selected sites to be visited over the evaluation
 - o List of key-informants, individuals for interviews
 - o Data collection instruments

The fieldwork must not begin until the USAID/COR approves the MEP.

2. Completion of Fieldwork (COF):

Fieldwork will take a total of 60 days, including recruitment and training of enumerators and supervisors; pre-testing of survey and interview tools; testing of the system using tablets for data collection. In addition, this timeline includes travel and courtesy call to local authorities. No later than 5 days after the end of the fieldwork, the Contractor will provide the USAID/COR a report showing the COF.

The COF report may be submitted either in French or in English. The report must include at a minimum the list of the selected villages with the number of surveyed households, the proportion of refusal and replacement. Brief description of each PSU such as road access, access to media and social services, and other socio-economic characteristics must be presented as an Annex to the COF.

USAID has to either approve or reject the COF report within 5 days after submission.

3. Descriptive Tables and Presentation of the Preliminary Findings:

No later than 45 days after the end of data collection (completion of fieldwork):

The Contractor provides the USAID/COR all the descriptive tables defined in the MEP. The tables should be in Excel format.

The Contractor must plan an oral presentation of the preliminary findings and conclusions to USAID, based on the findings from the fieldwork and the preliminary descriptive tables.

The Contractor must take into consideration the comments received during the presentation in drafting the evaluation report. To do so, the Contractor must identify a note-taker during the presentation, and add the presentation minute as an Annex to the final evaluation report.

4. Draft Evaluation Report:

The written draft report may be submitted in either English or French. The draft evaluation report must follow the requirements in Attachment J.3, Section 1. No later than 30 days after the presentation of the preliminary findings, a draft report of the findings and recommendations must be submitted to the USAID/COR. The report must clearly describe findings, conclusions, and recommendations.

USAID has to either approve or reject the Draft Evaluation Report by submitting written comments within 20 days of submission of the report.

5. Final Report:

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The final report must follow the instruction in Attachment J.3, Section 2 and 3. No later than 20 days after USAID approves the Draft Evaluation Report, the Contractor will submit a final report that incorporates the evaluation team responses to the Mission's comments and suggestions. The final report must be submitted in English and French, electronically. USAID has to either approve or reject the final report within 15 days after submission.

No later than 10 days after the approval of the final report, the contractor shall submit 20 hardcopies (10 in English and 10 in French) and two electronic copies of the USAID approved final report to USAID/Madagascar (1 in English and 1 in French). The electronic copies of the final report shall be in both PDF and MS Word format.

The contractor will also send an electronic copy of the English version of the final report to the Development Experience Clearinghouse for archival within three months of the approval of the final report by USAID.

IV-SCHEDULE

Activities	Day Number
Award Date	D0
METHODOLOGY AND EVALUATION PLAN	
Submit Methodology and Evaluation Plan to USAID (25 days)	D25
<i>Methodology and Evaluation Plan approved by USAID (within 15 days after submission)</i>	
FIELD WORK	
Submit Completion of Fieldwork report	D105
<i>Completion of Fieldwork Report approved by USAID (within 5 days after submission)</i>	
PRELIMINARY FINDINGS	
Oral Presentation of the preliminary results to USAID	D155
DRAFT REPORT	
Submit draft report to USAID	D185
<i>Draft report approved by USAID (within 20 days after submission)</i>	
FINAL REPORT	
Submit final report to USAID	D225
<i>Final report approved by USAID (within 15 days after submission)</i>	
Submit hardcopies of the final report in French and English to USAID	D250

V- TEAM COMPOSITION AND SKILLS FOR ACTIVITY A

The evaluation team shall consist of two key personnel, one of whom will be designated Team Leader. The evaluation team shall be external consultants, outside USAID and outside the implementing partners. USAID zones of interventions are mostly rural, thus the evaluation team may be required to travel in remote areas, with poor road conditions and possibly by foot.

The Team Leader is the primary point of contact between USAID and thus must have excellent communications skills. The Team Leader will ensure that the deliverables are completed in a timely manner and are responsive to the scope of work and USAID comments. The Team Leader will provide leadership for the team and coordinate activities.

The team Leader must have the following minimum qualifications:

1. Master's degree in evaluation, economics, public health, international development, or similar disciplines;
2. Ten years of experience of experience in conducting and/or managing evaluation, assessment, or operational research activities;
3. Strong understanding of evaluation design and evaluation methodologies;
4. Strong writing skills

The Data Analyst will be responsible for data collection, processing, and analysis. The Data Analyst will provide support to the Team Leader in responding the scope of work and in corresponding with USAID. The Data Analyst is responsible for the training of the enumerators and supervisors on the use of the tablet, control quality, data processing, and data analysis.

The Data Analyst must have the following minimum qualifications:

1. Master's degree in evaluation, economics, public health, statistics, international development, or similar disciplines;
2. At least five years' experience in using statistical software such as STATA or SPSS for data analysis;
3. Experience in sampling of large surveys, designing data entry form, collecting information using structured survey, processing and analyzing large quantitative datasets;
4. Familiarity with the use of tablet computers for data collection;

Language requirements:

- At least one team member must be proficient in spoken and written English to facilitate the discussion with USAID and to ensure the quality of the evaluation report.
- The two key personnel must be proficient in French. Most of the project key documents are in French and some implementing partners do not speak English.

ANNEX II: METHODOLOGIE ET LIMITES DE L'EVALUATION

METHODE DE COLLECTE DES DONNEES QUANTITATIVES

La collecte de données quantitatives dans le cadre de l'évaluation du projet WASH financé par USAID vise à calculer le niveau des principaux indicateurs d'effet et d'impact et d'apporter des éléments de réponse objectifs aux différentes questions d'évaluation. Comme la technique retenue pour l'évaluation est basée sur la double différence, la méthodologie adoptée doit permettre une comparaison sans faille des données collectées avec celles des études baseline. Ainsi, la méthodologie est celle d'une enquête par sondage représentatif à deux degrés respectant les exigences de la méthode LQAS.

A. Champs d'étude, Unités statistiques et base de sondage :

Le champ d'étude est constitué des 36 communes d'intervention des deux projets RANO HP et RANOn'Ala issues des 6 régions à savoir Sofia, Analanjirofo, Atsinanana, Vatovany Fitovinany, Atsimo Atsinanana et Anosy. Au premier degré, l'unité statistique est constituée par le Fokontany appartenant aux communes d'intervention. La liste des Fokontany fournie par la cartographie censitaire de l'INSTAT en 2009 est utilisée comme base de sondage au premier degré. Cette base de sondage est constituée de 464 Fokontany ; un Fokontany étant défini comme l'unité administrative de base formée d'une localité ou d'un ensemble de localités relevant d'une autorité administrative appelée "Chef du Fokontany".

Afin d'assurer la comparabilité des résultats avec ceux des baselines ainsi que respecter les niveaux d'agrégation des résultats stipulés dans les TDR, le champ d'enquête sera divisé en 6 strates dont une strate constituée par la zone d'intervention du projet Ranon'ala (commune de Maritandrano district de Mandritsara et les communes concernées dans les district de Soanierana Ivongo et Mananara Nord), les 5 autres strates sont constituées respectivement par chaque région d'intervention du projet Rano HP.

Au second degré l'unité statistique est constituée par le ménage. L'ensemble des ménages dans le fokontany-échantillon constitue la base de sondage au second degré.

Le ménage est défini comme un groupe de personnes généralement unies par des liens de parenté (mais pas forcément), qui résident ensemble sous le même toit, travaillent ensemble, prennent ensemble les principaux repas et reconnaissent l'autorité d'une seule personne appelée Chef de ménage.

B. Tirage des échantillons.

L'objectif est de constituer des échantillons indépendants et représentatifs au niveau chaque strate. L'application de la formule pour le calcul de la taille minimale de l'échantillon donne le nombre de 399 ménages par strate. Comme la méthode d'échantillonnage adoptée est celle du LQAS, la taille de l'échantillon par unité primaire doit être 19 ménages ce qui implique 21 unités primaires par strate.

Le tirage des unités primaires s'effectue de manière aléatoire simple avec probabilité inégale, proportionnelle à la taille du Fokontany, c'est-à-dire à l'effectif de la population dénombrée lors de la cartographie censitaire en 2009. Afin d'assurer une plus grande dispersion géographique de l'échantillon, le tirage systématique est adopté et le pas de tirage correspond au rapport de l'effectif de la population d'une strate par la taille de l'échantillon.

Toutefois, toujours dans le souci d'une meilleure comparabilité des résultats, il s'avère judicieux de garder les Fokontany échantillon (unités primaires) des baselines issus des Communes d'intervention des projets étant donné que ces fokontany ont été également issus d'une même technique de tirage c'est-à-dire celle d'un tirage aléatoire avec probabilité inégale sur la même base de sondage. Le tableau suivant donne la situation des échantillons

Strate	Population totale (2008/2009)	Nb total Fokontany	Nb Fkt Baseline	NB Fkt requis pour l'évaluation	Nb Fkt à tirer
Zone Ranon'ala	150 128	158	25	21	-4
Zone Rano HP					
Analanjirofo	84 815	44	15	21	6
Atsinanana	53 678	54	14	21	7
Atsimo Atsinanana	55 759	43	11	21	10
Vatovavy Fitovinany	86 964	100	12	21	9
Anosy	44 987	65	9	21	12

Au second degré, le tirage des ménages échantillons s'effectue de manière systématique en adoptant la méthode d'itinéraire. Le pas de tirage est le rapport du nombre total de ménages dans le Fokontany par la taille de l'échantillon (19 ménages par village).

Il est à noter qu'un entretien préalable avec un responsable du Fokontany devra être réalisé par le contrôleur dès l'arrivée de l'équipe dans le Fokontany au moment même de la visite d'usage. Cet entretien fournira des informations nécessaires à l'organisation des collectes de données, en particulier l'effectif des ménages qui rentre dans le calcul du pas de tirage. Le contrôleur se servira d'une table de nombre au hasard (fourni en annexe du manuel du contrôleur) pour identifier le premier ménage-échantillon dans le Fokontany.

En ce qui concerne les ménages-témoins, le tirage des échantillons se fera selon la même méthode LQAS donc la taille de l'échantillon est fixée à 19 ménages par village soit 38 ménages par strate afin d'assurer la convergence des estimateurs. Ils sont tirés de manière aléatoire avec probabilité égale parmi les ménages des deux fokontany dans une commune par strate choisie parmi celles qui ont fait l'objet de baseline mais n'ont pas bénéficié des actions des projets.

C. Technique d'observation et outil de collecte.

L'enquête se fera par interview direct sur la base d'un questionnaire. Comme c'est une enquête ménage, l'entretien doit être réalisé à l'intérieur de la maison d'habitation de l'enquêté à l'abri des regards indiscrets des personnes en dehors du ménage. Cette disposition est prise afin de garantir la confidentialité et la sérénité de l'enquête et de minimiser l'influence de l'environnement sur le comportement de l'enquêté.

L'enquête se fera en langue malagasy et le plus possible en dialecte local. Pour ce faire, l'enquête utilisera des agents enquêteurs maîtrisant le dialecte et les us et coutume de leur zone d'affectation sans toutefois négliger la compétence technique et l'aptitude physique. Cette disposition facilite la conduite de l'interview et favorise l'instauration d'un climat de confiance des enquêtés.

Par ailleurs, une fiche Fokontany destinée à collecter les informations plus générales se rapportant au Fokontany complète le questionnaire ménage et sert de moyen de contrôle. Il est administré par le contrôleur en interviewant un responsable local.

Limites de la méthodologie

Toutes les étapes de l'opération seront réalisées dans le strict respect des démarches techniques requises. Toutefois, comme toute enquête statistique par sondage, les résultats ne seront jamais sans failles.

Les limites de l'enquête se rapportent surtout sur l'éventuelle imprécision des données collectées à partir des simples interviews surtout lorsqu'il s'agit des données quantitatives qui font appel à la mémoire de l'enquêté.

Le plan d'échantillonnage adopté donne un échantillon autopondéré dont le dépouillement se fait comme un recensement au niveau d'une strate. Ainsi, des coefficients de pondération seront calculés pour des agrégations des résultats au niveau plus élevé.

