# Water and Sanitation Projects in Nepal 2008-2017



Rotary International District 2750
Rotary Club of Tokyo Ebisu
International Service Committee

#### Rotary Club of Tokyo Ebisu Water and Sanitation Project in Nepal

Overview: 2008-2017

In January 2008, Hideyuki Suzuki, a member (current President) of Rotary Club of Tokyo Ebisu, visited Palpa District in Nepal for the first time. There he met Mr. Kazumasa Kakimi, commonly known as "OKBaji," who has been involved in local activities in the region for many years. The two discussed what should be done to meet the requests of the local people.



Together, we observed firsthand the water and sanitation problems that are prevalent throughout the country and were convinced of the need to address them. To make Rotarians all over the world aware of these problems, we drafted and put forward a proposal to hold a workshop on "Water and Sanitation Problems" at the Rotary International Convention in Birmingham in June 2009. Our plan was to enlist the support of others in tackling water and sanitation problems in poor countries. With this objective, while we were in Birmingham, we sent out a message to the world titled "The Tokyo Ebisu Appeal." (Appendix 1)

To put our plan into practice, members of the Rotary Club of Tokyo Ebisu implemented a series of projects in Nepal which we continue to work on even today.

At a meeting with members of Rotary Club of Palpa Tansen during our visit in January 2008, Rotary Club of Tokyo Ebisu made a commitment to carry out joint projects in the future. The following year, in February 2009, two of our members again visited Nepal and worked on two projects on their own. They built small-scale water supply systems in two locations and installed biogas toilets in a total of 85 locations. This was the beginning of our "Water and Sanitation Projects" initiative. Once more, in November 2010, two of our members visited Nepal and together with Mr. Kakimi attended completion ceremonies for biogas toilets in scores of locations and for small-scale water supply systems in two locations, as well as 12 wells, which were constructed with funds from the FY2009-2010 budget, the initial year of the projects. During their stay, our members also visited Rotary Club of Palpa and held discussions on

#### future projects.



Initially, in 2008, we constructed a primary school. We discovered, however, that the children had great difficulty in attending school. The reason for this, we learned, was because much of their time during the day was taken up with chores such as drawing water from the well and gathering firewood. This was one of the main reasons we decided in the first place to construct biogas toilets and resolve the water problem. In short, we realized that unless we provided children with time for learning, our efforts at building a new school would have served no purpose.

A biogas toilet is a device that draws fermentation gas from human and cow waste collected in a tank to the kitchen where it is utilized for cooking using a gas cooker. Because gas is used for cooking, there is no longer a need for gathering firewood. Furthermore, building a small-scale water supply system in the center of a village frees children from the need to travel far to draw water. Thus, the construction of biogas toilets and the building of small-scale water supply systems were launched as the two pillars of the project of Rotary Club of Tokyo Ebisu.

From FY2010 to FY2011, 50 biogas toilet units and nine small-scale water supply systems were constructed. For the project to construct small-scale water supply systems, an application was lodged with the Rotary Foundation for a matching grant with Rotary Club of Palpa as the host club and Rotary Club of Tokyo Ebisu as the international partner. In November 2011, three of our members visited Nepal.

From FY2011 to FY2012, in response to strong requests from local communities, we constructed another 55 biogas toilets. At the same time, we built two schools and donated desks and other furnishings and equipment, and we provided salary assistance to teachers.

Furthermore, from FY2012 to FY2013, we made a donation to support microfinancing for

mothers. This resulted in the installation of a threshing machine, relieving mothers of the need to carry heavy crops after the harvest to the neighboring village for threshing.

After construction of the small-scale water supply systems in 11 locations was completed from FY2013 to FY2014, we continued to install biogas toilets and at the same time slightly shifted our focus to strengthening support for the autonomy of mothers and the support of schools.

