Report of the Japan Water Forum Fund 2016 Follow-up Observation

> June 2018 Japan Water Forum



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While Japan Water Forum (JWF) assessed and awarded funding to activities based on a proposal of each relevant organization, the said field activities were solely conducted under the responsibilities of respective organizations. Therefore, all activity reports including their contents and outcomes herein are based on their own reports.

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This Report is made and compiled based on reports submitted by relevant on-site organizations, to which JWF entrusted the follow-up observation.

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1. What is the Japan Water Forum Fund?

(1) Outline of the Fund

Japan Water Form (JWF) Fund was established in 2005 to support organizations aiming at solving water-related issues at a grass-roots level. It is formed and operated by utilizing membership fees of JWF and donations through JWF's "Charity for Water".

The JWF Fund has three basic principles; 1) the maximum amount of fund is 1,000 US dollars per a project, 2) projects shall be carried out by local organizations working at a grass-roots level, and 3) projects shall be carried out with acceptable and appropriate technology and method by the locals in cooperation with stakeholders.

The main feature of the JWF Fund is vesting recipients of the Fund full executive power to conduct their proposed project, so that any possible expenses incurred if JWF directly engages in them can be saved while autonomous outcomes from the practitioners can be expected.

During the past 13 years, 163 projects were implemented and more than 196,000 people were benefited in the regions of Asia-Pacific, Africa, Central America and South America.

Total number of supported projects and beneficiaries by JWF Fund 2005-2017

- Number of implemented projects: 163
- Total amount of funds: 161,531 US dollars
- Total number of beneficiaries: 196,778 people
- Number of water-supply facilities: 475 units
- Number of constructed sanitation facilities: 397 units
- Number of awareness building sessions: 404 (As of 22 May 2018)

(2) Outline of the Follow-up observation

Our priority is placed in responding to the issues and needs of the field in an efficient and effective way.

To grasp changes of the issues and needs after completion of the projects, we decided to carry out follow-up observations for the projects in 2014, and since then we have collected information on effects and impacts of the projects.

The JWF Fund 2016 supported 6 projects one each in Madagascar, Tanzania, Togo, Pakistan and two in India.

JWF asked 5 grass-roots organizations, excluding Togo where the follow-up observation had already completed in the past, to implement the follow-up observation. As a result of our request, we received consents from 3 organizations out of 6 who were supported by the Fund in 2016.

With their cooperation, the follow-up observations were carried out to see the conditions, one year after the completion.

The results of the observations are described below.

- 2. Reports of the follow-up observation
 - (1) Clean water and WASH education for the Ampandroantsiriry' community (Madagascar)
 - 1) Outlines of the project of JWF Fund 2016
 - > Organization: Grassroots Climate and Livelihood Actions (GRACLIA) (#108)
 - Project title: Clean water and WASH education for the Ampandroantsiriry' community
 - > Country/Area: Madagascar/Antsinanana
 - > Period: November 2016 to March 2017
 - > Number of beneficiaries 600 people: (170 women, 180 men, 250 children)
 - Cost: 985.9 USD (JWF Fund: 977.5 USD, contribution from beneficiaries : 8.4 USD)

Background:

Madagascar has approximately 22 million populations, with the majority, which represent 80% of the population, living in rural areas, where the public services and facilities are almost inexistent or to the minimum. In the village of Ampandroantsiriry, due to a lack of access to clean water for the local people, especially women and children have to walk hundreds meters from their village to nearby streams to wash their dishes and clothes, and fetch water. The stream is used by the local community as main source of water for drinking and cooking. On the other hand, addition to washing dishes and clothes, the majorities of the communities' members defecate in the surrounding areas since there is no toilet facility. As a result the local community is exposed to infections such as cholera, diarrhea, and typhoid. Furthermore, there is a dumping site few hundred meters upstream which pollutes water stream.

Outputs:

- Village meeting was held.
- 3 hand pumps were installed.
- Water user committees were established.
- 3 workshops of Sur'eau were conducted
- Clean up campaign of the dumping site was carried out.

Because of these activities, the residents of the Ampandroantsiriry' community could drink safe drinking water so that reduction of diseases caused by tainted water can be expected.

Before the project of JWF Fund 2016



Village people using water from this river

Dumping site located upstream of the river

During the project of JWF Fund 2016



Village people digging hand pumps

After the project of JWF Fund 2016



Installed hand pump

2) Results of the follow-up observation in 2017

The follow-up observation was carried out on 29th December 2017 by Ms. Sylvia Paulot, Grassroots Climate and Livelihood Actions

- Hand pumps
 - Two out of three functioning hand pumps are still usable daily by the local people; however, the other one has not been used due to inadequate location.
 - The third hand pump is located near rice fields and the water smelt mud, and the smell worsened after the rainy season.
 - The local people wanted to move the pump to another location, and actually there were local men who volunteered to do that. But only a few people paid

the money to the president of the Water User Committee to support the men who volunteered for displacement of the pump.