Quelques indicateurs mesurés dans les baselines avaient paru prêter à confusion dans leur interprétation et nous avons tenu à les mentionner dans le tableau ci-dessous car ils pourraient nécessiter un retour à leur définition telle qu'utilisée dans les baselines :

Indicateur	Définition	Mode de calcul	Commentaires
% communes ayant un taux de couverture d'approvisionnement en eau d'au moins 57%	Pourcentage des communes dont au moins 57% de la population totale s'approvisionnent en eau d'une source améliorée toute l'année (borne fontaine ou puits / forage protégé privé avec pompe ou puits / forage protégé public couvert).	Pour déterminer le taux de couverture en eau d'une source améliorée de 57%, il faut connaître le nombre total des points d'eau dans une commune et compter le nombre de personnes ayant accès à cette source. Le rapport de ces deux variables fournit le taux de couverture en eau. On dénombre ensuite les communes qui ont ce taux ramené au nombre total des communes	Cet indicateur ne peut pas être rapporté aux communes (Pb de représentativité de l'échantillon). On peut avoir le pourcentage des Fokontany (utilisation LQAS) et le pourcentage de la population s'approvisionnant en eau d'une source améliorée toute l'année au niveau d'une région Le mode de calcul n'est pas correct. Ce rapport donne plutôt le ratio nombre d'utilisateur par point d'eau
% de ménages pratiquant le lavage des mains à des moments critiques	Pourcentage de ménages qui se lavent les mains avec du savon aux 3 moments critiques : avant de manger ou avant d'allaiter / donner à manger à l'enfant, avant de préparer le repas, après défécation ou après avoir nettoyé le	Nombre de ménages pratiquant le lavage des mains à des moments critiques / Nombre total de ménages dans les zones du RANO HP	Ménage signifie totalité des membres du ménage . Ici , le questionnaire s'adresse à la mère de famille ou au chef de ménage s'il n'y a pas de femme

	bébé après défécation		
% de ménages capables de citer les 3 moments critiques pour le lavage des mains	Pourcentage de ménages capables de citer les 3 moments critiques pour le lavage des mains : avant de manger ou avant d'allaiter / donner a manger a l'enfant, avant de préparer le repas, après défécation ou après avoir nettoyé un enfant après défécation	Nombre de ménages capables de citer les 3 moments critiques pour le lavage des mains / Nombre total de ménages dans les zones du RANO HP	Le questionnaire s'adresse à la mère de famille ou au chef de ménage s'il n'y a pas de femme

Comme il a été confirmé qu'aucun investissement en infrastructure n'a été effectué dans la Région Anosy et que seules des campagnes de sensibilisation ont été menées, il a été décidé avec l'USAID que les travaux de collecte dans l'Anosy se limitent à tout ce qui touche seulement la Question 1 de l'évaluation.

Dispositif opérationnel et contrôle qualité.

Les points suivants donnent les différentes mesures à prendre pour le contrôle qualité.

- Le recrutement : le recrutement des agents de collecte vise à sélectionner les meilleurs agents tant sur le plan technique que sur le plan comportemental et physique. Les agents sont choisis en fonction de leur niveau de formation, de leurs expériences en matière d'enquête, de leur aptitude linguistique et physique et surtout leur comportement et leur motivation.
- La formation : une formation très complète sera organisée pour les agents de collecte. La formation théorique en salle sera suivi d'une enquête test dont l'objectif est double : (i) tester l'administrabilité du questionnaire et (ii) tester l'aptitude des agents et identifier les éventuelles failles à corriger.
- Le dispositif opérationnel de collecte : un dispositif d'encadrement optimal des travaux de collecte sera mis en place. L'enquête optera un éventail de subordination permettant un contrôle exhaustif et rapproché sur le terrain. Un contrôleur a 3 agents enquêteurs sous son contrôle et la charge de travail d'un agent enquêteur est fixée théoriquement à 4 questionnaires par jour au plus. La supervision de la collecte est assurée par deux cadres de CAETIC Développement dont l'expert en analyse de données et un statisticien. Chaque équipe dispose d'une voiture tout terrain pour son déplacement pendant la totalité de la collecte.

METHODE DE COLLECTE DES DONNEES QUALITATIVES

A. La collecte des données qualitatives

Les questions et les sous-questions d'évaluation seront également abordées par l'approche qualitative. Les données qualitatives extraites de la revue documentaire, des entretiens avec les personnes clés et des

discussions en focus groupes aideront à expliquer les changements de comportement en matière d'hygiène, de l'utilisation de l'eau et l'assainissement attribués aux projets. Les explications des comportements négatifs par rapport aux pratiques d'hygiène et l'utilisation des infrastructures d'eau et d'assainissement seront particulièrement examinées pendant l'enquête qualitative. L'enquête qualitative capturera également les leçons apprises et les meilleures pratiques relatives aux approches des projets pour accroître la connaissance et l'utilisation de la population des installations d'assainissement et d'eau potable. Les principaux résultats de l'enquête qualitative seront utilisés pour corroborer les résultats des enquêtes statistiques et pour fournir des conclusions valides et des recommandations concrètes sur la base des observations.

A titre indicatif, les documents à consulter concernent :

- Les documents de projets et les rapports d'activités annuels disponibles
- Le Code de l'Eau
- Le Programme National d'Accès à l'Eau Potable et l'Assainissement (PNAEPA)- Période 2008 – 2012 - Ministère de l'énergie et des mines- Juin 2008
- Guide technique CLTS- Unicef 2009
- Manuel de procédure pour la mise en place des projets Eau et Assainissement –Ministère de l'énergie et des mines-2005
- La stratégie nationale de Diarano-WASH-2008
- La politique de la qualité de l'eau – Water Aid-2003

Interviews Semi-Structurés (ISS)

Trois types de guide d'entretien seront élaborés pour aider l'équipe d'évaluation à mener les SSI :

- Guide d'entretien visant le personnel clé de l'USAID en charge de la supervision des projets de Rano HP et Rano'Ala,
- Guide de questionnaire pour le personnel technique des partenaires de mise en œuvre au niveau national et local;
- Guide d'entretien avec les représentants régionaux du Ministère de l'Eau, les coordinateurs régionaux de Diarano-WASH ;
- Guide d'entretien pour les autorités communales et villageoises, les comités WASH locaux, les chefs de Centres de Santé de Base, etc.
- Guide d'entretien pour le secteur privé responsable de la gestion des infrastructures d'approvisionnement en eau et services d'assainissement.

Le nombre personnes ressources est déterminé par le point de saturation de données quand l'équipe d'évaluation n'obtient plus de nouvelles informations. Le nombre d'ISS à mener est estimé entre 10-40 par zone.

Les questions dans le guide d'ISS seront structurées autour des thèmes suivants :

- Les facteurs favorables et les obstacles à l'adoption de meilleures pratiques d'hygiène par la population
- Les raisons de satisfaction et non satisfaction sur la qualité et la pertinence des services d'eau et d'assainissement fournis
- Efficacité des initiatives communautaires visant à protéger les ressources en eau
- Les changements dans l'organisation et la gouvernance du secteur de l'eau et de l'assainissement au niveau communal

- Les impacts de l'accès et de l'utilisation de l'eau drinkable et des installations sanitaires améliorées
- Les meilleures pratiques et les leçons tirées des approches des deux projets
- Recommandations très concrètes pour la phase post-projet et les projets similaires à l'avenir

Focus Group de Discussion (FGD)

Le protocole d'enquête des focus group sera élaboré pour trianguler les attitudes et les expériences des répondants en ce qui concerne, entre autres questions, l'efficacité des stratégies de changement de comportement, l'accès aux services d'eau et d'assainissement. L'équipe d'évaluation organisera des focus groupes de discussion composés de 5-9 personnes avec les catégories suivantes : (a) les groupes mixtes des usagers des services d'eau et d'assainissement, (b) les groupes des non-utilisateurs, et (c) les groupes des femmes bénéficiaires.

Des dictaphones seront utilisés pour capturer les discussions au cours des séances de focus group. L'équipe d'évaluation accordera une attention particulière aux informations sensibles liées au genre et WASH à travers les FGD avec les femmes.

Les principaux sujets à aborder lors des sessions de FG et liés aux questions d'évaluation sont les suivants :

Module 1: Accès à l'eau drinkable (30 minutes)

1. Changements observés positifs et négatifs de l'accès et de l'utilisation de l'eau par les bénéficiaires; préciser les catégories de population les plus touchées: les enfants, les femmes, les ménages pauvres, etc. Expliquer pourquoi.
2. Les obstacles et les incitations à l'adoption de meilleures pratiques d'hygiène et de latrines
3. Évaluation des services de gestion de l'eau par les usagers : donner les raisons de satisfaction/non satisfaction (utilisation de scores)

Module 2: Pratique d'hygiène et l'utilisation des latrines (1 heure)

4. Changements de pratiques de l'hygiène et de l'utilisation des latrines améliorées (et non améliorées) par la population préciser les catégories de population les plus touchées: les enfants, les femmes, les ménages pauvres, etc. Expliquer pourquoi.
5. Evaluation des services des opérateurs d'assainissement : donner les raisons de satisfaction/non satisfaction (utilisation de scores)
6. Les obstacles et les incitations à l'adoption de meilleures pratiques d'hygiène et de latrines
7. Recommandations pour la promotion de l'utilisation des installations d'assainissement améliorées et pour modifier les comportements vers des pratiques d'hygiène améliorées.

Certaines réponses issues des SSI et FGD seront codées pour faciliter le traitement des données, comme expliqué dans la section « Analyse des données qualitatives ».

B. Formation et Organisation de l'Equipe d'Evaluation

Sous la supervision du chef de mission et du senior socio-économiste, les interviews semi-structurées et le FGD seront menés par trois socio-économistes expérimentés et familiers avec les techniques de facilitation de groupes avec les communautés rurales. Chaque animateur aura un assistant pour prendre

des notes pendant les discussions, et pour gérer les dictaphones et la durée des sessions. Des visites de courtoisie auprès des autorités locale seront effectuées par l'équipe avant l'enquête.

Dirigée par le chef d'équipe et le senior socio-économiste, la formation sur l'utilisation des guides d'entretien et de focus group durera 3 jours avant la descente sur terrain. En consultation avec l'USAID, l'équipe d'évaluation fera un test des guides d'entretien avec quelques répondants à Moramanga. Les guides seront affinés en fonction des résultats du pré-test.

Sélection des Sites

Les interviews et les discussions en focus group seront menés dans toutes les régions agro-écologiques afin de pouvoir de présenter les données qualitatives par strate. Dans chaque zone agro-écologique, une stratégie d'échantillonnage raisonnée est adoptée pour sélectionner 12 communes qui ont au moins les caractéristiques suivantes:

- Communes bénéficiaires des systèmes gravitaires et/ou de forage, incluant des villages sans défécation à l'air libre ;
- Communes avec un accès facile et dans les régions éloignées. On suppose que le niveau de l'accès du site peut avoir une incidence sur l'efficacité du projet et, par conséquent, sur les résultats et les effets liés à l'accès à l'eau drinkable et à l'assainissement.

Les communes sélectionnées sont contenus dans le Tableau ci-dessous :

Table 4 : Les communes sélectionnées pour l'enquête qualitative

Projet RANO HP

REGION	DISTRICT	COMMUNE	CARACTERISTIQUES
Analanjirifo	Fenerive Est	Antsiatsiaka	Construction de forages et réhabilitation d'AEPG dans 8 fokontany avec 5000 bénéficiaires. Non enclavés.
Atsinanana	Vatomandry	Ilaka Est	Construction et réhabilitation d'AEPG dans 3 fokontany avec 9700 bénéficiaires. Non enclavés.
Vatovavy-Fitovinany	Ikongo	Ikongo	Construction et réhabilitation d'AEPG dans 3 fokontany avec 6400 bénéficiaires. Enclavés.
Atsimo Atsinanana	Vondrozo	Vondrozo	Construction et réhabilitation d'AEPG dans 11 fokontany avec 2700 bénéficiaires. Enclavés.
Atsimo Atsinanana	Farafangana	Ivandrika	Construction de pompes (AEPP) dans 5 fokontany avec 1300 bénéficiaires. Non enclavés.
Androy	Amboasary Atsimo	Behara	Non disponible. A confirmer dès que les rapports d'activités de Rano HP sont disponibles.

Projet RANON'ALA

REGION	DISTRICT	COMMUNE	CARACTERISTIQUES
Analanjirifo	Mananara Nord	Mananara	Construction de pompes et réhabilitation d'AEPG dans 12 fokontany avec 10 000 bénéficiaires. Non enclavés.
Analanjirifo	Mananara Nord	Antanambe	Construction de pompes dans 7 fokontany avec 6100 bénéficiaires. Enclavés.
Sofia	Maritandrano	Lampibe	Construction d'AEPG dans 1 fokontany avec 2100 bénéficiaires.

Comme les données qualitatives seront principalement utilisées pour analyser les impacts des projets sur les changements de comportement des bénéficiaires et leur accès à l'eau drinkable et à l'assainissement, aucune étude qualitative sera menée dans les communes sans les interventions de Rano HP et Ranon'Ala.

Table 5 : nombre d'ISS et de FGD par strate.