February 2014 marked 20 years since Mr. Kakimi took up residence in Nepal and commenced his support activities. Residents from local communities held a gathering to celebrate the occasion and express their appreciation for this man whom they know as "OKBaji." Over 7,000 people from surrounding communities attended and were joined by approximately 300 members of various support organizations in Japan. Six members of Rotary Club of Tokyo Ebisu also made the journey to the venue in the mountains where they further deepened their friendship with members of Rotary Club of Palpa.



On April 25, 2015, in the midst of our activities, the Nepal earthquake suddenly struck. After contacting Mr. Kakimi, we confirmed that all of the members of Rotary Club of Palpa were safe. We immediately shifted the focus of our activities to supporting earthquake victims.



Although the Palpa District was far from the epicenter and the damage from the earthquake was slight, some schools were destroyed or suffered damage such as cracks in the walls. To proceed with the repairs and the reconstruction of schools that were destroyed, we immediately sent funds.

Since the need for the installment of biogas toilets was significant, we selected a small village as a pilot project where all the farmhouses would be outfitted with biogas toilets. We completed this project in 2016.

In the fiscal period 2016 to 2017, we are in the process of lodging global grant applications for the construction of small-scale irrigation channels in three locations.

The projects of Rotary Club of Tokyo Ebisu in Nepal are supported by the cooperation of the following many rotary clubs. From the bottom of our hearts, we wish to express our deep gratitude to them.

Mr. Kazumasa Kakimi, who has lived in Nepal for 23 years, Rotary Club of Palpa Tansen, Nepal,

Rotary Club of Tokyo Kokubunji, Rotary Club of Tokyo Suginami, Rotary Club of Tokyo Kamata, Rotary Club of Tokyo Hachioji Minami,

Rotary Club of Tokyo Josai, Rotary Club of Tokyo Seinan, Rotary Club of Tokyo Shibuya,

Rotary Club of Nara Omiya, Rotary Club of Taipei Yungfu, Rotary Club of Taipei Fu You, Rotary Club of Lawndale

#### Overview of Annual Activities

#### 1. FY2008-2009

Rotary Club of Tokyo Ebisu volunteers constructed Sriya Kisan Primary School in Jure village Constructed biogas toilets: 15 units

Held a workshop and presented a display booth on "Water and Sanitation" during the Rotary International Convention in Birmingham, Great Britain.

Sent a message from Birmingham to the world about the commitment of Rotary Club of Tokyo Ebisu to tackle water and sanitation problems titled "The Tokyo Ebisu Appeal."

#### 2. FY2009-2010

Constructed small-scale water supply systems in two locations: Ruksebannjan and Galdha,

#### Kang Kung

Constructed biogas toilets: 70 units, joint project

Locations: Rampur, Khaliban, Silwa, Rinneraha, Phoksingkot, Gejaha, Galda, Darchha

Solar panels and lanterns: 4 sets

#### 3. FY2010-2011

Constructed 12 wells in Grosapp

Constructed small-scale water supply systems in nine locations: Molagram, Belgari, Gabdada, Jhiridi, Kudapani, Darkesing, Kaywarapani, Chamke, Damar (joint project assisted with matching grants)

Constructed biogas toilets: 50 units (joint project)

#### 4. FY2011-2012

Interior and exterior construction work for Sriya Kisan Primary School in Jure village Donated desks and chairs for Laximi Raj Secondary School (grades 1-9) in Duwari, as well as salary support for teachers

Constructed an infant classroom plus a meeting place for mothers in Dabla

Constructed biogas toilets: 55 units

#### 5. FY2012-2013

Made a donation to microfinancing organized by local mothers. Purchased a threshing machine

#### 6. FY2013-2014

Constructed biogas toilets: 30 units

Six members of Rotary Club of Tokyo Ebisu attended a celebration commemorating the 20th anniversary of OKBaji's arrival in Nepal

#### 7. FY2014-2015

Started construction work for a village in which all farming houses were to be outfitted with biogas toilets

Nepal earthquake occurred in 2015. Undertook restoration work on six primary school buildings with cracks.