- Some parts of the pumps were already changed many times. The local people asked the trained men to change them who received small payment for that.
- The capacity of two hand pumps weren't enough for the needs of the Ampandroantsiry community. As a result, some people are still going to the river to wash clothes and sometimes to take a bath. The local people reported that sometimes they have to wait for a few minutes, after use of the pump, to get water again from the pump. For those who cannot wait, they use the water from the pumps for cooking and drinking only and still use the river for their other needs.

• Water User Committee

The Water Committee of the functioning hands pumps is functioning. They managed to collect money from the pump users when the pumps needed to be repaired, and the fees were collected only when the pumps needed repairing. The presidents of the Water User Committees were good at mobilizing the pump users and settling differences among the users.

• Dumping site

After the project in 2016, the dumping site was closed. There had been no problem occurred after the dumping sites located upstream of the river was closed, because people who used the dumping site were those from the city which is 15 km away from the village and most of the dumping was industrial garbage. Now the local people are using the dumping site for crop farming.

• Change of people in the Ampandroantsiriry community

- After the installation of the hand pumps, the local people used the water from the pumps for cooking and drinking. As a result, the water usage from the river reduced, and people use the river only for washing clothes.
- Community solidarity built during and after the installing of the pumps in taking care of the pumps, especially with the two functioning hand pumps. Furthermore, more people want to have pumps in their villages to stop using the dirty water from the river.

Voices from the beneficiaries

- Ms. Bana, 36 years old, President of the water committee
 - I have used the hand pump and it was very helpful for me and my family because it's located not far from our home. Furthermore, the water from the pump is cleaner than that of the streams we usually used before. I'm very happy with it and the other people around here as well; it improved many people's lives around here.
 - Previously, when cooking rice with the water of the stream there was strange orange-like color on top of the rice after cooked due to particles from the water. Now by using the water from the pump, we do not have this anymore. Furthermore, we aren't loosing so much time going to the stream every day to fetch the water. Previously, our children had to go to the stream to fetch the water or wash dishes after school, but now they can do those tasks in the village and this is a huge change in our life.
 - However, when it was necessary to bring the pump to a repairer, I had to do that myself because other people will not do. This is because they see me as being responsible for the pump so I have to do all the work related to it. One day, I had to bring the pump to a repairer by hoot because the money I collected from the other users was not sufficient to cover my ticket for the local transportation. The majority of the users of the pump here are poor and I cannot force them to pay more.
- Ms. Veroboda, 45 years old, participant of Sur'eau workshops
 - After the Sur Eau workshop, we started to use the Sur'eau regularly for our drinking water which tasted better. But there once were times when we couldn't find the Sur'eau anymore in the shops, so we stopped using it.
 - The hand pump is very important to us and we use it every day. It makes our life easier. The pump is helping us a lot, we use less time in fetching water, and also the water from the hand pump is better than the stream we were using. Whenever I can, I fetch the water myself instead of asking my daughter to do so, because the pump is near and I need less help, which gives my daughter more time for her schoolwork or other tasks.
 - However, the need of clean water is still one of the biggest problems we face here, as the pumps aren't sufficient for all of us and thus some people still go to the stream. Furthermore during the dry season, it is harder to get water here, even with the hand pumps, because the water is getting lower and we always have to wait to get water after some other people already

used the pump before you. Also in the stream the water disappears during the dry season and it makes our life difficult, because we have to use them to wash our clothes when it's becoming difficult to get water from the pump.

- Ms. Nela, 8 years old
 - I'm using the hand pump and I like it, because it is near our home and we don't have to walk far. My family prefers using the water from the pump to the streams; we also have clean water at home for drinking or for cooking. And also I don't have to go far anymore to fetch the water after school.
 - Previously I used to go to the stream regularly to wash our dishes after school and fetch water. I didn't like doing that, because I was tired but still had to walk alone to the stream, which sometimes made me afraid because it was very quiet around the stream.

Lessons learnt

- To sustain the hand pumps, commitment of the water committee president is vital.
- Hand pumps helped the local people but they were not sufficient to stop them using the river, therefore many used the pump only for drinking water and go to the stream for other needs
- The hand pumps worked in the village but they were not deep enough to avoid getting dry during dry season
- Follow up efforts with the hand pump users was needed to spot problems early and help them find solutions to them.