	Nord Est SOFIA	Est: Analanjirifo- Atsinanana	Sud Est: Atsimo Atsinanana	Sud	Total
Communes Rano HP avec infrastructures d'eau	0	7	5	0	12
Communes Ranon'Ala avec infrastructures d'eau	1	9	0	0	10
Communes avec pompes et	Lampibe	Antanambe-	Ivandrika		4

enclavées/non enclavées		Antsiatsiaka			
Communes avec AEPG et enclavées/non enclavées		Ilaka Est-Mananara	Ikongo - Vondrozo		4
Commune dans le Sud avec activités d'assainissement				Besara (*)	1
total échantillon communes	1	4	3	1	9
ISS Personnes ressources (estimatif)	10	40	30	10	90
FGD avec usagers/non utilisateurs	2	8	6	1	17
FGD avec femmes	1	2	2	1	6
Nombre Total de FGD	3	10	8	2	23

(*) Commune à confirmer quand les rapports d'activités de Rano HP seront disponibles si des activités sur la promotion de l'assainissement et des pratiques d'hygiène y ont été réalisées.

L'enquête qualitative durera **20 jours** incluant la formation des facilitateurs et des assistants, ainsi que le test des guides d'entretien.

CONTROLE QUALITE: PREVISION ET GESTION DES RISQUES

ETAPES	RISQUES POTENTIELS	MESURES A PRENDRE
Elaboration des outils de collecte de données	Omission/oubli de certaines questions dans les questionnaires et autres outils de collecte	S'assurer de bien vérifier que TOUTES les grandes questions du Cadre conceptuel ont été transcrites et détaillées dans les questionnaires et autres outils de collecte correspondants. Exercice de vérification à faire ensemble par toute l'équipe !
Recrutement et Formation des Agents de terrain	Agent incapable malgré un bon CV	Analyse des CV, interview et mise à l'épreuve pendant le Pré-test Prévoir de pré-recruter des agents enquêteurs de réserve dès le début
Pré-test pour : Test d'administrabilité du Questionnaire et des Guides SSI et FGD Test de capacité du personnel d'enquête sur terrain	<ul style="list-style-type: none"> - Problème d'organisation sur le terrain - Difficulté d'utilisation des tablettes pour les Agents Enquêteurs - Gap et erreur identifiées dans le masque de saisie programmé dans les tablettes pendant le pré-test 	<ul style="list-style-type: none"> - Sites des pré-tests à déterminer et à visiter à l'avance pour mieux se préparer - Renforcer les agents enquêteurs en leur donnant encore plus de temps à s'exercer à la manipulation des machines - Rectifier la programmation des masques et les réinstaller dans les tablettes
Collecte de données et informations sur le terrain (tous les détails qui concernent l'organisation technique et logistique de l'enquête ménages seront consignés dans les manuels d'enquête des Contrôleurs et des Superviseurs)	<ul style="list-style-type: none"> - Panne technique des tablettes - Autonomie des batteries des tablettes - Vol des tablettes - Difficulté d'accès (routes impraticables à cause de la météo, insécurité) 	<ul style="list-style-type: none"> - Prévoir des solutions pour recharger les batteries en route (Doter chaque équipe de groupe électrogène pour recharger les batteries) - utiliser les tablettes des Contrôleurs en cas d'urgence en attendant des tablettes de remplacement éventuelles - Prévoir le remplacement des Fokontany échantillons défectueux par le choix d'un Fokontany appartenant à la même Commune. Cette opération revient au superviseur après accord de l'Expert en Traitement de données. Pour cela on donnera le code 999 à tous les FKT de remplacement pour éviter le blocage du système informatique

	<ul style="list-style-type: none"> - Risque d'usure physique et de fatigue des enquêteurs à cause de la longue durée des travaux de terrain 	<ul style="list-style-type: none"> - Faire passer un TDR du palu à tous les enquêteurs avant leur sélection pour se préparer à les prémunir de médicaments préventifs et constituer un pool d'enquêteurs de réserve pour remplacer les enquêteurs malades. Dotation d'un lot de vitamine C pour les équipes de collecte
Confection des masques de traitement de données et remplissage de la base de données via des fichiers envoyés par internet	<ul style="list-style-type: none"> - Détérioration des fichiers durant le transfert par internet - Détection d'imperfections dans les fichiers de collecte par les masques de traitement 	<ul style="list-style-type: none"> - Demander aux superviseurs de renvoyer les fichiers à problème - Retour à des opérations d'apurement manuel des fichiers défailants avec possible recours aux Superviseurs et Contrôleurs
Confection des programmes de tabulation et d'analyse	<ul style="list-style-type: none"> - Incohérence avec le modèle d'analyse défini préalablement - Détection d'imperfections dans les variables saisies dans la base de données qui rendent impossibles certains traitements à effectuer 	<ul style="list-style-type: none"> - Révision minutieuse des programmes de tabulation pour contrôle de cohérence avec le modèle d'analyse défini au préalable - Apurement manuel de la base avec possible retour aux Superviseurs et contrôleurs pour confirmation
Traitement des données et édition des tableaux de résultats, conduite des tests d'hypothèses	Détérioration des fichiers de résultats	Traitement à recommencer

METHODE D'ANALYSE DES RESULTATS

A. Méthode d'Analyse des Données Quantitatives

Dans le cadre de l'évaluation du projet WASH financé par USAID, la collecte de données quantitative vise à rassembler les informations a été réalisée dans le but de rassembler les informations requises pour la mesure des principaux indicateurs en relation avec les questions d'évaluation d'une part et pour l'application de la technique de la double différence d'autre part. Pour cette étude, deux critères de stratification ont été retenus pour l'agrégation des résultats. Il s'agit d'une part de la région agro écologique en 4 strates (Nord-Est, Est, Sud Est et Sud) et d'autre part le type en 2 strates (Forage, gravitaire). Toutefois, il convient de signaler que ces deux critères de stratification ne seront pas croisés.

L'analyse des données s'effectue à trois niveaux :

- Primo : réaliser des analyses descriptives sur les caractéristiques des ménages et de la population cible tout en calculant et en mettant en exergue les principaux indicateurs. Appliquer les règles de décision LQAS sur les Fokontany pour analyser la situation infra strate.
- Secundo : procéder à l'application de la technique de la double différence sur les principaux indicateurs (comparaison avec la situation avant projet puis avec la situation sans projet) avec test systématique de la significativité. Cette étape fera appel aux données du baseline et celles des ménages témoins.
- Tertio : procéder à analyse explicative des résultats atteints. Réaliser des analyses factorielles et/ou des régressions permettant de dégager les éventuelles facteurs favorables ou facteurs limitant par rapport aux questions d'évaluation.

Il convient toutefois d'apporter les précisions suivantes au niveau de certains indicateurs :

- Aucun indicateur ne sera agrégé au niveau Commune car la méthodologie d'échantillonnage ne le permet pas. Les données et indicateurs seront agrégés d'une part au niveau des 4 régions agro-climatique et d'autre part selon les 2 types d'infrastructure en eau (AEPG/AEPP et FPMH/PPMH).
- Pour certains indicateurs, la population de référence doit être redéfinie pour améliorer leur signification et leur pertinence. Par exemple pour les indicateurs relatifs au lavage des mains la population de référence doit être les mères de famille au lieu des ménages.

B. Méthode d'Analyse des Données Qualitatives

La matrice d'évaluation incluant les sous- questions d'évaluation servira de matrice d'analyse des données qualitatives. La masse de données recueillies à partir de la revue documentaire, des SSI et des FGD sera réduite par un processus d'assemblage, de classification, et de simplification de ces données afin d'en tirer les principales conclusions relatives aux questions d'évaluation. Pour l'aider à organiser les données, l'équipe d'enquête utilisera un canevas qui résume les grandes lignes de chaque interview réalisé.

Certaines modalités de réponse seront déjà codifiées dans les guides d'entretien. Un masque de saisie sera conçu et testé pour saisir ces données codées. Les données saisies seront organisées dans des diagrammes et des tableaux à double entrée pour mettre en évidence les résultats préliminaires significatifs. L'équipe d'évaluation fera la triangulation des données qualitatives avec les données quantitatives recueillies pour analyser la fiabilité et la validité des observations et en tirer les principales conclusions portant sur chaque question d'évaluation et sous- question.

ANNEX III: DATA COLLECTION INSTRUMENTS

QUESTIONNAIRE ET FICHE FOKONTANY

USAID

EVALUATION DES PROJETS WASH : RANO HP et RANOn'ALA

ENQUETE AUPRES DES MENAGES DANS LA ZONE D'INTERVENTION DES PROJETS

Cette enquête rentre dans le cadre de l'évaluation des projets Eau-Hygiène-Assainissement financés par l'USAID au cours de la période de 2009 à 2013 et ayant pour objectif principale de promouvoir aux communautés rurales de Madagascar un large accès à des services fiables et économiquement viables en eau et assainissement pour améliorer la santé, et les conditions de vie de la population.

Pour ce faire, un échantillon de ménages a été choisi de manière aléatoire pour répondre à quelques questions relatives à leurs caractéristiques d'une part puis à des questions en relation avec les projets. Ainsi, votre fokontany fait partie de l'échantillon dans lequel 19 ménages doivent être enquêtés. Votre ménage a eu la chance d'être choisi et je voudrais vous demander votre disponibilité à participer à cette enquête qui va durer normalement 20 à 30 minutes.

Mais tout d'abord, je tiens à vous signaler que toutes les informations que vous fournirez resteront strictement confidentielles et la participation à cette enquête est totalement volontaire. La base de données restera en usage interne pour l'évaluation des projets et aucune information individuelle ne sera publiée. J'espère cependant que vous accepterez de participer à cette enquête car votre opinion est particulièrement importante.

Je répondrais à toutes vos questions avant et après l'interview.

Nom de l'enquêteur :	Immatriculation : _ _
Date d'enquête :	
Nom du contrôleur :	Immatriculation : _ _
Date de contrôle du questionnaire :	

IDENTIFICATION

REGION :	_ _
DISTRICT :	_ _ _
COMMUNE :	_ _ _
FOKONTANY :	_ _ _
PROJET WASH : 1=RANO HP ; 2=RANOn'ALA	_
Statut de la commune : 1=Bénéficiaire ; 2=Témoin	_
VILLAGE (HAMEAU):	
MENAGE ENQUETE :	_ _

COORDONNEES GPS (contrôleur):	X :
	Y :

I- COMPOSITION DU MENAGE

Taille du ménage :

		01	02	03
M1	Nom (Lister tous les membres du ménage en commençant par le chef du ménage)			
M2	Sexe: 1- Homme; 2- Femme)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
M3	Quel âge a-t-il (elle) à son dernier anniversaire?	<input type="text"/>	<input type="text"/>	<input type="text"/>
M4	Quel est son lien de parenté avec le Chef de ménage (1)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
M5	Quelle est sa situation matrimoniale? (Pour les 13 ans et plus): 1- Marié 2- Célibataire; 3- Divorcé ou séparé; 4- Veuf	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
M6	Est-ce qu'il (elle) va à l'école ? 1- Oui; 2- Non	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
M7	Si moins de 15 ans, quel est le motif de non scolarisation ? 1- Ecole éloignée, 2- L'école n'est pas intéressante/ pas besoin d'aller à l'école 3- Nécessité de travailler/ manque d'argent 4- N'a jamais été à l'école	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
M8	Est-ce qu'il (elle) sait lire ?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
M9	Quel est son niveau d'instruction actuel ? (2)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
	<i>Pour les 15 ans et plus</i>			
M10	Exerce t-il (elle) au moins une activité ? 1- Oui; 2- Non	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
M11	Si NON, Pourquoi ? 1- Etudiant, élève 2- Infirmes, invalide, vieux 3- Chômeur, femme à la maison	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
M12	Si Oui, quelle est votre activité principale ? (3)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
M13	Etes-vous membre d'un VOI ou impliqué dans la gestion des ressources en eau ? (1-Oui, 2-Non)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
	Pour les femmes âgées de 15 ans et plus			
M14	Est-elle enceinte ? 1- Oui; 2- Non	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
M15	Est-elle allaitante ? 1- Oui; 2- Non	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

(1) **Lien de parenté :** 1- Chef de ménage ; 2- Epouse (x) ; 3- Fils(le) ; 4- Parents ; 5- Petits enfants ; 6- Autre famille ; 7- Salarié/domestique

(2) **Niveau d'instruction** : 1- Illettré ; 2- alphabétisé ; 3- Primaire ; 4- Secondaire premier cycle ; 5- Secondaire second cycle ; 6- Supérieur

(3) **Activité** : 1- Agriculture/élevage ; 2- Pêche ; 3- Emploi permanent formel ; 4- Commerce ; 5- Artisanat/transformation ; 6- Extraction minière ; 7- Salarié journalier/occasionnel ; 8- Autres