#### 8. FY2015-2016

Reconstructed a primary school totally destroyed in the earthquake.

Completed the Ebisu biogas toilet village where all farming houses were outfitted with biogas

toilets.

#### 9. FY2016-2017

Project to construct irrigation channels in three locations (currently applying for a global grant)

Appendix 1: The Tokyo Ebisu Appeal Appendix 2: How a biogas toilet is made

#### Why we initiated these projects

All of our "Water and Sanitation Projects" have been carried out under the guidance of Mr. Kazumasa Kakimi. Since 1995, Mr. Kakimi, a Japanese national, has been involved in volunteer activities in Dholimara, a small village in Nepal, where there was no running water or electricity. Collecting donations from numerous support organizations in Japan, Mr. Kakimi uses the funds he raises for various projects to improve living conditions in local communities in Nepal.

One of the members of Rotary Club of Tokyo Ebisu is also a member of one of the organizations that supports Mr. Kakimi's efforts. After this member met Mr. Kakimi, Rotary Club of Tokyo Ebisu also made a decision to support Mr. Kakimi's efforts.

Following our club's decision, Mr. Suzuki, (club member and current President) visited Dholimara, the village where Mr. Kakimi lives, in January 2008 and held discussions with Mr. Kakimi as to what our club could do. The conclusion of these discussions was that installation of biogas toilets and the construction of small-scale water supply systems would be projects that would best serve the needs of local communities.

During his time as a high-school teacher in Tokyo, Mr. Kakimi had visited Nepal from time to time because of his love of mountains. On one occasion, he encountered an avalanche. Fortunately, he survived but one of the Sherpas accompanying his trekking party lost his life. When Mr. Kakimi visited the Sherpa's family to deliver the belongings of the deceased, he saw for the first time the harsh living conditions the local people endured.

One year later he was living in the same conditions in Nepal and made a decision to dedicate his life to improving the lives of the people of that country. He then resigned from his job and moved to Nepal. Mr. Kakimi was 55 at the time.

#### Phase 1: Projects sponsored by Rotary Club of Tokyo Ebisu

#### (A) Water projects

Our water projects involve digging wells and constructing small-scale water supply systems. The small-scale water supply system we built in this village is a basic system that entailed laying pipes from upstream to the center of the village to fill a concrete tank prepared for storing the water, and then constructing several watering places downstream for the villagers' use. This system significantly reduces the time required for drawing water.

Construction of 12 wells and small-scale water supply systems in two locations from 2009-2011 (December 2011)



Above: The person in the red down jacket is Mr. Kazumasa Kakimi who lives in Nepal (currently a member of the Palpa RC)

Opening ceremony for the water supply system: Tape-cutting ceremony under an archway decorated with flowers and large leaves at the entrance to the village



Led by a band, attendants file into the ceremony venue (December 2011)



At the regular meeting of the Rotary Club of Palpa (December 2011)



Villagers dance until late during the celebrations

The tank for the water system is completed



Receiving a floral garland

Running water at last!

(December 2011)

#### (B) Construction of a biogas toilet

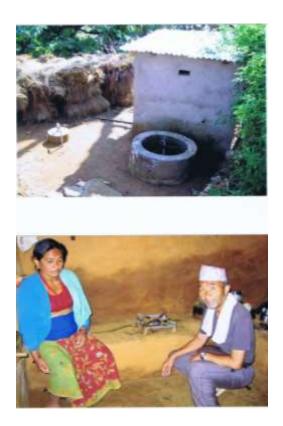
Rotary Club of Tokyo Ebisu launched a project to construct biogas toilets in the Palpa District of Nepal, and during the first phase of the project installed 135 units.

A biogas toilet is a type of gas generator developed in Scandinavia, and is also being put into practical use in Nepal. Human and animal waste are collected in a tank where gas is generated, and this gas is used for cooking.