Follow up observation



(Second from the right)



- (2) Rainwater Harvesting for water conservation and dry land farming for tribal farmers (India)
 - 1) Outline of the JWF Fund 2016 project
- > Organization: PRAGATI KORAPUT (#424)
- Project title: Rain water Harvesting for water conservation and dry land farming for tribal farmers
- > Country/ Area: India/Koraput
- > Project period: November 2016 to April 2017
- > Number of beneficiaries: 18 families, 102 people
- Cost: 1,366.95 USD (JWF Fund 983 USD, contribution from community 132.35 USD, contribution from PRAGATI KORAPUT 251.5 USD and others)

Background:

There are 18 small and marginal farmers who have their agriculture field of 17.5 acres growing millets, vegetables and pulses during the rainy season. In addition to the shape of land sloped and undulating, due to torrential rains with intensity of 150 to 200 mm per hour, heavy runoff of rainwater causes soil erosion and damages crops of the farmers almost every year. Contrarily, with the end of monsoon rains, the lands dry up as the moisture retention capacity of the soil is very low. Due to the undulating terrain, the land is unsuitable for agriculture. Over the years, due to erosion of topsoil and infertility of land, the productivity of the land has been declining. Therefore, the farmers who own the lands are reluctant to grow crops even during the rainy season, and rather they want to work as wage laborers in the nearest town to support their living. Some of the farmers also earn their living by selling firewood and charcoals, which causes further forest destruction.

Outputs:

- 1 Concept sharing meeting was held.
- User Group was established.
- Rainwater harvesting structure and drainage were constructed.

Because of these activities, it became possible for the target farmers to cultivate crops throughout the year so that their stable earnings can be expected.

Before the project of JWF Fund 2016



Agriculture field in the dry season

Growing crops during the rainy season

After the project of JWF Fund 2016

During the project



(2) Results of the follow-up observation in 2018

The follow-up observation was carried out on 8th and 20th February 2018 by Ms. Luna Panda, PRAGATI, KORAPUT.

Rainwater harvesting structure and drainage

Effect of the constructed facility: After completion of the project in April 2017, the rainy season started from June to September 2017. During this period, the structure created under the project helped harvesting the rain water. Despite of several heavy rains, the runoff water was collected in the structure through the inlet and the surplus water was channelized through the outlet, which reduced damage of both crops and lands. The farmers have grown grains and vegetables in their lands during the rainy season, but there was no damage of the crops. After the rainy season, the bounds are a little compressed; however, the rainwater harvesting structure is in good condition. The facility could protect the land of 7 hectares where 18 farmers are growing crops such as grains and vegetables while preventing heavy run off and crop loss during the rainy season.

- Pisciculture: Pisciculture has not yet started as is planned, because this is the first year of the structure and there is need to observe the water table level during the summer. However, <u>farmers have started culturing local fish</u> varieties in a very small scale for their own consumption.
- Others: The solar pump facility is used for pumping water for the crops during the winter season, and also growing crops is planned for the summer.

It is scheduled that vegetable cultivation will be started by 7 farmers during the summer but 11 farmers still lack confidence to grow crops with apprehension of water scarcity during the extreme summer.

- User Group
 - The User Group was formed and the members have contributed their labor for excavation of the rain water harvesting structure. The User Group members are using the water to grow their vegetables. The group needs to be more strengthened so that they can take responsibility not only for present usages but also for future maintenance.
 - The structure is maintained properly as the User Group members are involved in taking the responsibility for its maintenance. The beneficiary farmers who are using the water for crops have formed a user group who are taking responsibility in cleaning and maintenance of the structure. The farmers were motivated to start their own maintenance fund out of the income they earn during a cropping cycle. As it was planned and implemented based on the need of the farmers, they are confident to take ownership in maintaining the structure.
- Change of farmers life
 - The farmers are able to utilize their lands to grow crops throughout the year enabling them to produce additional food and earn supplementary income to support their livelihood needs. In the long run, it will not only arrest soil erosion, but also increase moisture retention capacity of the lands, ultimately restoring soil fertility and contributing to increased productivity.