II- CARACTERISTIQUES DE L'HABITAT ET EQUIPEMENT DE LA MAISON

H1	Quel type de logement occupez-vous ? 1- Maison individuelle 2- Chambre 3- Autres :	<input type="checkbox"/>
H2	Quelle est la nature du toit? 1- Tôle/tuile 2- Chaume/Feuille 3- Autres :	<input type="checkbox"/>
H3	Quelle est la nature du mur? 1- Brique cuite ou crue/ Parpaing / béton / pierre 2- Terre / torchis 3- Planche / écorce 4- Tôle/fût 5- Autre :	<input type="checkbox"/>
H4	Quelle est la nature du parquet? 1- Carreaux / ciment 2- Planche 3- Pierre 4- Terre battue avec Balatum ou natte 5- Terre battue sans natte 6- Autre	<input type="checkbox"/>
H5	Avez-vous des latrines? 1=Oui ; 2=Non	<input type="checkbox"/>
H6	Si Oui, Est-ce que je peux voir vos latrines ? 1-Oui ; 2-Non	<input type="checkbox"/>
H61	Murs : 1-Oui, 2-Non	<input type="checkbox"/>
H62	Toit : 1-OUI ; 2-Non	<input type="checkbox"/>
H63	Porte / Rideau : 1-Oui ; 2-Non	<input type="checkbox"/>
H64	Type : 1-Toilette à l'anglaise ou à la turque (porcelaine/plastique) 2-Dalle sanplat, dalle en ciment lissé 3-Plate forme en bois 4-Plate forme en terre 5-Trous ouvert 6-Tinette 7-Autre :	<input type="checkbox"/>
H65	Y a-t-il un balai ? 1-Oui ; 2-Non	<input type="checkbox"/>

H66	Y a-t-il un endroit pour le lavage des mains à proximité ? 1-Oui ; 2-Non	<input type="checkbox"/>
H67	Y a-t-il de l'eau à cet endroit ? 1-Oui ; 2-Non	<input type="checkbox"/>
H68	Si Oui, quel récipient est utilisé pour l'eau ? 1-Robinet 2-Seau 3-Autre ;.....	<input type="checkbox"/>
H69	Y a-t-il un produit de nettoyage des mains à cet endroit ? 1-Aucun 2-Savon 3-Détergent liquide 4-Cendre 2-Autre :.....	<input type="checkbox"/>
H7	Quelle énergie utilisez-vous pour la cuisson? 1- Bois de chauffe 2- Charbon de bois 3- Pétrole lampant 4- Autres :.....	<input type="checkbox"/>
H8	Quel type d'éclairage utilisez-vous? 1- Générateur/groupe électrogène 2- Bougie 3- Pétrole lampant 4- Graisse 5- Autre :.....	<input type="checkbox"/>
	Quel est le nombre de pièces occupées (Hors cuisine/toilettes) ?	<input type="checkbox"/>
H9	Quel est votre statut d'occupation ? 1- Propriétaire 2- Locataire	<input type="checkbox"/>
H10	Avez-vous les équipements suivants: Voiture Moto Charrette Pirogue Bicyclette Poste téléviseur Poste radio Téléphone portable	<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>

III-REVENU DU MENAGE

	QUESTIONS	REPOSES	CODE
R1	Quelles sont les différentes sources de revenus monétaires du ménage ?	1-Vente des produits agricoles 2-Artisanat/transformation 3-Mine 4-Commerce/restauration 5-Transport 6-Salaire permanent 7-Salaire journalier 8-Transfert	
R2	Si 1-Vente des produits agricoles Quels produits : produits vivriers <input type="radio"/> Produits de rente <input type="radio"/> Produits d'élevage <input type="radio"/> Produits de la pêche <input type="radio"/>	Périodicité : 1-jour ; 2-semaine ; 3-mois, 4-année Montant Ar :.....	_ _ _ _ _
R3	Si 2-Artisanat/transformation	Périodicité : 1-jour ; 2-semaine ; 3-mois, 4-année Montant Ar :.....	_ _ _ _ _
R4	Si 3-Mine Quel type de produit : Or <input type="radio"/> Pierres précieuses <input type="radio"/> Autres : <input type="radio"/>	Périodicité : 1-jour ; 2-semaine ; 3-mois, 4-année Montant Ar :.....	_ _ _ _ _
R5	Si 4-Commerce/restauration Quel type de commerce : Gargote/restau <input type="radio"/> Epicerie <input type="radio"/> Collecte de produits <input type="radio"/> Autre : <input type="radio"/>	Périodicité : 1-jour ; 2-semaine ; 3-mois, 4-année Montant Ar :.....	_ _ _ _ _
R6	Si 5-Transport Quel type de moyen utilisé : Voiture <input type="radio"/> Charrette <input type="radio"/> Pirogue <input type="radio"/> Autre :..... <input type="radio"/>	Périodicité : 1-jour ; 2-semaine ; 3-mois, 4-année Montant Ar :.....	_ _ _ _ _
R7	Si 6-Salaire permanent	Nombre de mois par an : Montant mensuel Ar:	_ _ _ _ _ _
R8	Si 7-salaire journalier	Nombre de jour par an : Montant par jour Ar:	_ _ _ _ _ _ _

R9	Si 8-Transfert monétaire	Périodicité : 1-jour ; 2-semaine ; 3-mois, 4-année Montant Ar :	_ _ _ _ _
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IV-UTILISATION DU REVENU MONETAIRE ET EMPRUNT

	QUESTIONS	REPONSES	CODE
U1	<p>Quels sont les différents postes de dépenses du ménage ? Est-ce que vous pouvez les classer par ordre d'importance ?</p> <p>Réponse : 1- Oui, 2- Non Si 1 (Oui) préciser l'ordre d'importance des selon le montant annuel dépensé: 1 pour le premier, 2 pour le second, ...</p>	<p>1-Alimentation 2-PPN non alimentaire 3-Education des enfants 4-Santé 5-Habillement 6-Logement 7-Obligations sociales 8-Investissement</p>	<p><input type="checkbox"/><input type="checkbox"/> <input type="checkbox"/><input type="checkbox"/> <input type="checkbox"/><input type="checkbox"/> <input type="checkbox"/><input type="checkbox"/> <input type="checkbox"/><input type="checkbox"/> <input type="checkbox"/><input type="checkbox"/> <input type="checkbox"/><input type="checkbox"/> <input type="checkbox"/><input type="checkbox"/> <input type="checkbox"/><input type="checkbox"/></p>
U2	<p>Votre ménage est-il membre d'un système de crédit ?</p>	<p>1-Oui 2-Non</p>	<p><input type="checkbox"/><input type="checkbox"/></p>
U3	<p>Est-ce que votre ménage a une épargne monétaire?</p>	<p>1-Oui 2-Non</p>	<p><input type="checkbox"/><input type="checkbox"/></p>
U31	<p>Si Oui (1), comment / où?</p>	<p>1-Thésaurisation (à la maison) 2-Chez une institution financière 3-SILC/VSLA 4-Autre :.....</p>	<p><input type="checkbox"/><input type="checkbox"/></p>
U32	<p>A quoi destinez-vous cette épargne ?</p>	<p>1-en prévision des festivités familiales 2-en prévision des maladies 3-pour les activités de production 4-en prévision de la période de soudure 5- Scolarisation des enfants 6-Autres :.....</p>	<p><input type="checkbox"/><input type="checkbox"/> <input type="checkbox"/><input type="checkbox"/></p>
U4	<p>Utilisez-vous d'autres formes d'épargne ?</p>	<p>1-Oui 2-Non</p>	<p><input type="checkbox"/><input type="checkbox"/></p>
U41	<p>Si Oui, les quelles ?</p>	<p>1-Sous forme de bijoux 2-Sous forme de bétail 3-Autre :.....</p>	<p><input type="checkbox"/><input type="checkbox"/></p>
U5	<p>Etes-vous membre d'un SILC/VSLA ?</p>	<p>1-Oui 2-Non</p>	<p><input type="checkbox"/><input type="checkbox"/></p>
U51	<p>Ce SILC/VSLA est-il toujours opérationnel ?</p>	<p>1-Oui 2-Non</p>	<p><input type="checkbox"/><input type="checkbox"/></p>
U52	<p>Combien avez-vous déposé comme cotisations ou dépôt au SILC/VSLA (Ar)</p>		<p><input type="checkbox"/><input type="checkbox"/><input type="checkbox"/><input type="checkbox"/><input type="checkbox"/><input type="checkbox"/></p>
U53	<p>Combien de fois les membres de votre SILC/VSLA se sont réunis depuis les 3 derniers mois ?</p>	<p>1- Moins de 3 fois 2-Plus de 3 fois</p>	<p><input type="checkbox"/><input type="checkbox"/></p>
U54	<p>Assistez-vous régulièrement aux réunions de votre SILC/VSLA ?</p>	<p>1-Oui 2-Non</p>	<p><input type="checkbox"/><input type="checkbox"/></p>

U55	Avez-vous déjà emprunté au C ILS/VSLA?	1-Oui 2-Non	<input type="checkbox"/>
U551	Si OUI, combien avez-vous emprunté la dernière fois (Ar)?		<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>
U552	Avez-vous remboursé en totalité l'emprunt au SILC/VSLA ?	1-100% 2-non-échu 3-échu mais non remboursé	<input type="checkbox"/>
U553	Pour quelle utilisation est cet emprunt ?	1-construction de latrines/ achat de dalles 2- construction de points d'eau 3- Pour des activités économiques 4-Achat des équipements de la maison, 5-Pour faire face à la période de soudure, 6- Besoin urgent/maladie, 7- Education des enfants, 8-construction/réparation de la maison 9Autres :.....	<input type="checkbox"/>
U6	Avez-vous déjà emprunté de l'argent (Autre que SILC/VSLA)?	1-Oui 2-Non	<input type="checkbox"/>
U61	Si Oui (1), à quelle périodicité ?	1-Plusieurs fois par an 2-Une fois par an 3-Tous les deux ans ou plus 4-Occasionnel/non déterminé	<input type="checkbox"/>
U62	Qui est votre dernier créancier ?	1-Institution financière 2-Usurier 3-Famille/ami (sans intérêt)	<input type="checkbox"/>
U63	Quelle est l'utilisation de cet argent ?	1-Pour des activités économiques 2-construction de latrines/ achat de dalles 3- construction de points d'eau 4-Construction/réparation de la maison 5-Achat des équipements de la maison, 6-Besoin urgent/maladie, 7-Pour faire face à la période de soudure, 8-Education des enfants, 9- Autres :.....	<input type="checkbox"/>

- les chiffres sur le nombre de villages SDAL

MODULE 3 : ORGANISATION ET GESTION DU SECTEUR EAH

1. Décrire l'organisation et la gestion du secteur EAH au niveau communal mis en place avec les projets ?
2. Est-ce que cette organisation et gestion est conforme au code de l'eau, à la PSNA et au manuel des procédures du secteur de l'EAH ?
3. Quels sont les recommandations à formuler pour la phase post-projet et pour les projets similaires pour le futur?

FICHE DE COLLECTE FOKONTANY

A utiliser par le contrôleur, cette fiche sert à collecter les informations sur le Fokontany qui rentrent dans l'organisation de la collecte ou pour compléter cette dernière.

REGION :
 DISTRICT :
 COMMUNE :
 FOKONTANY :
 INFORMATEUR:.....
 Nombre de village (Hameau) constituant le Fokontany :.....
 Nombre total de ménage :.....
 Effectif de la population :.....
 Référence :
 Pas de tirage (NB ménage/19) à communiquer aux contrôleurs :.....
 Couverture radio : RNM ; Radio locale Autre Radio
 Couverture télé :TVM ; Autre Télé
 Réseau téléphonique : TELMA ; AIRTEL ; ORANGE
(les infrastructures concernées sont celles mises en place par les projets dont infrastructures construites par le biais du projet, celles existantes et qui ont été améliorées par le projet).

Hameau (dénomination)	Type d'infrastructure d'eau 1-Gravitaire (BF et/ou BI) 2-Pompage (BF et /ou BI) 3-Puits/Forage avec pompe 4-Puits/Forage couvert sans pompe 5-Autre 0-Aucune	Observation
	<input type="checkbox"/>	
	<input type="checkbox"/>	
	<input type="checkbox"/>	
	<input type="checkbox"/>	
	<input type="checkbox"/>	
	<input type="checkbox"/>	

Y a-t-il un comité de gestion de l'eau au niveau du Fokontany ? 1=Oui ; 2=Non
 Si Oui, le comité organise t-il des réunions périodiques ? 1=Oui, 2=Non
 Y a-t-il une prévision de budget pour l'entretien et la maintenance ? 1=Oui ; 2=Non
 Y a-t-il un plan ou un système de collecte de fonds ? 1=Oui ; 2=Non
 Le Fokontany est-il déclaré SDAL (Sans défécation à l'air libre), 1=Oui ; 2=Non
 Si Oui, en quelle année ?
 (Demander à voir le certificat si c'est possible)

FICHE DE COLLECTE HAMEAU

A utiliser par l'agent enquêteur, cette fiche sert à collecter les informations sur les infrastructures au niveau hameau qui sera jointe à la fiche Fokontany.

