

「アンティグアの再生水試験事業」

10月20日付当地 Nation 紙は、国際協力推進協会(A P I C)の「太平洋・カリブ記者招待計画」により訪日した同紙エバンソン記者のアンティグアにおける我が国の再生水試験事業に関する記事を掲載しているところ、概要以下のとおり。

1 世界の水不足問題を解決しようとする日本の新興企業は、アンティグアで再生水利用試験を行い、数年後に域内展開を検討している。同記者招待計画は、創業8年のW O T Aで水処理・浄水システムを視察した。同システムは、家庭で排出される中水を再利用し、再び同じ用途で使えるようにポンプで送り返す。

2 W O T Aは、島嶼国が抱える水問題対策として、再生水技術を実証するには、カリブ地域は理想的な場所だと言及した。また、W O T Aは、淡水資源が限られている島嶼国において、人口増加及び観光業による水需要が高まっていることを指摘した。さらに、中水再生利用システムと海水淡水化システムは、同様の技術でありながら、後者はより多くのエネルギーが必要であると述べた。

3 W O T Aによると、中水再利用システムの導入には、大規模なインフラ工事は不要であるという。W O T Aのシステムは、大規模なシステム構築に伴う設置コスト、時間、環境負荷を低減できるとのことである。ユーザーや販売店によるフィルター交換、薬品の補充などの簡易メンテナンスは数か月に一度、専門家が行う定期的なメンテナンスは1年に一度行われる。しかしながら、現在の日本の水道料金の2倍近い値段であることもあり、日本の一般家庭において、再生水の利用には躊躇することが多いとのことである。

Antigua test project for recycled water

A JAPANESE START-UP COMPANY with an interest in solving the world's water shortage issues is testing the reusable waters in Antigua before looking to move into the rest of the region in a few years' time.

Co-founder and vice-president of intubation of the eight-year-old WOTA, Ryo Yamada, says the water systems will first be rolled out in Japan in about two years before the company enters the Caribbean market.

Yamada was speaking as he gave a demonstration of the water treatment/purification system to journalists on the Association for Promotion of International Corporation's Journalism Fellowship in Japan on Tuesday.

WOTA's system will take grey water – water from the shower, taps and washing machines – treat and purify it, and pump it back for use in the same shower and taps.

Another system, which is still in the developmental stage, will recycle water from toilets and kitchen sinks.

"We have ongoing conversations with Antigua and Barbuda. But I think small island nations, in general, have a variation of water problems in very compact areas. So I think it (the Caribbean) is an ideal place



JOURNALIST with the Gleaner Newspaper, Andre Williams, trying out the hand-washing station which recycles used water while journalist from the Solomon Islands Ofani Eremae looks on.

(Pictures by Heather-Lynn Evanson.)

for us right now to demonstrate our technology and show that we can solve these problems," Yamada noted.

"Because you're a small country you have very limited fresh water resources and in many of these island nations there is population increase, and also because there is tourism that drives water demand.

"So there is always the stress on how we provide water for the population and provide for tourism. And, at the same time, there's a lack of infrastructure in general," he added.

Yamada explained that the



CO-FOUNDER and vice-president of intubation at the eight-year-old WOTA, Ryo Yamada, explaining the processes behind the water recycling system.



HEATHER-LYNN'S HABITAT

WITH HEATHER-LYNN EVANSON

system uses a lot less energy than desalination in its processes, though the technology was similar to desalination.

"That's what makes it better compared to desalination as a water source," he said.

In addition, the company has dispensed with the need for a major infrastructural work in the installation of its system.

"Right now due to population growth and changes in lifestyle, water demand is increasing several per cent a year. On the other hand, water supply is diminishing because we have climate change which is changing precipitation patterns and we have quite a lot of water pollution which is ruining fresh water resources," he said.

"To solve this, our approach is to make small infrastructure instead of these big systems where we build these large treatment plants and then

connect that with pipes.

"We make something that is very compact that can be installed in each home to essentially have a water cycle for each home, and by doing that, we think we can reduce the installation cost, the installation time and the environmental impact associated with constructing large scale," Yamada revealed.

Minor maintenance, like replacing filters or refilling chemicals, would be done by the user or distributor every few months, while annual maintenance would be undertaken by professionals.

He was, however, quick to admit his company was not the only one in the market and that currently his was "not the cheapest system on the market".

He also noted it was still almost twice as expensive as the current cost of water in Japan.

Yamada said there was still some reluctance towards the use of recycled water.

"I think there is definitely a certain psychological hurdle to using recycled water but it's really no different than your local shower. So I think often when people experience our showers, they say this is really no different to my regular shower."