Voices from the beneficiaries

- Mr. Raju Santa, 45 years old, owner of a half-acre of land
 - I cultivate finger millet in my half acre land adjacent to the rainwater harvesting structure. I could harvest 3 quintals of the finger millet by adopting the new technology of the system for millet intensification. I feel happy that it will meet the consumption need of my family for additional 6 months. Earlier, I used to grow millets in the forest land and the harvest was not even enough for 3 months, so I had to buy millets from the market.
 - I am now planning to grow vegetables in my land by using the water from the rain water harvesting structure which will help me get additional income. My land will not be damaged any more during heavy rains. My family members are now happy as we could harvest millets for our household consumption for additional 6 months. Now we can get regular crops from our land.
 - Though most of the lands in my village are uplands without any irrigation, crops are affected by irregular monsoons. As a work is not available within the locality, the villagers sell firewood and charcoal which causes deforestation.
- Mr. Dibakar Jani, 46 years old
 - I cultivate maize, finger millets and tomatoes in my land near the rain water harvesting structure. I took millets and maize for my household consumption and sold tomatoes in the nearby market.
 - Thanks to the rain water harvesting structure, my land was protected as the rain water was harvested. This year my crops and lands were protected from heavy run offs. We could get water to save my crops during the dry spell in the rainy season.

Gradually my land is becoming more productive as soil erosion is reduced.

- Lack of irrigation is one of the biggest problems in our village. Due to erratic rain fall and changing climate, the situation is further worsened. The villagers cannot grow crops during off season; neither can they get work in the nearby areas. A large number of young boys and girls go to the nearest towns to work and earn for their family.
- Mr. Trinath Santa, 25 years old
 - I have utilized the facility for watering my crops during the dry spell of rainy and winter seasons. My family grow millets during the rainy season which is a regular part of our daily diet.

- My land was not affected by heavy runoffs of the rain water during the rainy season. I am now growing vegetables in the land. The villagers are now aware of the importance of the rain water harvesting. My family members now grow regular crops in the land. As they now work in the land, they need not go out of the village to look for work.
- However, I feel that the youth in our village are getting diverted from agriculture as they find it to be a non-remunerative sector with difficult issues like lack of irrigation, climate change effects, lack of access to inputs and capital to invest. Most of the youth are moving out to the nearby towns to work as wage laborers.

Lessons learnt

The project has raised awareness among the farmers of the village and also neighborhood villages for conservation, harvesting of the rain water and its use for agriculture. It has increased potential of land usage even during the off season, as the water can be available by using solar pumps to grow different crops. The farmers are encouraged to do agriculture in a planned manner and improved practices. The project has also contributed to reducing soil erosion and increase moisture retention capacity of the lands. The farmers of the neighborhood villages are also encouraged to mobilize Government schemes for similar activities which are most relevant for the geographical context. During the follow up observation



in 2016 (In rainy season)

Field visit by neighbors



(3) Promote WASH in Schools through Refurbishment of Toilets & Drinking Water System and Construction of a Hand Washing Station in Rajasthan, India (India)

1) Outlines of the project of JWF Fund 2016

- > Organization: PHD Rural Development Foundation (PHDRDF) (#449)
- Project title: Promote WASH in Schools through Refurbishment of Toilets & Drinking Water System and Construction of a Hand Washing Station in Rajasthan, India
- > Country/Area: India/Sikar District
- > Project period: November 2016 to April 2017
- Number of beneficiaries (Direct and Indirect): 272 people (140 girls, 120 boys and 12 teachers) and 1,360 people
- Cost: 1,149 USD (JWF Fund: 1,000 USD and contributions from PHDRDF: 149 USD)

Background:

The difficulty to access water and the low per-capita income of the district have impacted the sanitation conditions among the rural population including the schools, where existing sanitation facilities were in a deplorable condition and cannot be used by students. Poor financial resources have prevented rehabilitation of old broken sanitation structures. Students could not use the toilets because of lacking water. A lack of funds and water connection has led to its long-term neglect and excessive damage. This causes absenteeism, especially of girls. Girls had to go home to use toilets and the boys defecated in the open.

Outputs:

- Pre assessment survey was conducted.
- Existing toilets were refurbished.
- Hand washing facilities were constructed.
- Water quality test was carried out.
- WASH Committee was established.
- 2 WASH Sessions were held.
- Follow up and Feedback was carried out.

Because of these activities, the school students and teachers could make use of water throughout the year so that improvement of their leaning environment can be expected.

Before the project of the JWF Fund 2016



After the project of the JWF Fund 2016



(2) Results of the follow-up observation in 2018

The follow-up observation was carried out on 19th March 2018 by Ms. Shreya Verma, PHDRDF

• Refurbished toilets

- Usage of the toilets: <u>Refurbished toilets for girls</u>, boys and teachers are <u>functioning and used well</u>. Earlier, the students were practicing open defecation due to non-functional toilets and also they did not have hand washing facilities available in the school.
- A positive behavior change towards using sanitation facility rather than open-defecation, is being observed among the students as well as the

teachers. This is very beneficial especially for girl students as now they do not have to go far locations for open defecation, but have a safe space inside the school for the same.

