

Terminal Evaluation Summary Sheet

1 Outline of the Project	
Country: Madagascar	Project Title: Project for the Improvement of Rural Water Supply Management and Hygiene Practice in Atsimo Andrefana Region
Thematic Area: Water Resources	
Division in Charge: Water Resources and Disaster Management Group, Global Environment Dept.	Cooperation Scheme: Technical Cooperation Project
Project Duration: September 2008~March 2012	Total Cost: 410million JPY
Related Cooperation : Development Study "Groundwater Development Study in South-western Region (1989-1991)" and Grant Aid "The Project for Groundwater Development in the South-western Region (1992-1994)"	Counterpart Agency: Ministry of Water, Ministry of Health, Ministry of Education and their provincial branches in Atsimo Andrefana
	Supporting Organization in Japan: N/A
<p>1.1 Background of the Project</p> <p>In Madagascar, access to safe water and sanitation in rural areas has been an urgent issue. Only 29% and 11% of the proportion in rural areas have access to safe water and to safe sanitation facilities, respectively (WHO & UNICEF, Joint Monitoring Programme for Sanitation and Drinking Water, Update 2010). These rates are significantly lower than the average in Africa. Furthermore, diarrhea mainly caused by unsafe water and hygiene practices account for 17% of infant mortality under 5 years of age (WHO2006).</p> <p>In the region of Atsimo Andrefana, located in the southwest of Madagascar, as low as 25% and 10% of the population have access to safe water and to safe sanitation facilities, respectively. With 400 ~ 500mm annual rainfall and limited water resource availability, ensuring safe water and sanitation in this region has been one of national priorities in Madagascar.</p> <p>Over the past two decades, the Japanese government has continued cooperation with Madagascar in the field of water resources. In the Southwest, new water supply facilities were installed through the development study "Groundwater Development Study in South-western Region (1989-1991)" and the grant aid "The Project for Groundwater Development in the South-western Region (1992-1994)". However, these facilities didn't operate continuously or properly due to their malfunction and breakdown. To strengthen the rural water supply management, JICA's follow-up survey was carried out and following issues were recognized: the improvement of water management committees' capacity to manage, operate and maintain water supply facilities including setting and collecting water charges, the improvement of technologies of drilling and mechanical engineers, and the sensitization on hygiene and sanitation in rural areas.</p> <p>In recognition of these issues, the government of Madagascar requested technical cooperation to JICA. The preliminary study mission was dispatched to Madagascar and the framework of the cooperation was agreed in July 2007. The R/D for the cooperation was signed in July 2008 and the Project for the Improvement of Rural Water Supply Management and Hygiene Practice in Atsimo Andrefana Region started in September 2008.</p> <p>At the four months before the scheduled project termination in March 2012, the terminal evaluation was conducted to validate the project progress and achievements, as well as to examine the prospect of achieving the project purpose.</p>	
<p>1.2 Project Overview</p> <p>1) Overall Goal To establish and operationalize the monitoring system for management and maintenance system of water supply facilities and mechanism of sensitization on hygiene and sanitation in Atsimo Andrefana Region.</p> <p>2) Project Purpose To establish and operationalize the monitoring system for management and maintenance of water supply facilities and to boost the mechanism of sensitization on hygiene and sanitation in the four target districts of the project in Atsimo Andrefana Region.</p> <p>3) Outputs</p> <ol style="list-style-type: none"> 1. The methodology of capacity building for leadership in the management of water infrastructure and sanitation at the commune and Fokontany level, and for coordination of the organizations involved in the officers of DRE (Regional Directorate of the Ministry of Water) is established. 	