REGION :
 DISTRICT :
 COMMUNE :
 FOKONTANY :

HAMEAU : (Les hameaux concernés par cette fiche sont ceux visités par les agents de collecte, c'est-à-dire les hameaux de résidence des ménages échantillons)

INFORMATEUR:.....

Nombre total approximatif de ménage ou (Toit):.....

INFRASTRUCTURE D'EAU :

(les infrastructures concernées sont celles mises en place par les projets dont infrastructures construites par le biais du projet, celles existantes et qui ont été améliorées par le projet).

Type d'infrastructure	Nombre de point d'eau	Etat	
		Fonctionnel	Non fonctionnel
Réseau gravitaire	Borne fontaine publique : <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>	<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>	<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>
	Branchement privé : <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>	<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>	<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>
Réseau par pompage	Borne fontaine publique : <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>	<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>	<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>
	Branchement privé <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>	<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>	<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>
Forage avec pompe	Nombre <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>	<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>	<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>
Puits avec pompe	Nombre <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>	<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>	<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>
Forage couvert sans pompe	Nombre <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>	<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>	<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>
Puits couvert sans pompe	Nombre <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>	<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>	<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>

Y a-t-il un comité de gestion de l'eau au niveau du Hameau ? 1=Oui ; 2=Non

Si Oui, le comité organise t-il des réunions périodique ? 1=Oui, 2=Non

Y a-t-il une prévision de budget pour l'entretien et la maintenance ? 1=Oui ; 2=Non

Y a-t-il un plan ou un système de collecte de fonds ? 1=Oui ; 2=Non

INFRASTRUCTURES SANITAIRES

Existence de latrines publiques : 1-Oui ; 2-Non

Existence de Centre de Santé : 1-Oui ; 2-Non

Existence d'une école : 1-Oui ; 2-Non

Caractéristiques des latrines	Publiques	CSB	Ecole
Murs : 1-Oui, 2-Non	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Toit : 1-OUI ; 2-Non	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Porte / Rideau : 1-En bois ou autres matériaux ; 2-Rideau ; 3-Aucun	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Type : 1-Toilette à l'anglaise ou à la turque (porcelaine/plastique) 2-Dalle sanplat, dalle en ciment lissé 3-Plate forme en bois	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

4-Plate forme en terre 5-Trous ouvert 6-Tinette 7-Autre :.....			
Y a-t-il un balai ? 1-Oui ; 2-Non	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Y a-t-il un endroit pour le lavage des mains à proximité ? 1-Oui ; 2-Non	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Y a-t-il de l'eau à cet endroit ? 1-Oui ; 2-Non	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Si Oui, quel récipient est utilisé pour l'eau ? 1-Robinet 2-Seau 3-Autre ;.....	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Y a-t-il un produit de nettoyage des mains à cet endroit ? 1-Aucun 2-Savon 3-Détergent liquide 4-Cendre 2-Autre :.....	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

CANEVAS DE RAPPORTAGE DES DISCUSSIONS DE FOCUS GROUP

Nom de l'interviewer : /___/ 1. Clément 2. Florette 3. RR 4. Eléonore	N° CANEVAS : /___/___/___/	Région : District :
Date : /___/___/_____/	Liste des Fokontany :	Commune :
Noms :	Institution :	Fonction :

MODULE 1: ACCES A L'EAU DRINKABLE

8. Quels sont les changements observés positifs et négatifs de l'accès et de l'utilisation de l'eau par les bénéficiaires ?
9. Quelles sont les catégories de population les plus touchées ? Pourquoi ?
10. Quels sont les obstacles et les incitations à l'augmentation de l'accès à l'eau drinkable ?
11. Noter la satisfaction des usagers par rapport aux services de gestion de l'eau :

1-Non Satisfait 2-Peu satisfait 3-Satisfait

Facteurs de satisfaction	Note (1-3)	Raisons de satisfaction et non satisfaction / Observations
Proximité de la source		
Débit de l'eau		
Disponibilité de l'eau pendant l'année		
Qualité de l'eau (propreté, goût, odeur, couleur, etc.)		
Montant à payer à la pompe		
Montant à payer des branchements particuliers		
Facilité de paiement		
Horaires d'ouverture des bornes fontaines		
Durée d'attente auprès des bornes fontaines		
Communication sur le service d'eau		
Prise en compte des plaintes des usagers		

Facteurs de satisfaction	Note (1-3)	Raisons de satisfaction et non satisfaction / Observations
Capacité d'organisation du gestionnaire de l'eau (maintenance du réseau, transparence de gestion, propreté des points d'eau, etc.)		
Collaboration des autorités villageoises/ communales et le gestionnaire du service d'eau		

12. Recommandations pour une meilleure gestion de l'eau et une augmentation de l'accès à l'eau

MODULE 2: PRATIQUE D'HYGIENE ET L'UTILISATION DES LATRINES

1. Quels sont les changements de pratiques de l'hygiène par la population ?
2. Quels sont les obstacles et les incitations à l'adoption de meilleures pratiques d'hygiène ?
3. Quels sont les changements de pratiques de l'utilisation des latrines améliorées par la population ?
4. Quelles sont les catégories de population les plus touchées ? Pourquoi ?
5. Est-ce que les latrines non améliorées sont de plus en plus utilisées par la population ? Pourquoi ?
6. Quels sont les obstacles et les incitations à l'adoption de latrines améliorées ?
7. Noter la satisfaction des usagers des services des opérateurs d'assainissement :

1-Non Satisfait 2-Peu satisfait 3-Satisfait

Facteurs de satisfaction	Note (1-3)	Raisons de satisfaction et non satisfaction / Observations
Qualité des dalles (lavable, sans fissure, confort, etc.)		
Prix des dalles		
Facilité de paiement		
Délai de livraison		
Proximité des opérateurs d'assainissement		
Communication sur la construction de latrines et les produits d'assainissement		
Information et Communication sur l'hygiène et l'assainissement (CLTS)		

Facteurs de satisfaction	Note (1-3)	Raisons de satisfaction et non satisfaction / Observations
Collaboration des autorités villageoises/ communales et les comités WASH		

8. Recommandations pour la promotion de l'utilisation des installations d'assainissement améliorées et pour modifier les comportements vers des pratiques d'hygiène améliorées.

**CANEVAS DE RAPPORT DES FOCUS GROUP ET DES SSI – EVALUATION DES PROJETS
RANO HP ET RANON’ALA**

Nom du facilitateur : /__/ 5. Clément 6. Florette 7. RR 8. Eléonore	N° canevas : /__ / __ / __ / __ /	Région : District :
Date : /__ / __ / ____ / Nombre de personnes participantes : FG1 /__ / dont /__ / femmes FG2 /__ / dont /__ / femmes FG3 /__ / dont /__ / femmes	Liste des Fokontany bénéficiaires des projets :	Commune :

QUESTION D’EVALUATION 1 : ADOPTION DES PRATIQUES D’HYGIENE PAR LES POPULATIONS

1. Quelles sont les activités d’éducation réalisées par les projets Rano HP et Ranon’Ala pour :
 - les pratiques des 3 messages clés de Diorano-Wash, notamment le lavage des mains avec du savon aux moments critiques ?
 - les pratiques de stockage de l’eau drinkable et les méthodes de traitement d’eau ?
2. Quelles sont les pratiques d’hygiène expliquées et les méthodes de traitement de l’eau introduites ?
3. Est-ce que les méthodes de sensibilisation ont été adaptées aux cibles ?
4. Est-ce que les activités ont couvert la commune ? les villages desservis par les infrastructures d’adduction d’eau ? les villages sensibilisés sur l’assainissement ?
5. Quels sont les changements généralisés sur les pratiques d’hygiène constatés au niveau des villages ?
6. Quels sont les facteurs favorables et les obstacles à l’adoption des pratiques d’hygiène améliorée par la population ?
7. Quels sont les impacts de l’adoption des pratiques d’hygiène améliorées sur l’incidence des maladies diarrhéiques ?
8. Quelles sont les bonnes pratiques et les leçons apprises tirées des approches des projets pour favoriser un changement positif de comportement ?
9. Quelles sont les recommandations pour l’après-projet et pour les projets similaires dans l’avenir ?

QUESTION D’EVALUATION 2.1. : AUGMENTATION DE L’ACCES ET DE L’UTILISATION DE L’EAU DRINKABLE

1. Est-ce que les points d’eau réalisés respectent les normes prescrites dans les décrets d’application du code de l’eau et dans le manuel des procédures du secteur de l’EAH, en ce qui concerne les critères suivants ?

2. Quels sont les services fournis par les partenaires privés pour l'eau drinkable ? Depuis quand ?
3. Les points d'eau sont-ils toujours fonctionnels ? Pourquoi ?
4. Quels sont les changements observés positifs et négatifs de l'accès et de l'utilisation de l'eau par les bénéficiaires ?
5. Quelles sont les catégories de population les plus touchées ? Pourquoi ?
6. Quels sont les facteurs favorisant et défavorisant l'accès à l'eau drinkable ?
7. Est-ce que des comités de points d'eau et des comités de bassins ont été mis en place *selon les spécifications du décret sur les agences de bassins* ? Sont-ils toujours fonctionnels ?
8. Est-ce que les aires d'assainissement et les périmètres de protection des captages ont été mis en place ?
9. Quelles sont les activités pour la protection des ressources en eaux confiées par les projets aux communautés ?
10. Est-ce que les activités pour la protection des ressources en eaux confiées par les projets aux communautés peuvent être pérennes ?

QUESTION D'EVALUATION 2.2. : ADOPTION DE L'ASSAINISSEMENT AMELIORE

1. Est-ce que les projets Rano HP et Rano'Ala ont bien appliqué le CLTS ?
2. La mise en œuvre du CLTS avec les appuis des projets a-t-elle abouti à l'existence de villages SDAL, de communes SDAL ? Pourquoi ?
3. Est-ce qu'il y a eu d'autres approches pour le développement de la latrinisation ? Lesquelles ? Quels sont les résultats obtenus ?
4. Quels sont les services fournis par les partenaires privés pour l'assainissement ? Depuis quand ?
5. Ces services d'assainissement sont-ils toujours fonctionnels ? Pourquoi ?
6. Quels sont les facteurs favorisant et les contraintes pour l'adoption de latrines améliorées par les populations dans les zones des projets ?
7. Quels sont les changements de pratiques de l'hygiène par la population ?
8. Quels sont les obstacles et les incitations à l'adoption de meilleures pratiques d'hygiène ?
9. Quels sont les changements de pratiques de l'utilisation des latrines améliorées par la population ?
10. Quelles sont les catégories de population les plus touchées ? Pourquoi ?
11. Est-ce que les latrines non améliorées sont de plus en plus utilisées par la population ? Pourquoi ?
12. Quels sont les obstacles et les incitations à l'adoption de latrines améliorées ?
13. Quelles sont les bonnes pratiques et les leçons apprises tirées des approches des projets pour favoriser un changement positif de comportement ?

QUESTION D’EVALUATION 3 : SATISFACTION DES USAGERS SUR LES SERVICES FOURNIS PAR LE SECTEUR PRIVE

1. Quel est le niveau de satisfaction des besoins en eau de la population ? (résumé des scoring des FG)
2. Quel est le niveau de satisfaction des besoins de latrines de la population ? (résumé des scoring des FG)
3. Quels ont été les problèmes techniques rencontrés par les gestionnaires de l’eau?
4. Quels ont été les problèmes rencontrés qui ont rendu difficile la GESTION de l’exploitation de ces infrastructures DURANT ET APRES la fin des projets ?
5. Est-ce que les mesures prises pour améliorer le service de l’eau ont été efficaces ? Lesquelles ?
6. Quelles sont les conditions de pérennité du service du gestionnaire ?
7. Quels sont les risques que l’exploitation des services de l’eau s’arrête ?
8. Quels ont été les problèmes techniques rencontrés par les opérateurs EAH ?
9. Quels ont été les problèmes rencontrés qui ont rendu difficile la GESTION des sanimarchés DURANT ET APRES la fin des projets ?
10. Quelles sont les mesures prises pour améliorer la vente des latrines et le service d’assainissement ? sont-elles efficaces ?
11. Quelles sont les conditions de pérennité des sanimarchés ?
12. Quels sont les risques que la vente des latrines s’arrête ?
13. Décrire l’organisation et la gestion du secteur EAH au niveau communal mis en place avec les projets ?
14. Quels sont les avantages et les faiblesses de cette organisation et mode de gestion ?
15. Dans quels domaines l’autorité communale et le Comité WASH sont AUTONOMES pour bien gérer le secteur de l’E&A ? pourquoi ?
16. Dans quels domaines l’autorité communale et le Comité WASH sont FAIBLES pour bien gérer le secteur de l’E&A ? pourquoi ?
17. Quel est le niveau de collaboration entre le secteur privé, les autorités locales, les comités WASH au niveau des communes et les usagers ?
18. Quelles sont les recommandations à formuler pour la phase post-projet et pour les projets similaires pour le futur en vue d’augmenter la satisfaction des usagers de l’E&A et de pérenniser les services ?

