

Rovai Case Studies



How Rovai is helping improve day-to-day life in rural Cambodia

1 Pump #492

This 5-member family from Por Pel Commune has owned their Rovai pump since 2007, and has extensively integrated it into their way of life.

The family's income generation activities revolve around commercial agriculture, aquaculture, and wine production. Because of the scale of their work, large amounts of water and labor are required. Before purchasing Rovai, water usage was estimated at around 3,000 liters a day.

After testing the Rovai pump for a short time, the family decided to make the purchase, citing easier access to water and increased cleanliness due to the concrete cover.

Soon, the pump's commercial value began to emerge when the family was able to incorporate Rovai into the family wine business. Thanks to the increased ease of collecting water, the family estimated its output capacity grew by 15 liters of wine per day, at a cost of 2,000 riel per liter. Less the cost of raw materials, this translates into a potential 18,000 riel per day increase (\$4.40 USD), generally realized with larger customer orders.

The family also connected PVC pipes to the pump to water crops such as morning glory, green beans, cucumber, and cauliflower in fields that would have been otherwise inconvenient to maintain.

The family gauges their current usage at around 6,400 liters a day – essentially double their previous usage, with most of the increase translating into more crops in more fields, more wine production, and the maintenance of a fish pond that holds thousands of fish.

When a nearby pagoda learned of this family's utilization of Rovai, they purchased three for their own use.

2 Pump #54

This 4-person family in Kampong Chhnang (husband, wife, and two children under 10) purchased the Rovai family pump over a year ago. They initially bought the pump after deciding it would make collecting water easier, as well as protecting their children from falling into an open well (Rovai pumps come with a concrete well cover). The husband and wife, and frequently relatives, pump water from the well every day.

The main source of the family's income comes from making Khmer noodles, with some additional farming and vegetable-growing. The process of making Khmer noodles is water-intensive, often consuming 1,000 liters of water a day or more and requiring the boiling of water before use. The wife spends her afternoons making the noodles, and sells them at the local market the next morning.

The family has seen tangible results from their use of Rovai - the wife is able to draw more water for Khmer noodles, increasing her productivity by an estimated kilogram daily. This additional kilogram sells for 1,500 riel, which could be converted into a 45,000 riel (\$11 USD) increase in monthly earning potential.

Additionally, children in the family can now bathe directly at the well without assistance from adults or fear of falling in.

The family has recommended the pump to neighbors; as a result, one of the neighbors has purchased a Rovai pump as well.

3 Pump #34

This family, from Dork Snet Village in Kampong Tro Lach, has owned a Rovai pump since 2009. There are 5 family members, including an elderly grandparent.

The family's source of income is mostly through rice farming, with additional agriculture projects such as growing coconuts.

After seeing a nearby school using the Rovai pump, the family decided to purchase the pump as well. They were specifically impressed with the concrete well cover and the ease of use, switching from a traditional rope-and-bucket setup.

In addition to everyone in the family using the pump, they share it with two neighboring families. Despite this heavy shared usage, they have had no performance complaints with the pump or the rope.

The family estimates that they've cut time spent retrieving water from two hours previously to only 30 minutes using Rovai. In addition to the time savings, they have noticed that their

water is no longer dirty and does not contain mosquito larvae as it previously did when using the rope-and-bucket retrieval method.

The family feels that their income has increased through their ability to grow more palm trees for a larger coconut yield, as well as new plantings of cabbage, herbs, and other vegetables. With ten more palm trees planted since the pump was purchased, they expect to see an increase in mature coconuts in the coming years. For them, Rovai plays a key role in sustaining the large number of palm trees currently planted. Their plan in the future is to add PVC pipes to the pump to reach their plots more effectively.

In addition to increased profit from selling the coconuts, they estimate they're saving money by not having to purchase vegetables from the market; however, they had trouble quantifying this savings.

They've also gained time out of the day that was previously spent pumping water – this time is put to use by one of the family members, who is a teacher, to spend more time teaching. The other family members use the increased time for leisure.

4 Pump #24

This pump is being used by a 71-year-old monk in a pagoda in Ponley Commune, Kampong Chhnang. The pump has been in use at the pagoda for two years, and is highly valued by the administrator there.

The monk noted especially its usefulness during religious festivals where hundreds of people could quickly and easily access water. Additionally, there is a primary school on-site where students use the well on schooldays. On an everyday basis, the well is accessed by an elderly woman who serves the monks, and the ease of use of the Rovai pump is significantly greater than the previous rope-and-bucket method. The water is also noticeably cleaner and free of insects.

An alternative he considered, due to the amount of usage the well gets, was to use a motor to draw water from the well, but he feels he is saving money by not having to frequently purchase gasoline to power the motor.

The pump's most important task is as a quick, reliable source of water to mix with building ingredients during the construction of a new temple. The majority of the pagoda's estimated 4,000-liter-a-day water intake goes toward this construction, and the Rovai pump plays a key role.

Before owning the Rovai pump, the monk did not grow crops; now, he grows a small amount for internal use and plans to grow more.