<p>2. The methodology of capacity building of communes for management of water supply facilities is established as owners of the facilities to manage them or supervise delegated managers.</p> <p>3. The methodology of capacity building of the Fokontany and Village level organizations for management of water supply facilities (CPE) is established;</p> <p>4. Sensitization activity of hygiene and sanitary education by administrative agencies related to hygiene in the target region - DREN (Regional Directorate of the Ministry of Education), DRSP (Regional Directorate of the Ministry of Health), schools and health centers - is improved.</p> <p>4) Target Area</p> <p>The target area is the four districts in Atsimo Andrefana (Morombe, Toliara II, Sakahara, Ankazoabo). From the four districts, 24 villages in 15 communes are selected as pilot sites.</p> <p>5) Input</p> <p>(Japanese side) The number of experts dispatched to the project is 11, working 73 MM in totals, and the amount of local cost is 97.2 million Japanese yen (including the provision of machinery/equipment) for 3.5 years.</p> <p>(Madagascar side) The assignment of counterparts (mainly in DRE, DREN and DRSP) and in-kind contribution</p>	
2 Evaluation Team	
Member of the Evaluation Team	<ol style="list-style-type: none"> 1. Mr. Shigeyuki Matsumoto (Leader) Director, Disaster Management Division 2, Global Environment Department, JICA 2. Mr. Yosuke Sasaki (Advisor on Rural Water Development) Senior Advisor, JICA 3. Mr. Takashi Honda (Evaluation Planning / Water Supply and Sanitation) Special Advisor, Disaster Management Division 2, Global Environment Department, JICA 4. Mr. Hiroyuki Okuda (Evaluation Analysis) Tekizaitekisho, LLC 5. Mr. Toshiyuki Morita (Interpreter) Japan International Cooperation Center 6. Mr. Ravaloson Andrianaritsifa (Evaluator) Monitoring and Evaluation Service, Ministry of Water 7. Mr. Rakotomavo Marcel (Evaluator) Drinking Water Supply Support Service, Ministry of Water 8. Ms. Miola Raminoson (Interpreter)
Evaluation Period	30 November 2011 ~ 25 December 2011
	Type of Evaluation: Terminal
3 Project Performance	
<p>3.1 Achievements of Outputs</p> <p>(Output 1)</p> <p>Out of four indicators set for the output 1, three are achieved and one is not achieved.</p> <ul style="list-style-type: none"> • As to the spare-part supply system, the signing of the contract between a local association, TANTELY, and DRE was still ongoing at the time of terminal evaluation. As such, the Indicator 1.1 - DRE receiving a monthly report from the contracted NGO on its operation - has not been achieved yet. • Trainings of mechanics based on the cascade method were conducted towards establishing a repair system of water supply facility. 18 mechanics were registered as technicians specialises by DRE after completing the training in October 2011. The indicator 1.2, therefore, is achieved. • The indicator 1.3 – communes other than the pilot commune in 4 districts to be trained by DRE – is achieved as the training to that effect was conducted in December 2011 with the attendance of 52 commune mayors. The indicator 1.4 – annual meeting to be organized by DRE with concerned agencies of hygiene section – is also achieved as three GTP (Project Working Group) were already held since 2010. <p>(Output 2)</p> <p>Out of two indicators set for the output 2, one is partially achieved and the other is not evaluated due to the lack of data.</p> <ul style="list-style-type: none"> • Responsibilites de l'eau, 15 in total, were appointed at each pilot commune. Trainings on mayors of commune and responsabilite de l'eau were conducted on water policy, roles of commune in water facility management. As to the indicator 2.1 – the pilot 15 communes to explain their roles to at least three Fokotany other than pilot Fokotany, such information will be collected at the next quarterly monitoring in February next year. • As to the monitoring system of water facility from CPE - Commune -DRE to Ministry of Water, the first quarterly reports were submitted from 13 communes, out of total 15 pilot communes, to DRE in November 2011. As such, the indicator 2.2 is partially achieved. 	

- At Befandriana commune, the process of sourcing out water supply management to the private sector is underway. Selection of contractor and monitoring of the contractor still needs to be conducted.

(Output 3)

Out of three indicators set for the output 3, two are partially achieved and one is almost achieved.