Remplir le tableau suivant

REGION	COMMUNE	Nb fokontany bénéficiaires de IEC sur WASH	Nb fokontany SDAL	Nb ménages dans les FKT SDAL

GUIDE D'INTERVIEWS SEMIS-STRUCTUREES POUR LES COORDINATEURS REGIONAUX DE DIORANO-WASH

Nom de l'interviewer : /___/ 9. Clément 10. Florette 11. RR 12. Eléonore		N° questionnaire : /___/___/___/	Région : District :
Date : /___/___/_____/		Fokontany :	Commune :
Noms :		Institution :	Fonction :
Sexe : /___/ 1. M 2. F	Dates de collaboration avec le projet : Du mois /___/ Année /_____/	Responsabilités par rapport au projet :	
	Au mois/___/ Année /_____/		

MODULE 1 : PRATIQUES D'HYGIENE

10. Quelles sont les activités d'éducation réalisées par les projets Rano HP et Ranon'Ala pour :
 - les pratiques des 3 messages clés de Diorano-Wash, notamment le lavage des mains avec du savon aux moments critiques ?
 - les pratiques de stockage de l'eau drinkable et les méthodes de traitement d'eau ?
11. Quelles sont les pratiques d'hygiène expliquées et les méthodes de traitement de l'eau introduites ?
12. Est-ce que les méthodes de sensibilisation ont été adaptées aux cibles ?
13. Est-ce que les activités ont couvert la commune ? les villages desservis par les infrastructures d'adduction d'eau ? les villages sensibilisés sur l'assainissement ?
14. Quels sont les changements généralisés sur les pratiques d'hygiène que vous avez constatés au niveau des villages ?
15. Quelles sont les bonnes pratiques et les leçons apprises tirées des approches des projets pour favoriser un changement positif de comportement ?

MODULE 2 : ADOPTION DE L'ASSAINISSEMENT AMELIORE

14. Est-ce que les projets Rano HP et Ranon'Ala ont bien appliqué le CLTS ?
15. La mise en œuvre du CLTS avec les appuis des projets a-t-elle abouti à l'existence de villages SDAL, de communes SDAL ? Pourquoi ?

16. Est-ce qu'il y a eu d'autres approches pour le développement de la latrinisation ? Lesquelles ?
Quels sont les résultats obtenus ?
17. Quels sont les services fournis par les partenaires privés pour l'assainissement ? Depuis quand ?
18. Ces services d'assainissement sont-ils toujours fonctionnels ? Pourquoi ?
19. Quels sont les facteurs favorisant et les contraintes pour l'adoption de latrines améliorées par les populations dans les zones des projets ?

20. Quelles sont les bonnes pratiques et les leçons apprises tirées des approches des projets pour favoriser un changement positif de comportement ?

Collecter si disponible :

- les chiffres sur les villages et les ménages touchés par les activités d'éducation-communication sur les messages WASH,
- les chiffres sur le nombre de villages SDAL

MODULE 3 : ORGANISATION ET GESTION DU SECTEUR EAH

4. Décrire l'organisation et la gestion du secteur EAH au niveau communal mis en place avec les projets ?
5. Quels sont les avantages et les faiblesses de cette organisation et mode de gestion ?

6. Quelles sont les recommandations à formuler pour la phase post-projet et pour les projets similaires pour le futur?

GUIDE D'INTERVIEWS SEMIS-STRUCTUREES POUR LES AUTORITES COMMUNALES ET VILLAGEOISES, LES COMITES WASH LOCAUX ET LES COMITES DE GESTION DE L'EAU

Nom de l'interviewer : /___/		N° questionnaire : /___/___/___/	Région :
13. Clément			
14. Florette			
15. RR			District :
16. Eléonore			
Date : /___/___/_____/		Fokontany :	Commune :
Noms :		Institution :	Fonction :
Sexe : /___/	Dates de collaboration avec le projet :	Responsabilités par rapport au projet :	
3. M	Du mois /___/		
4. F	Année /_____/		

	Au mois/ ___/_____ Année / ____/_____/	
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MODULE 1 : IMPLICATION DE VOTRE ENTITE DANS LE SECTEUR E&A

P1. Dans quelles activités de gestion du secteur E&A votre entité est-elle impliquée ?		
1. Elaboration de PCDEA, analyse des besoins	/___/	Commentaires
2. Sensibilisation communautaire : (préciser quels thèmes :.....	/___/	
3. Passation de marchés de construction	/___/	
4. Maîtrise d’ouvrage des constructions	/___/	
5. Sélection du gestionnaire d’infrastructure	/___/	
6. Contrôle/Suivi des procédures de gestion	/___/	
7. Contrôle qualité des services d’E&A	/___/	
8. Suivi de la maintenance des infrastructures	/___/	
9. Elaboration de plans de protection des ressources en eau	/___/	
10. Mise en vigueur des Dina de protection		
11. Suivi de la mise en œuvre des plans de protection	/___/	
12. Déclenchement et mise en œuvre de CLTS	/___/	
13. Suivi de construction de latrines		
14. Certification des villages SDAL	/___/	
15. Autres :.....	/___/ /___/ /___/	

P2. Dans quels domaines l’autorité communale et le Comité WASH sont AUTONOMES pour bien gérer le secteur de l’E&A ? POURQUOI ?			
	Commune	WASH	
1. Elaboration de PCDEA, analyse des besoins	/___/	/___/	Commentaires
2. Sensibilisation communautaire : (préciser quels thèmes :.....	/___/	/___/	
3. Passation de marchés de construction	/___/	/___/	
4. Maîtrise d’ouvrage des constructions	/___/	/___/	
5. Sélection du gestionnaire d’infrastructure	/___/	/___/	
6. Contrôle/Suivi des procédures de gestion	/___/	/___/	
7. Contrôle qualité des services d’E&A	/___/	/___/	

8. Suivi de la maintenance des infrastructures			
9. Elaboration de plans de protection des ressources en eau	/__/ /__/	/__/ /__/	
10. Mise en vigueur des Dina de protection			
11. Suivi de la mise en œuvre des plans de protection	/__/ /__/	/__/ /__/	
12. Déclenchement et mise en œuvre de CLTS	/__/ /__/	/__/ /__/	
13. Suivi de construction de latrines	/__/ /__/	/__/ /__/	
14. Certification des villages SDAL	/__/ /__/	/__/ /__/	
15. Autres :.....			

P3. Dans quels domaines les capacités de gestion de l'autorité communale et du Comité WASH sont encore FAIBLES ? POURQUOI ?

	Commune	WASH	
1. Elaboration de PCDEA, analyse des besoins	/__/ /__/	/__/ /__/	Commentaires
2. Sensibilisation communautaire : (préciser quels thèmes :.....	/__/ /__/	/__/ /__/	
3. Passation de marchés de construction	/__/ /__/	/__/ /__/	
4. Maîtrise d'ouvrage des constructions	/__/ /__/	/__/ /__/	
5. Sélection du gestionnaire d'infrastructure	/__/ /__/	/__/ /__/	
6. Contrôle/Suivi des procédures de gestion	/__/ /__/	/__/ /__/	
7. Contrôle qualité des services d'E&A	/__/ /__/	/__/ /__/	
8. Suivi de la maintenance des infrastructures			
9. Elaboration de plans de protection des ressources en eau	/__/ /__/	/__/ /__/	
10. Mise en vigueur des Dina de protection			
11. Suivi de la mise en œuvre des plans de protection	/__/ /__/	/__/ /__/	
12. Déclenchement et mise en œuvre de CLTS	/__/ /__/	/__/ /__/	
13. Suivi de construction de latrines	/__/ /__/	/__/ /__/	
14. Certification des villages SDAL	/__/ /__/	/__/ /__/	
15. Autres :.....			

P4. Quelles sont les recommandations pour améliorer la gouvernance du secteur de l'EA dans votre commune ?

Commentaires

MODULE 2 : APPROPRIATION DES SERVICES ET DES INFRASTRUCTURES EN E&A PAR LA COMMUNAUTE

P5. Donnez des exemples de facteurs qui ont encouragé l'utilisation des services E&A par les ménages

ADDUCTION D'EAU		LATRINES AMELIOREES	
1. Forte sensibilisation des usagers (indiquer le moyen le plus efficace) :	/___/	1. Forte sensibilisation des usagers	/___/
2. Points d'eau à proximité	/___/	2. Propagation des déchets	/___/
3. Ménages satisfaits de la qualité de l'eau	/___/	3. Propagation des maladies	/___/
4. Prix abordable aux BF	/___/	4. Confort/propreté des latrines	/___/
5. Mesures de promotion des BI	/___/	5. Prix abordable des dalles	/___/
6. Coût abordable des abonnements	/___/	6. Mesures de promotion des dalles	/___/
7. Ménages satisfaits du rapport prix/qualité de l'eau	/___/	7. Coût abordable des constructions de latrines	/___/
8. Sources traditionnelles polluées/loin	/___/	8. Ménages satisfaits du rapport prix/qualité des dalles	/___/
9. Coupures peu fréquentes	/___/	9. Bénéficiaires des SILC/VSLA	/___/
10. Bénéficiaires des SILC/VSLA		10. Autres :	
11. Bénéficiaires de JIRAMORA		
12. Autres :	
.....			
.....			
Commentaires		Commentaires	

P6. Donnez des exemples de facteurs qui limitent encore l'utilisation des services E&A par les ménages

ADDUCTION D'EAU		LATRINES AMELIOREES	
1. Manque de sensibilisation des usagers	/___/	1. Manque de sensibilisation	/___/
2. Sources traditionnelles à proximité	/___/	2. Prix des dalles encore cher	/___/
3. Ménages non-satisfaits de la qualité de l'eau drinkable	/___/	3. Faible pouvoir d'achat des ménages	/___/
4. Prix de l'eau encore cher aux BF	/___/	4. Arrêt de promotion des dalles	/___/
5. Prix des BI encore cher	/___/	5. Coût élevé des constructions de latrines	/___/
6. Coût élevé des abonnements	/___/		
7. Faible pouvoir d'achat des ménages	/___/		

8. Ménages non-satisfaits du rapport prix/qualité de l'eau /___/ 9. Insuffisance de débit /___/ 10. Coupures fréquentes /___/ 11. Longue queue aux BF /___/ 12. Autres : /___/ /___/	6. Faible capacité de stockage des latrines /___/ 7. Mauvaise qualité des dalles/buses /___/ 8. Ménages peu satisfaits du rapport prix/qualité des dalles /___/ 9. Autres : 10.
Commentaires	Commentaires
P7. Donnez des exemples de facteurs qui encouragent et limitent l'adoption du lavage des mains avec le savon par les ménages ?	
ENCOURAGENT	LIMITENT
1. Forte sensibilisation des usagers (indiquer le moyen le plus efficace) : /___/ 2. Points d'eau à domicile /___/ 3. Points d'eau à proximité /___/ 4. Prix des savons abordable /___/ 5. Autres :	1. Manque de sensibilisation /___/ 2. Prix des savons encore cher /___/ 3. Faible pouvoir d'achat des ménages /___/ 4. Arrêt de promotion des branchements à domicile /___/ 5. Coût élevé des branchements /___/ 6. Ménages peu satisfaits de la qualité des services d'eau 7. Autres :
Commentaires	Commentaires
P8. Existe-t-il des groupes SILC/VSLA opérationnels dans votre localité ?	P9. Si OUI, pensez-vous que ce système facilite l'accès aux produits et services de E&A ?
Oui /___/ Combien sont fonctionnels ? /___/	Commentaires

Non /___/	
P10. Quels sont les problèmes rencontrés par la création et le fonctionnement des groupes SILC/VSLA dans votre localité ?	P11. Quelles sont les améliorations nécessaires au bon fonctionnement des SILC/VSLA ?
Commentaires	Commentaires

GUIDE D'INTERVIEWS SEMIS-STRUCTUREES POUR LES CHEFS DE CENTRES DE SANTE DE BASE

Nom de l'interviewer : /___/		N° questionnaire : /___/___/___/	Région :
17. Clément 18. Florette 19. RR 20. Eléonore			District :
Date : /___/___/_____/		Fokontany :	Commune :
Noms :		Institution :	Fonction :
Sexe : /___/	Dates de collaboration avec le projet :	Responsabilités par rapport au projet :	
5. M	Du mois /___/		
6. F	Année /_____/		
	Au mois/___/		
	Année /_____/		

IMPACTS DE L'ACCES A L'E&A SUR LA SANTE COMMUNAUTAIRE

C1. Dans quels domaines le CSB a-t-il bénéficié des appuis du projet en matière d'E&A ?		
1. Aucune collaboration	/___/	Commentaires
2. Construction/réhabilitation de points d'eau	/___/	
3. Construction/réhabilitation de latrines		
4. Formation en EAH (préciser quel thème) :		
.....	/___/	
	/___/	
5. Collaboration dans la sensibilisation communautaire (préciser quel thème) :		

<p>.....</p> <p>.....</p> <p>6. Partage de données des indicateurs</p> <p>7. Autres :.....</p> <p>.....</p>	<p>/__/</p> <p>/__/</p> <p>/__/</p>	
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C2. Quels sont les changements constatés au sein de votre CSB et de votre localité suite à ces appuis ?