On November 20, 2011 when the first target of the project was reached, a ceremony was held to celebrate its completion. The ceremony took place in the presence of Mr. Kakimi and with three members from the Rotary Club of Tokyo Ebisu in attendance. Led by a marching band playing music, we made our way to the square where the ceremony was to take place. Like similar ceremonies in Japan, various people involved in the project delivered speeches, and we were among these. Although there is no electricity in the village, the speakers gave their addresses using a microphone powered by solar batteries as the attendants listened.

The local residents are very happy with the results of the project. In this area alone, there are still more than 200 families who hope to have their own biogas toilets installed in the future. A biogas toilet unit can be constructed for 40,000 yen. Rotary Club assists by providing 20,000 yen for each unit, half of the total amount, while the balance comes from government grants and self-funding by the villagers. Almost all of the construction work is done by the beneficiary families and people in the neighborhood. Therefore, if there is a breakdown or other problem later, the villagers will be able to fix it themselves.

When a biogas toilet is completed, it not only improves hygiene but also frees housewives and children from having to go out and gather firewood. Even if we built a school for children, they would not attend. In other words, for children to be able to go to school, they need to have the time. With the convenience of biogas toilets, children now have time to go to school.



Ceremony celebrating the completion of a biogas toilet



At the entrance of the ceremony venue



Mr. Hiroki Ono, Chairman of the International Service Committee at the time, cuts the tape

## Phase 2: Project for Constructing Small-scale Water-supply Systems in Nine Locations in Nepal

The small-scale water supply systems we are currently constructing draw water through pipes for a distance of 1 to 2km, using the difference in height from upstream to the center of a village downstream, where the water is stored in a tank made of concrete. The water is then drawn from the tank through pipes to public water places equipped with several taps. The village people can now access water here without having have to travel far.

To receive a matching grant for this project, we began preparations in February 2010, prior to the start of the financial year. After holding meetings with Mr. Kakimi, we submitted the grant application to Rotary International District 2750 and The Rotary Foundation (TRF) at the beginning of July 2010. This was to be a project for constructing small-scale water supply systems in nine locations in East Palpa with a budget of approximately \$27,000. After lodging our application, however, communication among the TRF, Nepal, and our side did not go as smoothly as planned, and it was not until the end of March 2011 that the money from the TRF was finally deposited into the account of the Rotary Club of Tokyo Ebisu. After the deposit of the funds, construction work commenced simultaneously in the nine locations from April 1, 2011 and was completed in all nine locations on March 1, 2012.

At the end of November 2011, while the project was still underway, three members visited the local area as representatives of Rotary Club of Tokyo Ebisu and, accompanied by Mr. Kakimi, they attended completion ceremonies for three of the small-scale water supply systems. For the ceremonies at the other six locations, Mr. Kakimi kindly acted as a representative of Rotary Club of Tokyo Ebisu and attended the ceremonies on our behalf.

#### So, where in Nepal did we construct these small-scale water supply systems?

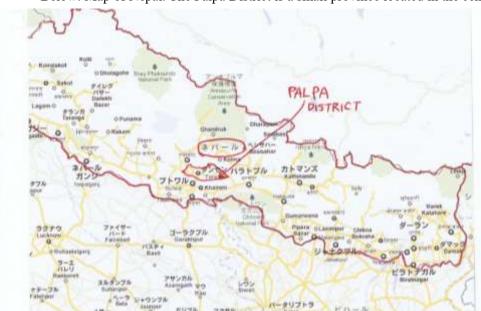
Nepal is a small country located north of India. To reach the construction sites, we traveled to Kathmandu from Tokyo via Bangkok, and then changed planes to travel to Bhairahawa. From there, we traveled another two hours by jeep to Tansen. Tansen is located in the center of the Palpa District, where Rotary Club of Palpa Tansen is located. Rotary Club of Palpa Tansen was the host club for this project, and Rotary Club of Tokyo Ebisu, as the international partner, received a matching grant to construct

the small-scale water supply systems in nine locations in East Palpa.