- The management and function of CPE at the 24 pilot villages were strengthened by the training conducted by DRE and experts in October 2010. The indicator 3.1 – a journal to be kept on operation, daily check and repair – is partially achieved as 79% of pilot villages keep the journal on operation and daily check, and 58% keep journal of repair. The indicator 3.2 – an accounting book to be kept in the pilot 24 villages by the water management entity (CPE in most cases) is also partially achieved as 79% of pilot villages keep such accounting books.
- Trainings of mechanics in CPE (“repairman for hand pump village” for level I facility and “operator” for level II facility) based on the cascade method were conducted in some areas by technicians specializes.
- As for the indicator 3.3 – the increase of pilot villages from 8% to 30% which accumulates a deposit of at least 100,000 ariary - is almost achieved as the rate is 29% at present.

(Output 4)

Out of five indicators set for the output 4, two are achieved, one is partially achieved, and two are not achieved.

- Three messages of WASH (use safe water, wash your hands, and use latrine) were advocated through school education and hygiene promotion practice through cascade method trainings conducted by the Ministry of Education and the Ministry of Health.
- A training guide was developed and approved by the Ministry of Health and the Ministry of Education in December 2011. The indicator 4.1 - improved training program to be approved by concerned agencies - is achieved with the approval of the training guide in December 2011. Action plans are expected to be prepared based on the improved training program by DREN and DRSP in February 2012, so the indicator 4.2 are not achieved yet.
- According to the monitoring conducted in September 2011, all the 26 schools that were engaged in the project incorporated hygiene education into their action plan. As such, the indicator 4.3 - WASH at schools to be promoted in line with action plan – is achieved. Their activities at school, however, were not monitored by any of ZAP (Administrative Office of Education) yet at the time of the monitoring in September 2011. So, the indicator 4.4 – monitoring on such school practices to be conducted by ZAP – are not achieved yet.
- According to the monitoring of September 2011, the indicator 4.5 - monitoring by CSB (Basic Health Center) on trained community agents - is partially achieved as 20 CSB out of targeted 28 CSB prepared action plans for the monitoring to be conducted.

3.2 Achievements of Project Purpose

Out of six indicators (except for two sub-indicators) set for the project purpose, two are achieved, three are partially achieved, and one is not achieved.

- The indicator 1 - quarterly reports on the established “water operation & management system” to be constantly submitted from DRE to Ministry of Water – has not been achieved yet as the system is yet to be established in its entirety at present. The first report is planned in January 2012.
- As for the indicator 2 – the number of communes that submit the monitoring report in 4 pilot districts to be increased from 0% to 50%, the current rate is 27% and so the indicator 2 is partially achieved. 13 communes submitted the 1st quarterly reports in November 2011 out of total 49 communes (15 pilot communes + 34 other communes)
- The indicator 3 – the rate of water facilities in operation to be increased from 45% to 60% - is achieved based on the inventory data as of November 2011. Water facilities in 32 villages (18 pilot villages + 14 other villages) out of 53 villages are in operation.
- The indicator 4 - training to be organized by DREN and DRSP on schools and CSB in pilot villages – is achieved as a refreshment training was conducted in November by DREN and DRSP. On the other hand, the indicator 5 and 6, monitoring results to be reported among DRSP-SDSP (District Service for Public Health)-CSB, and monitoring results to be reported among DREN – CISCO (District School Office) – ZAP – EPP (Public Primary School), respectively, are partially achieved because such reporting is currently underway, at the time of terminal evaluation, in the feedback meetings which are being held in the 4 targeted districts on 12 through 17 December 2011.

3.3 Achievements of Overall Goal

It is still premature to evaluate the progress towards achieving the overall goal at the time of terminal evaluation,

since it is emerged after the operation and maintenance system is established and put into operation.

4 Evaluation Results

4.1 Relevance

The relevance of the project is high.

- The purpose and activities of the project is aligned with key legislation and strategies in water and sanitation sector such as Code de l'eau (1999), Programme National d'Accès à l'Eau Potable et à l'Assainissement (PNAEPA) for 2008-2012, and Politique et Stratégie Nationale de l'Assainissement (PSNA) in 2008.
- The improvement of access to safe drinking water and hygiene can also contribute to Madagascar's Millennium Development Goals such as eradication of extreme poverty, reduction of child mortality and improvement of maternal health.
- PDM of the project was revised 3 times to better reflect and effectively support the realization of the above mentioned policies and strategies. As such, the Ministry of Water acknowledges that the project is fully aligned with national policies as well as with the needs of the Ministry.
- The improvement of access to safe water and promotion of health service is prioritized in the County Assistance Policy of the Japanese Ministry of Foreign Affairs for Madagascar (2006).

4.2 Effectiveness

The effective of the Project is high.

- The initial R/D was signed in July 2008, and R/D has since been revised three times - in October 2009, February 2011 and August 2011 - in accordance with the situations such as the governmental transition to provisional authority in March 2009 and the decentralization policy promoted by the authority.
- Based on the 3rd edition of PDM in the R/D signed on August 2011, the effectiveness of the project is evaluated high as the project design is correctly adjusted to achieve the project purpose which is aligned with the water sector policy. In accordance with the 3rd PDM, project activities of the third year are currently being conducted intensively and the project has the potential to achieve establishment of othe management and maintenance system of water supply facilities and the mechanism of sensitization on hygiene and sanitation. On the other hand, the remaining project period seems insufficient, in order to entrench monitoring activities to verify effectiveness and functionality of the system and methodologies introduced by the Project.
- Taking advantage of an opportunity of on-the-job training for DRE mechanics, water facilities were repaired in 14 pilot villages by the Project. Such repairs were not included as activities in PDM but were effective to produce the intended outputs.
- In recognition of the importance of strengthening the financial capacity at commune level to ensure the sustainability of the system, the Ministry of Water issued a ministerial ordinance in July 2011 for commune to be able to collect water tax from CPE on condition that both parties agree.
- According to the impact survey in hygiene section in September 2011, improvement of some hygiene practices among pupils are observed such as hand-washing, using latrines at school and drinking boiled water. On the other hand, there was a case observed that teachers at EPP didn't fully understand the 3 messages of WASH and were likely to have conveyed only partial or insufficient messages to pupils.
- There are some outstanding activities such as the operation of spare-parts supply system by the local association, the establishment of repair system using technicians specialises, the management of water supply facility by the private sector based on a contract, follow-up of training on sensitization, the completion of commune manual, and the sensitization of villages on water fee and water tax.

4.3 Efficiency

The efficiency of the Project is medium.

- The input from both Japan and Madagascar side, such as the dispatch of experts, provision of equipment, disbursement of local costs, assignment of counterparts and in-kind contributions, are managed properly for project activities. The PDM was revised three times and there were changes of PO, but once these revisions were settled, inputs are provided accordingly.
- The project has been experiencing a delay of implementation, which can be attributed to the following: 1) Political unrest resulting from the transition of governmental authorities in 2009, 2) ministerial restructuring of executing agency, the Ministry of Water in 2008, and 3) consequent changes of interpretation of water policies. The project was required to adjust its design and activities in line with these situations, and it took time for the project to discuss and agree with the concerned ministry about their details.

- It is also noted by the counterparts in hygiene section that the tools and materials for awareness raising on WASH are very effective, such as lambahoany and PHAST card, in comparison with just oral explanation which are common among other organizations including NGOs.

4.4 Impact

The impact of the Project is still low at present.

- The main impact, which is the advancement towards the overall goal, will start realizing once such system begins operations. As such, the impact of the project is still low at the time of terminal evaluation.
- The Ministry of Water acknowledges that the overall goal is significantly relevant, but indicates that the achievement of the overall goal largely depends on decision makers, beyond the Ministry of Water, who set the direction of government policy, strategy and targets in medium and long term.
- Some impacts are being observed in terms of the level of awareness of villagers on the importance of water facilities. There are some pilot villages where, after repair of public water faucets, villagers voluntarily try to keep a good condition for facilities by, for example, building a fence around the facility, and laying stones on the pathway.
- According to counterparts of the Ministry of Education, through the project, teachers at pilot EPP have learned a new teaching technique, which is “a pupil to pupil approach” – children explain what they have learned to other children – and this approach is appreciated as very effective in a classroom.
- It is pointed out, during the terminal evaluation, that the current indicator for overall goal is far-reaching and needs to be reviewed and revised, if necessary, at opportune time.