 Cleaning of the toilets: A sanitation worker (sweeper) was appointed by the school authorities in order to ensure the cleanliness of the toilets on a regular basis. <u>This has ensured smooth functioning and maintenance of the</u> facilities.

The pit will take approximately 2-3 years to be filled up. Thereafter, the school will get the pits cleaned on their own. The school headmaster has committed to this task to be done in the future. The local government may also assist the school headmaster if they are approached.

• The sewage will then be dried up in the open to be used as manure.

• Hand washing facility in girls toilet

• The hand washing facility of the girls' toilet is functioning well; construction of hand washing station has led to increase hygienic practices by the students. The hand washing station has been built outside the girls' toilet to encourage good hand washing practices among them.

The number of taps and the amount of water are substantially enough as they are being largely used by the students.

• Drinking water facility with taps and Soak Pit

• Immediately after the renovation of the drinking water facility in 2016, the water from the facility was not potable. Therefore, students use it only for handwashing.

After that, the local government has been very supportive towards the needs of the school and has extended help to get the water treated. The water is now considerably safe for drinking purposes.

The students are now using the water from the hand washing and the drinking water station. The newly constructed facility has made it easier for the students to access water in a clean and effective manner.

The soak pit is functioning well. The construction of soak pit next to the drinking water station was initiated in order to capture over-flow of waste water. A well-covered soak pit was made to collect the waste water and use it for ground water recharge.

WASH Committee

The WASH Committee is in place and functioning well. It includes both teachers and students to ensure that the hand washing ritual is practiced before the lunch hour and the students use and maintain the toilets regularly.

• Changes of students, teachers and school authorities

- It has been observed that not only do the sanitation facilities remain clean but the students are also very happy as using toilet facilities has become convenient for them and they now feel like attending school.
- The teachers have also become sensitive towards cleanliness and have now begun to follow hygienic sanitation habits and directing the students to follow the same.
- The school management too is responsive to the needs of maintaining the sanitation facility and has therefore hired a sanitation worker to keep them clean. They have also approached the local government to provide for means to make the water safe for drinking.

Voices from the beneficiaries

Mr. Satya Veer, School headmaster of the school

- There have been positive changes among the students as they have become aware of the hygienic habits to be followed. <u>The students have started the practice of washing hands which has led to reduced incidences of water borne diseases among them</u>. The school now looks clean and has gotten a beautiful surrounding. Moreover, <u>the students now like coming to school</u> more regularly.
- The good WASH habits are also being followed by the students including hand washing, preventing open defecation, using toilets and keeping them clean. The group hand washing session is being done regularly by the school students.
- Mr. Vijay Prakash, teacher of the school
 - I use the sanitation facilities at the school and found out that they are were good and safe. I have now realized that it is very important to have proper sanitation facilities and practice hygienic behavior, at school and at home, so as to keep one fit and healthy.

- It has been observed that the students have gained more knowledge about safe and clean drinking water, advantages of hand washing, use of toilets for defecation and proper maintenance of these them.
- Now all the students, especially the girls have a safe space to access the toilet. This has also improved their daily attendance. Now, the students regularly take part in the group hand washing session. The painting of hand washing steps has helped the students in properly washing their hands.

• Mr. Arjun Lal, student of the school

I am very happy after using the toilet facilities in my school. Earlier, there were no toilets in the school and we used to go to the nearby field, also we did not have a proper handwashing and drinking water station in the school – it was rusted making it unsafe.

My friends and I are very happy to use the toilets inside the school and to use the new colorful drinking water/handwashing station.

 My friends and I feel all students are now following sanitation practice of using toilets, and handwashing which we did not do so regularly before, this has definitely led to a better environment. The construction of hand washing station and refurbishment of toilets for the students in following good hygiene practices has been a significant move towards change. We also have new taps in the refurbished drinking water system. Also, the WASH committee conducts regular handwashing sessions which remind us to wash hands before eating.

Lesson learnt

- The provision of infrastructure to the village population has to be accompanied with behavior change sessions to ensure that the importance of the infrastructure is understood well by the students and teachers and is also used and maintained properly.
- Involvement of the school management from the beginning is important for not only smooth implementation of the project but also sustainability after the completion of the project period
- Practical demonstration of activities like handwashing leads to better adoption of new behavior
- The positive impact of new infrastructure and change in behavior motivates the authorities and the students alike to – 1) use and maintain the infrastructure, 2) appointment of a sanitation worker, 3) mobilize the local government for added benefits like safe drinking water etc.

Follow-up observation



Refurbished toilet for girls in 2016

Inside of the girls toilet



End of the Report