

Japan touts pedal-powered water purifier

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Japanese water purifier venture Nippon Basic displays a portable water purifying system "Cycloclean," powered by pedaling a bicycle to make a maximum of 5 liter of clean water in a minute at a technology fair in Tokyo. Nippon Basic Co. is gearing up for large-scale production in Bangladesh of the bicycle that can purify water at disaster zones or remote villages.

A Japanese company is gearing up for large-scale production in Bangladesh of a bicycle that can also be used to purify water at disaster zones or remote villages.

"If you can bike to a river, pond, pool or other sources of [water](#), all you need is your leg power to produce clean drinking water," Yuichi Katsuura, president of Nippon Basic Co. said on Thursday as he introduced the system.

Cycloclean needs only manpower to turn a bike chain driving a motor to

pump water through a series of filters, unlike other systems requiring gasoline or electricity. It can purify five litres (1.3 gallons) of water in a minute.

The bike boasts puncture-free tyres, while the pump and hoses are housed in an attache case-like box on the rear carrier and three filter cartridges are fitted around the rear wheel.

Nippon Basic, based in Kawasaki near Tokyo, has sold 200 bikes since first launching Cycloclean in Japan in 2005 at 550,000 yen (6,600 dollars) each, Katsuura said.

Many of the bikes went to Japanese local governments but a small number were sold to Bangladesh, Cambodia, China, Indonesia, Myanmar and the Philippines, he said.

Katsuura said the company had seen demand rise in Bangladesh and started local assembly late last year, partly to reduce the price in cooperation with a Bangladeshi bicycle maker.

"We hope local production will go into full swing around April," he said, adding his firm and local partners were aiming for annual production of 100-200 units.

Katsuura argued Bangladesh's millions of rickshaws would decrease as its economy grows but that a bike-water business could provide new jobs to some of the drivers.

"You go to where water is, put your bicycle on a stand, drop a pump and peddle for clean water, which can then be sold elsewhere," he said.

He added that the pump was capable of sucking up water at a depth of five metres despite its "low-tech appearance".

Cycloclean was on display at an environment-friendly technology fair in Kawasaki, near Tokyo, which ends Thursday.

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