4.5 Sustainability

The prospect for sustainability of project outputs is low at present.

- The system is yet to begin operations, and whether it functions effectively or not still needs to be monitored. Through monitoring, suggestions are still to be presented and revisions are yet to be added to the system as necessary. Without such process of review and verification of sustainability of the system as yet, the prospect of sustainability is evaluated low at present.
- DRE’s number of staff was 4 in 2008 when the project began, but in 2009 two new staff and in 2011 five more staff members joined. The Ministry of Water indicates that this is a part of their efforts to ensure the sustainability of the Project. On the other hand, it is pointed out by those who are engaged in the project that the biggest challenge to the sustainability of the system would be the limited capacity of commune, in terms of human resources and finance, as the owner of water facilities.
- The Ministry of Education indicates that incorporating water hygiene and sanitation into the school curriculum is the best strategy to sustain the activities conducted in the project. The Ministry of Health also plans to integrate project activities into their regular work. Both ministries acknowledges that the project is fully aligned with the national policy, but conducting proper monitoring, in particular at the central level, to maintain the quality of project activities is a challenge due to limited budget and human resources, which prevents them from visiting the region or districts and monitoring in the field.

4.6 Factors that have promoted or hindered the implementation of project

1) Promoting factors

- It is noted by the counterparts that the communication between them and the Japanese experts are very good. For example, the experts always proceeded with activities through consultation and discussion with counterparts and made efforts in adjusting the project design to be more reflective of the reality of the Madagascar rural area as well as the direction of government policy. It is also acknowledged by the counterparts that a number of team members speak French and some of them speak Madagascan, which is conducive for smooth cooperation and coordination of the project.

2) Hindering factors

- The counter-budget for the project has not been prepared in Madagascar as the project was not incorporated into the PIP (Public Investment Plan of Madagascar). As for the year 2012, the project was recorded in the PIP for the first time as JICA had issued a letter with the announcement of project budget, and the budget for project operation is set aside for the Ministry of Water.

4.7 Conclusion

The relevance and effectiveness of the Project is high. According to the indicators, the project has the potential to

achieve establishment of the management and maintenance system of water supply facilities and to boost the mechanism of sensitization on hygiene and sanitation. However, the remaining project period seems insufficient, in order to entrench monitoring activities to verify effectiveness and sustainability of the system and methodologies introduced by the Project to functionalize the system. The efficiency of the project is evaluated medium due to the repeated revision of PDM, three times in a short period, and resulting necessary adjustments. On the other hand, the Project has not started producing remarkable impacts yet. Likewise, the prospect of sustainability is evaluated low at present because the water supply operation and management system is just about to be established in its entirety, and it is still uncertain how durable and effective the system is until the system begins operations.

5 Recommendations and Lessons Learned

5.1 Recommendations

(To the Project)

- 1) The project should make extra efforts to complete the outstanding activities, such as the operation of spare-parts supply system by the local association, the establishment of repair system using technicians specialises, and the management of water supply facility by the private sector through a contract, by the end of project.
- 2) The Project should compile its findings, lessons learned and recommendations before the end of the Project in a manner that can contribute to improve sector policy, strategy and practice, to be shared with and utilized by stakeholders including Malagasy authorities and development partners in the sector.
- 3) When developing various manuals for key players, the Project should include a section of handover, where necessary procedures are described for the transfer of tasks from predecessor to successor.
- 4) The Project should inform SMAGSSE of the contents of the Project in order to consider the future possibility of their involvement in the monitoring system.

