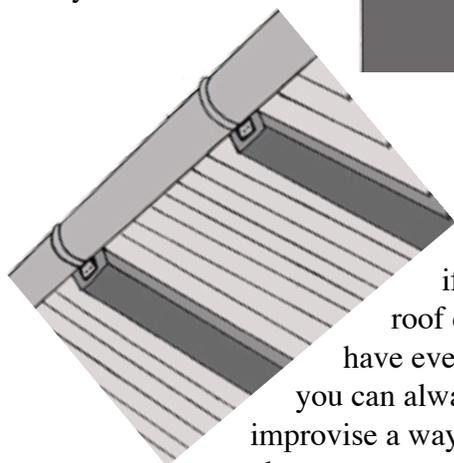


## Getting Started

The easiest way to harvest rainwater is to install a collection system while you are building your house, because you can make use of construction scaffolding and won't have to accommodate tricky roof structures. But you can still install a collection system even if you didn't plan ahead, especially if your house already has eave boards on which to attach a gutter system.



Even if your roof doesn't have eave boards, you can always improvise a way to attach gutters.

“It’s not just rain,  
but water.  
It’s not just water,  
but a precious resource.”



The Samdrup Jongkhar Initiative  
Samdrup Jongkhar, Bhutan  
2013  
[www.sji.bt](http://www.sji.bt)

Special thanks to our donor:



## An Introduction to Rainwater Harvesting



## Rainwater harvesting

is an easy way to make use of the water around us. Read on for some simple tips for harvesting rainwater from your rooftop.

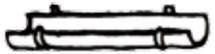
### What's Needed:



Plenty of rain



Catchment area (roof)



Gutters and hooks



A simple mesh filter  
or a sand filter



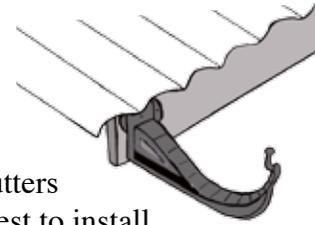
Storage tanks



Optional for  
underground storage:  
a pump or pressurized  
tank

## Installing a Gutter System

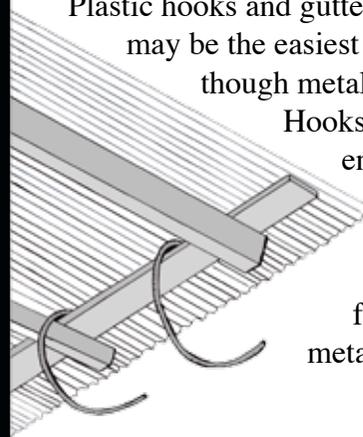
Install strong hooks to hold the gutters onto the eave boards of your house.



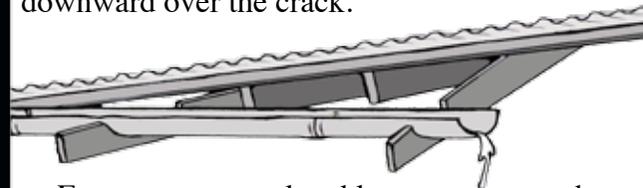
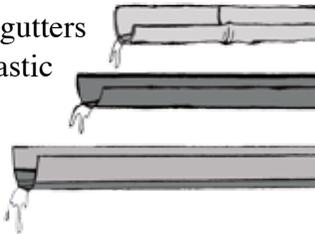
Plastic hooks and gutters may be the easiest to install, though metal will last longer.

Hooks should be strong enough to endure heavy rainfall.

Hooks can be purchased, or made from rebar, scrap metal, wood or rope.



Once the hooks are set, gutters can be installed. For plastic gutters, High Density Polyethylene (HDPE) plastic is recommended because it is recyclable. Metal gutters can often be manufactured locally. Be sure to solder the connection points or overlap the gutter pieces so that water flows downward over the crack.



For a more natural and low-cost approach, bamboo gutters also work well. Gutters can even be fashioned from plastic bottles!

## Water Storage

The most common way to store water is above ground, in concrete or plastic tanks. A closed system will keep pests out. If you are using rainwater for drinking, it's good to boil and filter it first and to clean your harvesting system regularly.



If you are storing a large amount of water— for agricultural use, for example— a leak-proof underground system may be best. In Bhutan,

underground systems are made from concrete. Filter rainwater before storage, through a simple metal screen or through a more sophisticated system like a slow sand filter.

A pump or pressure tank may be needed for water distribution.

