

Solar Early Warning System

The challenge: In flood-prone areas, community members and their livestock may have little warning that a flood is imminent. Similarly, they may remain unaware until it is too late of hazards such as a fire breaking out in the community. Many of the most at-risk communities have unreliable access or no access to the electricity grid.

The solution: A solar-powered early warning system (EWS) can ensure that all community members are alerted to imminent or potential danger. A timely and audible alert gives community members time to protect their family members, most treasured possessions, and livestock.

The technology: Electricity is generated by solar panels and stored in a battery to ensure the system is in a state of constant readiness, day or night. This power is used to issue an amplified warning message via loudspeaker. The warning can be triggered via an SMS, manually or automatically. Automatic alerts can be triggered by information from sensors based in the river or from weather stations.

Illustrative output: 2 x 55 watt-peak (Wp) solar panels are required.

Lifespan? @10-15 years.

Why choose a solar early warning system?

- ✓ Efficient, effective and environmentally friendly option.
- ✓ Can operate in remote and off-grid locations.
- ✓ Zero-cost to run and low-cost to maintain.
- ✓ Easy to operate by community members after receiving basic training.