The construction sites were deep in the mountains, requiring further travel from Tansen for about four to six hours by jeep, and the sites had no amenities such as electricity, wells, or plumbing.



Nepal is located north of India



Below: Map of Nepal. The Palpa District is a small province located in the center of Nepal

The airport for traveling to the Palpa District is in Bhairahawa near the border with India. Lumbini, the birth place of the holy Buddha, is near the Bhairahawa Airport.

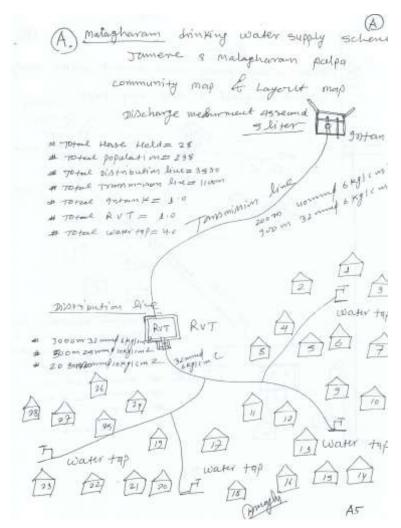


Above: Map of the Palpa District

The nine locations where we constructed the small-scale water supply systems are indicated on the map in red letters.

Some of the above places can be accessed by jeep, but others are accessible only by motorcycle or on foot.

Below is a diagram of the small-scale water supply system we constructed in the village of Molagram, one of the nine locations.



The villagers performed the construction work for the system while receiving technical guidance. As a result, they will be able to do any necessary maintenance work on their own in the future. This system does not depend on electric power but instead makes use of differences in height to draw water. Even if there is a breakdown, it can be quickly fixed.

Photographs showing of the completion ceremonies for the small-scale water supply systems (November 2011- March 2012)



Left: Completion ceremony at Jhiridi village

Left center: Three members of Rotary Club of Tokyo Ebisu together with Mr. Kakimi

Top right: Inscription on the water tank in the village of Damar village

Right center: The water has reached the center of the village

Right bottom: Material mixed with rocks and sand is brought in by the villagers, who separate the

rocks and sand using a sifter













Left top: Tap No. 1, Damar village Left center: Tap No. 2, Damar

Left bottom: Water tank, Kaywarapani

Right top: Tap No. 3, Damar

Right center: Inscription on the water tank, Kudapani

Right bottom: Public water place next to the primary school, Chamke



Left top: Inscription on the water tank, Jhiridi Left center: A very busy public water place

Left bottom: Accounting report written on the tank, Jhiridi

Right top: Inscription on the tank, Gabdada

Right center: Piping to be laid from upstream to the tank in the village

Right bottom: Members of Rotary Club of Palpa during the meeting for this project (The person in the red shirt is Mr. Uptal Kumar Bajracharya, Chairman of Rotary Club of Palpa for the FY2010-2011)

Exactly the same letters were engraved on the inscription attached to the concrete water tank.

#### Phase 3: Nepal Project

By last year, we had constructed small-scale water supply systems in a total of 11 locations and dug 12 wells. Since we had made notable headway in the construction of water systems, this year we decided to focus our efforts on the construction of schools and the improvement of facilities within the schools, which had been our original aim. Nevertheless, there is still an ongoing need for biogas toilets, so we have continued with this project.

#### **School construction**

In July 2009, when Mr. Kakimi returned to Japan, interested members of Rotary Club of Tokyo Ebisu voluntarily collected donations and entrusted Mr. Kakimi with the construction of a school. The school building was completed in October 2010. The school is located in the village of Jure in the remote municipality of Sahalkot VDC, and the name of the school is Sriya Kisan Primary School. Due to a budget shortfall, however, construction work on both the interior and exterior of the school had not been completed, and there were no desks and chairs (Photo: left below).