(To the Ministry of Water)

- 5) The Ministry of Water is to utilize the PIP acquired for the year 2012 to continue to strengthen the capacity of commune for the operation and management of water facilities.

(To DRE)

- 6) DRE is to consider utilizing the sensitization tools like what are developed for promoting hygiene practice, such as lambahoany and PHAST card, to also increase the awareness of villages on the importance of water facility management and operation.
- 7) A future possibility of using mobile network for monitoring activities is to be actively sought by DRE, commune, and CPE in recognition of the difficulty of paper-based monitoring: e.g., lack of paper, lack of means of transport, shortage of budget for site visiting.
- 8) DRE is to seek the possibility of increase its staff to facilitate and support the capacity development of commune on water supply management.
- 9) For the capacity of communes to be further strengthened as a key player of decentralized system, DRE should continuously make efforts to assist commune to seek potential financial sources through preparation of PCD, for example.

(To the three ministries)

- 10) The Ministry of Water, the Ministry of Education and the Ministry of Health are to further improve cooperation and coordination to strengthen the linkage of activities between water supply, hygiene and sanitation, and to consider integrating the monitoring for the project activities into an existing reporting system, if any, by adjusting the reporting format and its frequency. Also, the three ministries may be able to consider a coordinated system to jointly undertake the monitoring at community level, including community agents and school teachers, to simplify monitoring and to reduce its costs.
- 11) Sensitization regarding water supply, water fees collection, and the relationship between water, hygiene and sanitation at community level should be promoted to ensure the sustainability of the project by the three ministries. For the sensitization to be successful, a detailed TOR for the activities should be developed.
- 12) Refreshment trainings by the three ministries on water, sanitation & hygiene, and management system should be provided at all level for water section as well as hygiene section of the project.

(To higher authorities)

- 13) Active coordination and cooperation with projects supported by other development partners should be considered by Madagascan authorities to increase the impact of the Project. These projects include, for example, PAEAR

project financed by AfDB, the project conducted by UNICEF, and MEDEA program financed by EU/GRET. Besides, knowledge sharing with initiative or network like Ran' Eau and Diorano-WASH should be promoted.

- 14) Authorities concerned of the Madagascan and Japanese side should consider the extension of project period, based on the fact that there remain many outstanding activities and it seems to be difficult to check whether the established system is workable and sustainable within the limited time frame. During the extended period, monitoring of the established system and methodology, feedback for revision, and the final touch for more robust and sustainable system, such as refreshment trainings and preparation for expanded sensitization, should be implemented.

5.2 Lessons Learned

- 1) Behavioral change requires continual intervention and sustained commitment for a long time. The Project was originally started with the term of two years, but more consideration should have been on the term for the project to start realizing actual effects and impact.
- 2) Revising PDM for better alignment of the Project to the Malagasy policy framework was effective, according to changes of the situation. A project design should be flexibly improved during the course of the project. JICA experts should pay close attention to the alignment between policy framework and the Project design, through better communication with counterparts and continuous information collection on relevant laws, regulations and strategies.
- 3) The management and maintenance system which should be realized through the Project activity needs to be intensively discussed and mutually agreed at the earlier stage of the Project. Such a target system should be written in a document or schematic diagram to create common understanding.
- 4) When PDM was revised, the Project carried out the extensive surveys on present conditions of maintenance and management system in Madagascar, such as interviews and site visits to reference practices by Malagasy authorities and other development partners, and a feasibility study on affermage (outsourcing to private sector). Such surveys were effective to collect good practices and lessons learned from other experiences in the local context of Madagascar to be reflected to the project design and activities.
- 5) In order to establish appropriate management and maintenance system for water supply and sanitation, including water tariff collection, rehabilitation of water supply facilities is necessary. Otherwise, persuading key players of the system to believe the effectiveness of trainings and sensitization becomes difficult.
- 6) When new equipment is introduced, the equipment should be the ones whose spare-parts are easily available in Madagascar.