

# RAIN WATER RECYCLING AND MONITORING SYSTEM

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## ABSTRACT

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The project is about the system in which rain water is made reusable using water vaporizing and filtering as the main creditor. The rain water collecting system has been used in most of the African countries and main idea of our project is to modify the existing system by adding filters to improve the water quality. The system can be also applied in tropical countries to work as additional water supply in every household and to increase the environmental awareness among the public.

The system works firstly by collecting water in the tank, this is rain water. Then this water is sent through a filter, after that the water is then sent to a airtight boiler where it is turned into vapor, as these vapors go up inside the boiler chamber it is then condensed to get the water, the condensation of the water is careful design of this prototype which would allow maximum utilization of the environment. Now after condensing water is ready to be used and is collected in a tank. The system would be fully monitored and all the flow of the water and water level in every tank can be displayed and also controlled using system of sensors and switches in the tank and supply lines. As a fully environmental friendly system, this system does not require any other electrical supply, as the whole system will be fully powered up by the solar energy.