Sriya Kisan Primary School at the time of completion in 2010

Completion of the interior and exterior work in 2011

Just around that time, thanks to the timely appreciation of the yen, a small amount of money was left over from the biogas toilet budget, so we appropriated this money to work on the interior and exterior of the school building. There was still a shortfall, however, but the villagers were willing to contribute, and at last work on the interior and exterior of the school was completed. (Photo: Right)

In response to a separate request from the local people, we also donated furnishings such as desks and chairs to Laximi Raj Secondary School (grades 1 through 9) in Duwari.



Below: In Dabla we also constructed a two-story building to house an infant school and place for mothers to get together. This work was completed in April 2012.



Two-story building to house an infant school and a meeting place for mothers, under construction in January 2012

Below: State of construction at the end of February 2012.



#### Phase 4:

Already five whole years have passed since we made our Tokyo Ebisu Appeal in Birmingham. With support from Mr. Kazumasa Kakimi, who lives in Nepal, we built biogas toilets and secured water intensively, actively and on a large scale in East Papal, Nepal. These efforts resulted in providing children and mothers with more time, albeit slight, for study and other activities. We felt that perhaps we had reached the stage where we should pause for a moment.

Before making our next move, we decided it was necessary for us to revisit our first objective and consider the next phase of our work. We then decided that from FY2012 to FY2013 we would provide financial support for microfinancing, which had started to take root in local areas, and offer mothers more opportunities for learning as well as realizing prospects for earning income.

The villagers bought a thresher machine with the funds. This eliminated the trouble of transporting grain after the harvest to neighboring villages for threshing. The villagers pay a fee for use of machine. The revenue from use of the machine is used for other purposes and for repair costs when the machine breaks down.

This objective of this initiative was to shift from a "process of building and providing things at the request of the local people" to a "process where the local people think and act on their own." This is the first step in the transition from receiving assistance to becoming independent.



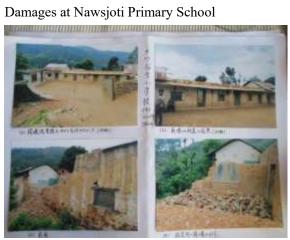
#### Major Earthquake in Nepal on February 25, 2015

As soon as we heard the news about the devastating earthquake in Nepal, we immediately made local contact to ask what we could do. From among the many proposals we received, we made a decision to assist with the recovery and reconstruction of primary schools. Local areas were in a state of chaos at the time and it became clear that there was a lack of manpower. Although this project took some time, it at last completed with the restoration of six schools and the reconstruction of one school in September 2016. The restoration work at Nawajoti Primary School was undertaken as a commemorative project celebrating the 20th anniversary of Rotary Club of Tokyo Ebisu.

Cracks in walls of school building and after their repair







### Primary school after reconstruction



#### Phase 5: Construction of the Tokyo Ebisu Biogas Toilet Village

Despite the occurrence of a devastating earthquake, we continued our efforts to construct biogas toilets. One local proposal was to equip with biogas toilets the remaining 20% of homes that had none in villages where 80% of homes already had one. Wealthier families in some villages had already had biogas toilets installed at their own expense, and many other families had toilets installed with assistance we provided. Nevertheless, although the amount was small, households that wanted biogas toilets were required to assume part of the cost. Therefore, it was only families that were unable to meet the obligation to assume a certain amount of the cost burden that did not have biogas toilets. Unless the amount of this burden were further reduced, it was clear that biogas toilets for all farming families would not become a reality. Rotary Club of Tokyo Ebisu provided the necessary support, and happily every home in the Gejha village now has a biogas toilet.

Below is a thank you letter we received from the villagers. (July 2016)



#### Phase 6: Construction of a small-scale irrigation channel

We have applied for a global grant to construct small-scale irrigation channels in three locations in FY2016 - 2017. The budget for this project will be about \$70,000, and after its completion, local communities will be able to increase their harvests through double cropping. The conversion of fields into rice paddies will also be possible. We hope that this project will enrich the economy of local communities.