## Visiting Fiji

## International Affairs Department

From May 24, 2024, I visited relevant organizations in Fiji to discuss the formation of a sewerage project in the Republic of Fiji. I visited the Fiji Ministry of Public Works, the Water and Sewerage Corporation (WAF), the Japanese Embassy in Fiji, the JICA Fiji Office, and other organizations to discuss the prospects for sewerage projects in Fiji.

During my stay, I had the opportunity to visit the Kinoya Sewage Treatment Plant in the capital city of Suva. The plant has a treatment capacity of 33,000 m³/day in fine weather and has two treatment systems: the trickling filter and the batch processes. In addition to the wastewater that flows into the plant through the sewer pipes, sludge (sewage?) drawn from the septic tanks of individual households in the city, which are treated separately, is brought in by vacuum truck and treated.

When we explained the situation to the WAF staff who manage the treatment plant, we learned that only one of the three sedimentation ponds, two of the three spray filter beds, and one of the three final sedimentation ponds were in operation. As for the batch method, we were informed that the public corporation's headquarters had ordered it to be discontinued due to its high electricity consumption.

Even under these conditions, they were able to treat wastewater with an inflow BOD of 350 mg/L down to 50 mg/L. I was pleasantly surprised by the treatment capacity of the trickling filter process, which exceeded my expectations. They were enthusiastic about restarting the facilities that had been shut down for repairs and complying with the standard value of 20 mg/l.

The treated water is discharged into the sea (the South Pacific Ocean) in front of them, but due to opposition from residents, they have extended the discharge channel out to sea 2.4km offshore. We also heard about other issues they are considering, such as using digester gas and sludge in green agricultural land.

There are many similarities between Japan and Singapore in terms of how they deal with residents and the issues they are addressing. Although the countries are different, I felt a sense of affinity because they face similar challenges regarding wastewater projects.



Panoramic view of the Kinoya treatment plant

From the front, the primary sedimentation tank, the spray filter bed, and the final sedimentation tank are arranged in that order. The digestion tank is also visible in the distance.



The state of the inflowing water

It was even grayer than in the photo, and there was not much of a smell.