Rainwater Harvesting (RWH)







Rainwater harvesting is the process of collecting and storing rainwater that falls on our rooftops and open grounds for later use.

This can be stored for direct use or can be recharged into the ground water.

Where can be install?

These Rainwater harvesting structures can be installed at anywhere

including;



Aanganwadi



Gov. Buildings



Farms

Community

level

Flooding Area

Catch the rain

Where it fall, When it falls

For Water Security!

Checkdams for Runoff, RWH for Rooftops!

Be the "WATER CHAMPION" of your Village !

Components & Specifications of Rainwater Harvesting

01. Rooftop Area

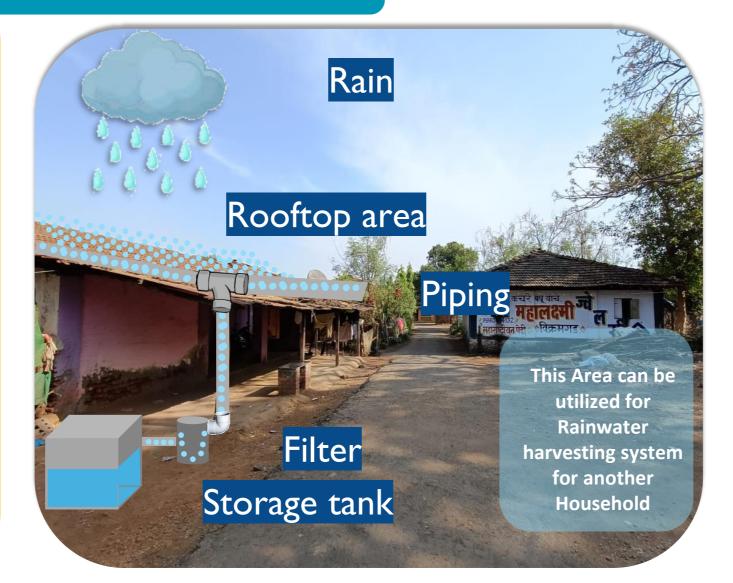
- RWH can be done on any type of rooftop.
- Proper cleaning of the roof and filter is mandatory before and during monsoon.
- Avoid using soap or acid for cleaning the roof.
- Roof surfaces should be smooth, easy to clean & • durable to prevent material shedding into the water.





RCC Roof

Corrugated Galvanized sheets Roof iron Roof



04. Storage Tank

- Storage tanks should have a tight-fitting roof to block light, a manhole cover, and a flushing pipe at the base.
- Only fill tanks with rainwater.
- The tank should be easy to clean from the inside.



Masonry Polyethylene Ferrocement Tank Tank Tank

Cement Square Tank

02. Conveyance System & Gutter

- Gutter size should match the flow during the heaviest rain, ideally 10-15% oversized.
- Use semi-circular or rectangular gutters for optimal flow.
- Ensure gutters are well-supported to prevent sagging or falling when filled with water.

gutter





Plain galvanized iron gutter

PVC Material **Bamboo** betel trunk Gutter

Dos for Harvesting Rainwater

03. First Flush & Filter

- Taps should be installed 10 cm above the tank base to allow debris to settle on the bottom, preserving water quality.
- A first flush system diverts initial dirty runoff, and a filter unit removes debris and contaminants before water enters the storage tank.







Cloth filter

filter

Don't for Harvesting Rainwater

- Divert initial rainwater before collecting it in the storage tank.
- Clean the roof every 15 days and make sure there are no leaves on the roof •
- Make sure the pipes are well maintained

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CWAS CENTER FOR WATER AND SANITATION

CRDF CEPT UNIVERSITY

On the top of the rainwater tank, ensure a tightly fitting lid is in place to prevent sunlight • from entering, which can promote algae growth.

- Do not store rainwater in tanks without proper covers.
- Don't use paints, chemicals or hazardous substances on the roof
- Don't leave the first rain separator valve open! Remember to close it.

In partnership with:

