

The Japanese abacus and the children of an island country

– Japan Overseas Cooperation Volunteers teach the abacus in Tonga



Ms. Yuka Nagaoka (right) and Mr. Roani Tahitoa, the local *Soroban* Officer. (Photo: Yuka Nagaoka)

Did you know that the *Soroban* (abacus) that Japanese people are so familiar with is being used to teach algebra in the small island Kingdom of Tonga in the South Pacific Ocean? Since 1978, when it received a request from the King of Tonga, Daito Bunka University has been working to train abacus instructors through initiatives such as accepting exchange students. Furthermore, since 1989, JICA has also been dispatching Japan Overseas Cooperation Volunteers (JOCVs) to the Ministry of Education and Training of Tonga to serve as abacus instructors and primary school teachers.

Currently, students from the third to fifth grade in Tongan public elementary schools learn how to use an abacus for 15 minutes every day. Tests and abacus competitions are also held. However, the country's remote islands and rural areas do not have enough abacuses for their students. For that reason, JICA has been gathering abacuses from throughout Japan that are no longer in use and donating them through its "Smile for All in the World!" program. During the Sixth Pacific Islands Leaders' Meeting (PALM6) that took place in Okinawa in 2012, approximately 900 abacuses were presented to the Prime Minister of Tonga. Over many years, the abacus has served as a tool for deepening the bonds between Japan and Tonga.

Certified abacus rank holder Ms. Yuka Nagaoka (JOCV/ abacus) has a post on the main Tongan island of Tongatapu as a "Soroban Officer." Each day, she rotates between 10 schools out of the island's 46 public primary schools.

She commented, "Many teachers here have the skills needed to teach the abacus, as it is a required subject in the country's teachers' training school. Because of that, it is rare for a JOCV to teach a class themselves. Here, our main activities are to assist with classes and offer advice about teaching methods. Then again, there are also schools and classes where the abacus lessons are not being offered for a variety of reasons. So, in those cases, we follow up to find out the reason and help the schools offer the lessons."

Ms. Nagaoka also runs the *Soroban* Competitions that are held seven times a year in Tonga, and visits one of the remote islands once a month to give *Soroban* lessons at a teacher training school. What motivated Ms. Nagaoka to go to Tonga?

"In the beginning, I thought international cooperation and volunteer activities were not very relevant to my life. However, my boss at the company I used to work for, whom I respected a lot, was a former JOCV, and he often talked about his experiences during his volunteer years. Listening to his stories, I grew interested in the

program and finally applied for it myself. I was already certified in the abacus, and I was simply overjoyed that I could get involved with international cooperation using a skill I already had."

With few main industries and limited employment opportunities, Tonga has been experiencing a continuing flow of competent human resources going out of the country to overseas. One of the reasons why the King of Tonga has taken the initiative to promote abacus training is said to be his desire to foster competent Tongan workers. "I personally think that, even though there is a limit to what people can do to stop the outflow of human resources, Tonga must focus on fostering people that can compete on an equal footing with people from the international community. To that end, primary school education is very important, so I feel proud that I am involved with this. Learning the abacus is not just about the mere skill of calculating numbers, it is also said to improve concentration, perseverance, the ability to process information, and overall brain function. By learning the abacus in primary schools, students can obtain the basic academic skills that will allow them to shift into more advanced levels of algebra and math with little difficulty." said Ms. Nagaoka.

Another volunteer, Ms. Megumi Wakamatsu (JOCV/ primary school education) is working in the remote island of Vava'u, a place of lush nature. She used to be a primary school teacher, and has experience of running a *Soroban* school in Japan. She is aiming to improve Tonga's arithmetic education as a whole through *Soroban* classes.

She explained, "When the local teachers ask the children, they all say that they love the abacus. Most people think that the abacus is a very good thing, but there are still children who have trouble learning it. Also, there are teachers who are ambitious about teaching the abacus, but also teachers who lack the motivation to do so. The truth is that there are a lot of issues."

Looking back on her activities on Tongatapu, Ms. Nagaoka said, "Right after I took my post, I asked myself a lot of questions everyday about the significance of my work here. But when I held my first national competition, I saw a wonderful scene of 200 children giving their entire attention to the abacus with my own eyes. My motivation rose instantly." Although there still are issues such as the lack of abacuses and motivation gaps among teachers, Japanese abacuses have steadily taken root in these southern islands and progress is being made, including the move by Tongans themselves to play a leading role in organizing the *Soroban* Competitions that have been managed mainly by JOCVs up until now. There can be no doubt that the abacus has captured the hearts of Tongan children and is contributing to an improvement in arithmetic education there.

*1 A program that collects goods needed by developing countries related to sports, culture, education, welfare, and other activities from domestic donors and sends them throughout the world via dispatched JICA volunteers. The program aims to help people feel more involved in international cooperation and contribute to developing countries.



Ms. Wakamatsu visiting a school to support abacus lessons. (Photo: Megumi Wakamatsu)