Commentaires

C3. L'incidence des maladies diarrhéiques dans votre commune a-t-elle diminué ou non ? Pourquoi ?

INDICATEUR A COLLECTER : taux d'incidence de la diarrhée des enfants 0-5 ans depuis 2009-2013

2009 :

2010 :

2011 :

2012 :

2013 :

Commentaires

C4. Quels sont les impacts de l'adoption des pratiques d'hygiène sur l'incidence des maladies diarrhéiques ?

Commentaires

C5. Quelles sont les recommandations sur les approches de promotion des pratiques d'hygiène et d'adduction d'eau ?

Commentaires

GUIDE D'INTERVIEWS SEMIS-STRUCTUREES POUR LES REPRESENTANTS REGIONAUX DU MINISTERE DE L'EAU

Nom de l'interviewer : /__/ 21. Clément 22. Florette	N° questionnaire : /__ / __ / __ /	Région :
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23. RR 24. Eléonore			District :
Date : /__ /__ /____/		Fokontany :	Commune :
Noms :		Institution :	Fonction :
Sexe : /__/ 7. M 8. F	Dates de collaboration avec le projet : Du mois /__/ Année /____/ Au mois/____/ Année /____/	Responsabilités par rapport au projet :	

MODULE 1 : APPRECIATION DES SERVICES D'ADDUCTION D'EAU DRINKABLE

D1. Donnez les caractéristiques des points d'eau réalisés par le projet Rano HP ou Rano'Ala ?

Type d'infrastructure	Nombre de point d'eau	Etat	
		Fonctionnel	Non fonctionnel
Réseau gravitaire	Borne fontaine publique : _ _	_ _	_ _
	Monoblocs/ saniblocs : _ _	_ _	_ _
	Branchement privé : _ _	_ _	_ _
Réseau par pompage	Borne fontaine publique : _ _	_ _	_ _
	Monoblocs/ saniblocs : _ _	_ _	_ _
	Branchement privé _ _	_ _	_ _
Forage avec pompe	Nombre _ _	_ _	_ _
Puits avec pompe	Nombre _ _	_ _	_ _
16. Mois de début d'exploitation.....20..... 17. Contrat de gestion signé avec la commune /__/ 18. Contrat de gestion signé avec le Ministère de l'Eau /__/ 19. Date de contrat.....20..... 20. Prix de vente unitaire en Ar..... a. Litre :..... b. Seau c. Bidon d. Mètre cube.....		Commentaires	
Avez-vous réalisé des analyses de l'eau dernièrement ?		Oui /__/ Non /__/	

Si OUI, quand ?		
1. Analyse biologique réalisée le		
2. Analyse physico-chimique réalisée le.....		
D2. Est-ce que les points d'eau réalisés respectent les normes prescrites dans les décrets d'application du code de l'eau et dans le manuel des procédures du secteur de l'EAH, en ce qui concerne les critères suivants ? Répondez par Oui-Non-Ne sait pas (O/N/NSP)		
8. La qualité de l'eau distribuée	/___/	Commentaires
9. La quantité d'eau par rapport au nb de population	/___/	
10. L'analyse physico-chimique	/___/	
11. L'analyse bactériologique de l'eau	/___/	
12. Les traitements de l'eau	/___/	
13. Le volume de réservoir	/___/	
14. Le nombre de points d'eau	/___/	
15. L'organisation de la gestion des points d'eau	/___/	
16. Le tarif appliqué	/___/	
17. Le recouvrement de la redevance	/___/	
18. Autres :.....	/___/	
.....		
.....		
.....		
.....		
.....		
.....		

MODULE 2 : ORGANISATION ET GESTION DU SECTEUR EAH

7. Décrire l'organisation et la gestion du secteur EAH au niveau communal mis en place avec les projets ?
8. Quels sont les avantages et les faiblesses de cette organisation et gestion du secteur de l'EAH ?
9. Quels sont les recommandations à formuler pour la phase post-projet et pour les projets similaires pour le futur?

MODULE 3 : PROTECTION DES RESSOURCES EN EAU

1. Est-ce que des comités de points d'eau et des comités de bassins ont été mis en place *selon les spécifications du décret sur les agences de bassins* ? Sont-ils toujours fonctionnels ?
2. Est-ce que les aires d'assainissement et les périmètres de protection des captages ont été mis en place ?
3. Quelles sont les activités pour la protection des ressources en eaux confiées par les projets aux communautés ?
4. Est-ce que les activités pour la protection des ressources en eaux confiées par les projets aux communautés peuvent être pérennes ?

Quelles sont les bonnes pratiques et les leçons apprises des approches des projets pour augmenter l'accès à l'eau drinkable?

P12. Quelles sont les initiatives communautaires qui ont amélioré l'accès à l'E&A ?		
1. Aucune initiative 2. Main-d'œuvre/matériaux pour construction de points d'eau 3. Fonds pour construction de points d'eau 4. Création de comités de bassins 5. Clôture des sources de captage 6. Mise en vigueur de Dina de protection des ressources en eau 7. Autres :	/___/ /___/ /___/ /___/ /___/ /___/ /___/	Commentaires
P13. Quels sont les impacts de ces initiatives communautaires sur la gestion et l'utilisation des services d'E&A ? Si aucun impact, expliquez pourquoi ?		
Commentaires		

GUIDE D'INTERVIEWS SEMIS-STRUCTUREES POUR LES GESTIONNAIRES DES POINTS D'EAU ET LES ENTREPRENEURS DE JIRAMORA

Nom de l'interviewer : /___/		N° questionnaire : /___/___/___/	Région :
25. Clément 26. Florette 27. RR 28. Eléonore			District :
Date : /___/___/_____/		Fokontany :	Commune :
Noms :		Entreprise :	Fonction :
Sexe : /___/	Dates de collaboration avec le projet :	Responsabilités dans l'Entreprise :	
9. M 10. F	Du mois /___/ Année /_____/		
	Au mois/___/ Année /_____/		

		Nb d'employés : /__/_/
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MODULE 1 : GESTION DES INFRASTRUCTURES EN EAU

P1. Donnez les caractéristiques des infrastructures que vous gérez dans le cadre du projet Rano HP ou Ranon'Ala ?

Type d'infrastructure	Nombre de point d'eau	Etat	
		Fonctionnel	Non fonctionnel
Réseau gravitaire	Borne fontaine publique : _ _ _	_ _	_ _
	Monoblocs : _ _ _	_ _	_ _
	Branchement privé : _ _ _	_ _	_ _
Réseau par pompage	Borne fontaine publique : _ _ _	_ _	_ _
	Monoblocs : _ _ _	_ _	_ _
	Branchement privé _ _ _	_ _	_ _
Forage avec pompe	Nombre _ _ _	_ _	_ _

<p>21. Mois de début d'exploitation.....20.....</p> <p>22. Date de contrat avec la commune.....20.....</p> <p>23. Prix de vente unitaire en Ar.....</p> <p style="margin-left: 20px;">a. Litre :.....</p> <p style="margin-left: 20px;">b. Seau</p> <p style="margin-left: 20px;">c. Bidon</p> <p style="margin-left: 20px;">d. Mètre cube.....</p>		<p>Commentaires</p>
<p>Avez-vous réalisé des analyses de l'eau dernièrement ?</p> <p>Si OUI, quand ?</p> <p>3. Analyse biologique réalisée le</p> <p>4. Analyse physico-chimique réalisée le.....</p>		<p>Oui /__/_/ Non /__/_/</p>

P2. Aviez-vous des difficultés au début de l'exploitation de ces infrastructures ? Si OUI, quels ont été les problèmes TECHNIQUES qui ont ralenti l'exploitation ?

<p>16. Aucune difficulté majeure</p> <p>17. Forte présence de fer</p> <p>18. Insuffisance de débit</p> <p>19. Fonctionnement des chargeurs solaires</p> <p>20. Compréhension de la mise en œuvre du contrat de gestion déléguée,</p> <p>21.</p> <p style="margin-left: 20px;">Autres :.....</p> <p>.....</p>	<p>/__/_/</p> <p>/__/_/</p> <p>/__/_/</p> <p>/__/_/</p> <p>/__/_/</p> <p>/__/_/</p> <p>/__/_/</p>	<p>Commentaires</p>
--	---	---------------------

.....			
P3. Quels ont été les problèmes rencontrés qui ont rendu difficile la GESTION de l'exploitation de ces infrastructures DURANT ET APRES la fin des projets ?			
	Durant	Après	
1. Mise en place du contrat de gestion déléguée	/__/	/__/	Commentaires
2. Connaissance insuffisante des spécifications du code de l'eau et des décrets d'applications	/__/	/__/	
3. Manque de responsabilités de la commune	/__/	/__/	
4. Faible capacité de contrôle de gestion par la commune	/__/	/__/	
5. Manque de sensibilisation des usagers	/__/	/__/	
6. Faible pouvoir d'achat des ménages	/__/	/__/	
22. Faible recouvrement des frais de maintenance	/__/	/__/	
7. Faible stratégie de vente/promotion des BP			
8. Faible stratégie de vente/promotion des BS	/__/	/__/	
9. Faible capacité de l'équipe de vente	/__/	/__/	
10. Faible capacité de l'équipe de maintenance	/__/	/__/	
11. Mauvaise qualité de l'eau	/__/	/__/	
12. Fréquentes coupures	/__/	/__/	
13. Insuffisance de débit	/__/	/__/	
14. Autres :.....	/__/	/__/	
.....			
.....			
P4. Quelles sont les mesures prises pour améliorer le service d'adduction d'eau ?			
Commentaires			
P5. Quels sont les effets de ces mesures sur l'accès à l'eau et la qualité du service ?			
1. Peu d'effet	/__/		Commentaires
2. Hausse des usagers de BF	/__/		
3. Hausse des usagers de BI	/__/		
4. Accès des pauvres au service d'eau	/__/		
5. Faible coupure d'eau	/__/		
6. Meilleure gestion des infrastructures	/__/		
7. Meilleure collaboration avec la commune	/__/		
8. Autres :.....	/__/		
.....			
.....			
P6. Parmi vos clients, sur quels aspects portent souvent les plaintes formulées avec le service actuel?			

1. Aucune	/___/	Commentaires
2. Fréquentes coupures	/___/	
3. Horaires d'ouverture des BF non respectées	/___/	
4. Prix à la pompe cher	/___/	
5. Coût élevé des BI	/___/	
6. Coût élevé des abonnements	/___/	
7. Mauvaise qualité de l'eau	/___/	
8. Insuffisance de débit	/___/	
9. Insuffisance de débit en période d'été	/___/	
10. Longue queue dans les BF	/___/	
11. Peu d'information sur le service	/___/	
12. Autres :.....		

P7. Dans quels domaines l'autorité communale et le Comité WASH sont AUTONOMES pour bien gérer le secteur de l'E&A ? POURQUOI ?

	Commune	WASH	
1. Elaboration de PCDEA, analyse des besoins	/___/	/___/	Commentaires
2. Sensibilisation communautaire : (préciser quels thèmes :.....	/___/	/___/	
3. Passation de marchés de construction	/___/	/___/	
4. Maîtrise d'ouvrage des constructions	/___/	/___/	
5. Sélection du gestionnaire d'infrastructure	/___/	/___/	
6. Contrôle/Suivi des procédures de gestion	/___/	/___/	
7. Contrôle qualité des services d'E&A			
8. Suivi de la maintenance des infrastructures	/___/	/___/	
9. Elaboration de plans de protection des ressources en eau	/___/	/___/	
10. Mise en vigueur des Dina de protection	/___/	/___/	
11. Suivi de la mise en œuvre des plans de protection	/___/	/___/	
12. Déclenchement et mise en œuvre de CLTS	/___/	/___/	
13. Suivi de construction de latrines	/___/	/___/	
14. Certification des villages SDAL	/___/	/___/	
15. Autres :.....			

