

**Low Cost, Easy to Assemble and Maintain**

## **Simple Rainfall/Water-level Monitoring & Warning System**

At the danger of sediment and flash flood disasters caused by local torrential rains, **we have to grasp the situations, judge and take actions by ourselves.** This is especially important in those areas where the capacity of the government and municipalities is limited. The VCEW has developed a simple system and promoting Community Early Warning using the system. VCEW have organized training seminars for assembly and installation of the system in Japan, Nepal, Fiji and Kenya. The system including its localized models is in use in Japan, Nepal, India, Indonesia, Sri Lanka, Fiji, Solomon Islands and Kenya at present.



Assembly of Monitor (Nepal 2010)



Assembly of Stream gage (Fiji 2011)



Assembly of Rain gage (Kenya 2013)



Installation of Stream gage (Kenya 2013)



Installation of Rain gage (Kenya 2013)



Explanation to people (Fiji 2011)



Installation of stream gage (Fiji 2011)



Memorial shot (Nepal 2010)



Memorial shot (Kenya 2013)

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# Hydrological Equipment for Community Early Warning

The early warning equipment is composed of MONITOR/WARNING UNIT, RAIN GAGE and STREAM GAGE. This Equipment can be assembled locally with parts available universally.

When the accumulated rain or water level reaches the pre-set levels the lamps flash and the buzzer sounds. With this automatic warning function, the equipment is useful particularly for early warning of flash-floods and debris-flows by heavy rains concentrated over a small catchment for a short period.

The approximate cost is 40 US\$ for MONITOR/WARNING UNIT, 15 US\$ for RAIN GAGE, 30 US\$ for STREAM GAGE and 1 US\$ per one meter for the connecting cable. (as of January 2014, in Tokyo)

## MONITOR/WARNING UNIT

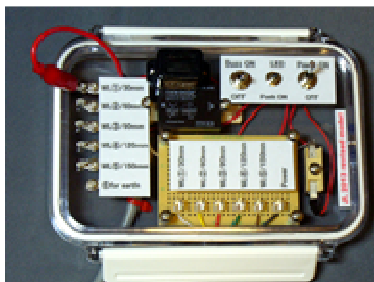
The monitor/warning unit is designed to apply to both the rainfall and water level. AC converter, battery and/or solar system may supply the DC 12 volts power.

## RAIN GAGE

The rain gage is a sensor attached on the side of the rain accumulating container. The gauge is usually installed near-by the observer's house.

## STREAM GAGE

The stream gage is composed of a casing pipe and a sensor rod. The stainless screw terminals for sensing are placed on the sensor rod.



MONITOR/WARNING UNIT



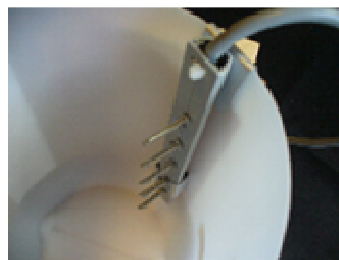
RAIN GAGE (New Model)



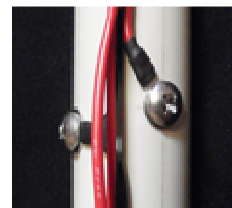
STREAM GAGE



RAIN GAGE (Original Model)



Rain gage (sensor)



Stream Gage (sensor terminal)

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