

Having trouble viewing this newsletter? [Click here.](#)



*Empowering families and children to effect lasting change... community by community.*



# Rooftop Rainwater Harvesting & Sustainable Cambodia

 [Forward to a Friend](#)

Cambodia is a country of stark contrasts. In the rainy season, the rice paddies are green with new rice, the jungle lush, and the countryside thriving with new growth. In the dry season, the rice fields are parched and baked, the jungle brown, and the countryside coated with dust. While water is abundant in the rainy season, in the dry season the shallow ponds quickly dry up, and water becomes very difficult to reach, with families often spending several hours each day traveling to collect water.

Unfortunately, it is most often the children who must spend this time collecting water, as the parents are busy with other chores or with working to generate a meager income. As a result, the children often miss school during the dry season, or the family loses income generation opportunities.

But if the villagers were able to collect and store enough rain water in the wet season to get the family through the entire dry season, the children could spend their time attending school and adults could spend their time generating income, instead of walking hours to a river, lake or deep pond to collect water for daily use.



Rain water collection has been in practice throughout Cambodia for many years. For generations, families have been catching the abundant rainfall that



Traditional Water Jar

comes during the annual monsoon season (June-November). But the traditional methods and tools for collecting rainwater have not been sufficient to last long, or to provide safe water.

Most commonly, rainwater is collected in small earthen jars (150-300 liters), by having the rain fall directly into the jars (as pictured). In some cases, gutters or bamboo pipes are utilized to deliver water to these jars. The water that is collected is used for drinking, cooking, cleaning, bathing, and watering animals.



Building a RRH Container

There are several problems with this system of water harvesting. First, the jars are not capped and sealed and are therefore susceptible to contamination. Secondly, the jars are small and cannot store enough water for the duration of the dry season (December-May), forcing many families to collect water from outside sources, which are often polluted and far away from their homes.

To help families with these issues, Sustainable Cambodia has begun a Rooftop Rainwater Harvesting program which helps the families install a system to collect and store enough water to last the entire dry season. Many sponsors around the world are helping with this, including the Rotary Club of Poipu Beach (Hawaii), The Rotary Club of Calgary Canada, Wildrose Foundation, Rotary of Western Australia, the Rotary Club of Port

Orange/South Daytona (Florida), Animas Environmental Services, Care for Cambodia, and individual families who have assisted with the project.

The water is collected using a rooftop rainwater system, where rain falling on metal or tiled roofs is caught and transferred into pipes that lead to a capped and sealed 3,000-4,000 liter water storage tank. The cap and seal helps to prevent contamination, in combination with a "first-flush" system that re-routes the first few minutes of water, ensuring that the water stored in the tank is clean. A faucet near the bottom of the tank allows water to be pulled off easily for family use. The tanks are large enough to provide a family of up to 9 people with water for drinking and cooking for the duration of the dry season.

The tanks are constructed in new facilities at Sustainable Cambodia, and are transported by the village families. Like barn-building used to be in many countries, this is a community project, with several families sharing the work of installation, and

with multiple families coming together to help each other with the task.

Like all Sustainable Cambodia projects, there is extensive training involved, so the families become self-sufficient in maintenance. And their participation in construction and installation bring them a sense of true ownership. They are trained in water management, safe water use (sanitation), the mechanics of the rooftop rainwater collection system and in tank maintenance. Now



Transporting the RRH Container



Boy with New RRH

families not only have access to healthy water for drinking and cooking year-round, but they also have the skills and knowledge to use water wisely and safely and to maintain the systems that harvest and store the rainwater that will be their primary source of drinking and cooking water during the long dry season.

The project has only been underway for a few months, but already Sustainable Cambodia and

the families have built and installed dozens of rooftop rainwater harvesting systems.

Our thanks to all the fantastic supporters around the world who have helped to make this project successful. Thanks to all of you, many families now have a sustainable way of collecting, storing, and using rainwater, and many hundreds and even thousands of families will have this valuable resource in the future!



**Quicklinks**

 [Forward to a Friend](#)

[Give a Village Gift](#)  
[Sponsor a Child](#)  
[Make a Contribution](#)  
[Tell-a-Friend](#)  
[Volunteering](#)  
[Newsletter Archive](#)  
[Our Programs](#)

---

**Sustainable Cambodia** is a grass-roots, volunteer-based, Rotary-supported, 501(c)(3) not-for-profit organization, working with rural Cambodian villages to help them achieve sustainability and self-sufficiency. Our model is unique in several ways:

- Only native Cambodians are employed as paid staff, and all international officers, directors and consultants are unpaid volunteers, ensuring that 100% of funding goes directly into the rural village programs.
- We are an empowerment organization rather than an "Aid" organization. We provide resources, assistance, training and education to the community, empowering families to revitalize their community and economy.
- Our approach is broad-based, including schooling for children, safe village drinking water, irrigation systems, alternative agriculture, vocational education, micro-business and healthcare.
- In return for the assistance, each family commits to helping surrounding villages: We not only "teach them how to fish," but teach them to teach others how to fish.

While we currently work in central Cambodia, our vision is for this empowerment model to spread across Cambodia, and ultimately to grow into other countries.

---

### Contact Info:

Richard Allen & Susan Mastin, Volunteer Directors/Officers  
[usoffice@sustainablecambodia.org](mailto:usoffice@sustainablecambodia.org)  
US phone: 352-371-2075  
visit us at [www.sustainablecambodia.org](http://www.sustainablecambodia.org)

### [Forward email](#)



This email was sent to [usoffice@sustainablecambodia.org](mailto:usoffice@sustainablecambodia.org) by [usoffice@sustainablecambodia.org](mailto:usoffice@sustainablecambodia.org) | [Update Profile/Email Address](#) | Instant removal with [SafeUnsubscribe™](#) | [Privacy Policy](#).

Sustainable Cambodia | US Offices | 101 SE 2nd Place, Suite 201-A | Gainesville | FL | 32601