P8. Dans quels domaines les capacités de gestion de l'autorité communale et du Comité WASH sont encore FAIBLES ? POURQUOI ?			
	Commune	WASH	
1. Elaboration de PCDEA, analyse des besoins	/__/	/__/	Commentaires
2. Sensibilisation communautaire : (préciser quels thèmes :.....	/__/	/__/	
3. Passation de marchés de construction	/__/	/__/	
4. Maîtrise d'ouvrage des constructions	/__/	/__/	
5. Sélection du gestionnaire d'infrastructure	/__/	/__/	
6. Contrôle/Suivi des procédures de gestion			
7. Contrôle qualité des services d'E&A	/__/	/__/	
8. Suivi de la maintenance des infrastructures			
9. Elaboration de plans de protection des ressources en eau	/__/	/__/	
10. Mise en vigueur des Dina de protection	/__/	/__/	
11. Suivi de la mise en œuvre des plans de protection			
12. Déclenchement et mise en œuvre de CLTS	/__/	/__/	
13. Suivi de construction de latrines			
14. Certification des villages SDAL	/__/	/__/	
15. Autres :.....	/__/	/__/	
	/__/	/__/	
	/__/	/__/	
	/__/	/__/	
	/__/	/__/	
P9. Quelles sont les recommandations pour améliorer la gouvernance du secteur de l'EA dans votre commune ?			
Commentaires			
P10. Quelles sont les conditions de pérennité de votre service ?			
Commentaires			
P11. Quels sont les risques que votre exploitation s'arrête ?			
Commentaires			

GUIDE D'INTERVIEWS SEMIS-STRUCTUREES POUR LES OPERATEURS D'EAH

Nom de l'interviewer : /___/ 29. Clément 30. Florette 31. RR 32. Eléonore	N° questionnaire : /___/___/___/	Région : District :
Date : /___/___/_____/	Fokontany :	Commune :
Noms :	Entreprise :	Fonction :
Sexe : /___/ 11. M 12. F	Dates de collaboration avec le projet : Du mois /___/ Année /_____/	Responsabilités dans l'Entreprise : Nb d'employés : /___/

MODULE 1 : GESTION DE L'EXPLOITATION DES SANIMARCHES

A1. Donnez les caractéristiques des SERVICES d'assainissement que vous gérez dans le cadre du projet Rano HP ou Ranon'Ala ?		
1. Fabrication de dalles SANPLAT 2. Fabrication de dalles porcelaines et autres 3. Livraison et pose de dalles 4. Construction de latrines 5. Gestion de saniblocs/ monoblocs 6. Mois de début d'exploitation.....20..... 7. Autres :.....	/___/ /___/ /___/ /___/ /___/ /___/ /___/	Commentaires
A2. Aviez-vous des difficultés au démarrage de l'exploitation du SANIMARCHE ? Si OUI, quels ont été les problèmes TECHNIQUES qui ont ralenti l'exploitation ?		
1. Aucune difficulté 2. Manque de formation des maçons 3. Manque de matériaux adaptés 4. Manque de fonds de démarrage 5. Faible stratégie de vente/marketing/promotion	/___/ /___/ /___/ /___/ /___/	Commentaires

6. Manque de sensibilisation des usagers	/__/		
7. Autres :.....	/__/		
.....	/__/		
....			
A3. Avez-vous d'autres activités lucratives qui contribuent au fonctionnement du SANIMARCHE ?			
Commentaires			
A4. Quels ont été les problèmes rencontrés qui ont rendu difficile la GESTION du Sanimarché DURANT ET APRES la fin des projets ?			
	DURAN T	APRE S	
1. Manque de sensibilisation des usagers	/__/	/__/	Commentaire s
2. Manque de fonds de roulement	/__/	/__/	
3. Faible capacité de production de dalles	/__/	/__/	
4. Faible pouvoir d'achat des ménages	/__/	/__/	
5. Prix élevé des dalles/latrines	/__/	/__/	
6. Faible stratégie de vente/promotion	/__/	/__/	
7. Insuffisance du personnel de vente	/__/	/__/	
8. Faible marge de profit unitaire	/__/	/__/	
9. Mauvaise qualité des dalles/ buses	/__/	/__/	
10. Manque de service de vidange	/__/	/__/	
11. Autres :.....	/__/	/__/	
.....			
....			
A5. Quelles sont les mesures prises pour améliorer la vente des latrines et le service d'assainissement ?			
Commentaires			
A6. Quels sont les effets de ces mesures sur l'accès des ménages aux latrines améliorées ?			
1. Peu d'effet	/__/	Commentaires	
2. Hausse des usagers de latrines améliorées	/__/		
3. Hausse des usagers de latrines partagées	/__/		
4. Accès des pauvres aux latrines	/__/		
5. Meilleure capacité de production	/__/		
6. Meilleure gestion/profit des SANIMARCHES	/__/		
7. Autres :.....	/__/		
.....			
....			
A7. Parmi vos clients, sur quels aspects portent souvent les plaintes formulées avec le service actuel?			

1. Aucun	/__/	Commentaires
2. Fissure des dalles/buses	/__/	
3. Coût élevé des dalles	/__/	
4. Coût élevé du transport des produits	/__/	
5. Pas de livraison à domicile	/__/	
6. Fréquente vidange à faire	/__/	
7. Peu d'information sur les produits	/__/	
8. Autres :.....	/__/	
.....		
....		

MODULE 2 : GOUVERNANCE DU SECTEUR DE L'E&A

A8. Dans quels domaines l'autorité communale et le Comité WASH sont AUTONOMES pour bien gérer le secteur de l'E&A ? POURQUOI ?

	Commune	WASH	
1. Elaboration de PCDEA, analyse des besoins	/__/	/__/	Commentaires
2. Sensibilisation communautaire : (préciser quels thèmes :.....	/__/	/__/	
.....			
.....	/__/	/__/	
.....	/__/	/__/	
3. Déclenchement et mise en œuvre de CLTS	/__/	/__/	
4. Suivi de construction de latrines	/__/	/__/	
5. Certification des villages SDAL			
6. Autres :.....			
.....			
.....			

A9. Dans quels domaines les capacités de gestion de l'autorité communale et du Comité WASH sont encore FAIBLES ? POURQUOI ?

	Commune	WASH	
1. Elaboration de PCDEA, analyse des besoins	/__/	/__/	Commentaires
2. Sensibilisation communautaire : (préciser quels thèmes :.....	/__/	/__/	
.....			
.....	/__/	/__/	
3. Déclenchement et mise en œuvre de CLTS	/__/	/__/	
4. Suivi de construction de latrines	/__/	/__/	
5. Certification des villages SDAL	/__/	/__/	
6. Autres :.....	/__/	/__/	
.....			
.....			

A10. Quelles sont les recommandations pour améliorer la gouvernance du secteur de l'EA dans votre commune ?			
Commentaires			
A11. Quelles sont les conditions de pérennité de votre service ?			
Commentaires			
A12. Quels sont les risques que votre exploitation s'arrête ?			
Commentaires			

ANNEX IV: SOURCES OF INFORMATION

DISTRICT	COMMUNE	FOKONTANY	Ménages enquêtés
MANANARA-AVARATRA	ANTANAMBAOBE	Antanambaohely	19
		Antanetilava	19
	ANTANAMBE	Ambodimanga	19
		Malotrandro	19
	ANTANANANIVO	Antenina	19
	IMORONA	Vohitralanana	19
	MANANARA AVARATRA	Ambatotsimahatamana	19
		Mahambolona	19
		Antanankoro	19
		Soavinarivo	19
	SANDRAKATSY	Andaparatihely	19
		Ambodihitsina	19
		AmbodimangaTolongoina	19
MANDRITSARA	MAROTANDRANO	Antsiraka	19
		Lampibe	19
SOANIERANA IVONGO	AMBAHOABE	Antsirabe Sandrangato	19
		Ambarimay	19
	ANDAPAFITO	Marolambo	19
	MANOMPANA	Moronivo	19
		Antanandava	19
		Manompana	19

Tableau 4b: Région ANALANJIROFO (zone RANO HP)

DISTRICT	COMMUNE	FOKONTANY	Ménages enquêtés
FENERIVE EST	ANTSIATSIKA	Ambodihazina	19
		Antsiatsiaka	19
		Tananambo	19
		Vohimafaitra	19
		Andranomiditra	19
	SARANAMBANA	Ambahavala	19
		Ambodihiasina	19
		Ambolozatsy	19
		Ampangamena	19
		Andranomiditra	19
		Ihazomena	19
		Saranambana	19
		Ambodilaitra	19

		Ambilona	19
VAVATENINA	AMBODIMANGAVALO	Ambodirafia II	19
		Vohiboangy	19
		Ambodimangavalo	19
	MIARINARIVO	Ambodiampaly	19
		Androrangabe	19
		Miarinarivo	19
		Sahavatana	19

Tableau 4c: Région AT SINANANA

DISTRICT	COMMUNE	FOKONTANY	Ménages enquêtés
BRICKAVILLE	AMBOHIMANANA	Ambodialampona	19
		Ambohimanana	19
	ANIVORANO EST	Antseranambe	19
		TanambaoSahaniveno	19
		Ambalatenina Sud	19
		Anivorano Est	19
		Antsirakaomby	19
	LOHARIANAVA	Marofisokina	19
		TanambaoSanjaviavy	19
		Fierenana	19
		Andonabe	19
		Leokasina	19
VATOMANDRY	ILAKA EST	Ambalakondro	19
		Andranoambia	19
	NIAROVANA CAROLINE	Ambinanindrano	19
		Bonaka	19
		Sahabe	19
		Ambalacakay	19
		Ambalamangahazo	19
	TSARASAMBO	Ampaho	19
		Sahatalevana	19

Tableau 4d: Région VATO VAVY FITOVINANY

DISTRICT	COMMUNE	FOKONTANY	Ménages enquêtés
IKONGO	IKONGO	Marovitsika	19
		Tsarakianja Est	19
		Andromba	19
		Tsaratanteraka	19
	MAROMIANDRA	Ambohitsara B	19
		Sandranantakely	19

		Maromiandra	19
MANAKARA ATSIMO	ANTEZA	Anteza	19
		Lavakianja	19
		Mahavelona	19
	FENOMBY	Ambohimahasoa	19
	TATAO	Mahatsinjoriaka	19
VOHIPENO	ANDEMAKA	Andemaka	19
		Marohanka II	19
		Vohitromby	19
	ILAKATRA	Ambodiara I	19
		Ambohitsara III	19
		Havohavo	19
		Ilaka	19
		Amboangibe	19
		Tanambao II	19

Tableau 4e:Région ATSIMO ATSIANANA

DISTRICT	COMMUNE	FOKONTANY	Ménages enquêtés
FARAFANGANA	IVANDRIKA	Mahazoarivo	19
	VOHIMASY	Iandraina	19
		Tsararano	19
		Vohibano	19
		Vohibe	19
VANGAINDRANO	MATANGA	Anezandava	19
		Tanatana	19
		Vohimena	19
		Ambalengo	19
		Mahavelo	19
		Marofotra	19
		Matanga	19
	SOAMANOVA	Madiaoandro	19
		Maronosy	19
		Maroroka	19
VONDROZO	VOHIMARY	Ratsimanahy	19
		Zafinivola	19
		Vohitsidy	19
	VONDROZO	Antevongo	19
		Masitafika	19
		Vondrozo	19

Tableau 4f:RégionANOSY

DISTRICT	COMMUNE	FOKONTANY	Ménages enquêtés
AMBOASARY- ATSIMO	BEHARA	Analagna	19
		Ankikiririka	19
		BeharaAmbony	19
		Fandiova	19
		TanambaoBehara	19
		Antsivavy	19
		Helobondro	19
		Maromena	19
		BerentyToby	19
		EsatraBevia	19
	SAMPONA	AnkilibeVahavola	19
		Elanja Centre	19
		Nasambola	19
	TANANDAVA SUD	AmbanizaMorafeno	19
		Ampotobato	19
		Tanandava Sud II	19
		AmbolovohitseTanamiray	19
		Ambolovohitse Ville	19
		Maroaiiky II	19
		Berano Ville	19
Ankara Berano	19		

En ce qui concerne les ménages témoins, les 12 villages prévus ont été réalisés et les 228 ménages témoins ont été enquêtés comme le montre le tableau suivant :

Tableau 5 : Situation des échantillons témoins

STRATE	DUSTRICT	COMMUNE	FOKONTANY	Ménages enquêtés
Zone RANON'ALA	MANANARA-AVARATRA	AMBATOHARANANA	Ambodisambalahy	19
			Ambodimangatelo	19
VATOVAVY FITOVINANY	MANAKARA ATSIMO	AMBILA	Vohipanany	19
			Vohilava	19
ATSIMO ATSINANANA	FARAFANGANA	MANAMBOTRA ATSIMO	Manambotra Sud	19
			Maroroka	19
ANALANJIROFO (Zone Rano HP)	VAVATENINA	SAHATAVY	Sazomena	19
			Mahatsinjo	19
ATSINANANA	BRICKAVILLE	VOHITRANIVONA	Sarotriva	19
			Ampasimbe	19
ANOSY	AMBOASARY- ATSIMO	AMBOASARY ATSIMO	Magnaly	19
			Ianakafy	19

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