

EARLY WARNING SYSTEM PROVIDES CRITICAL ALERTS

Two-way communication service provides early warning alerts to citizens in flood-prone area via the Iridium® Satellite Network.

Sutron Corporation

“Sutron recommended the Iridium® system as the most economical, the most reliable and the best suited system for Bhutan’s remote, rugged terrain and extreme climate conditions. Other providers simply couldn’t provide the same level of communications needed for this project,” said Ashish Raval, senior vice president, Sutron Corporation.

THE CHALLENGE

The Kingdom of Bhutan, located in the eastern Himalayas, experienced major flooding around their glacial lakes. The worst occurrence took place in 1994 when a glacial lake outburst flood (GLOF) occurred on the Glacial Lake of Luggy, claiming 22 lives and causing massive property and livestock damage.

THE SOLUTION

The 1994 GLOF was the catalyst for the government of Bhutan to establish an Early Warning System, giving downstream inhabitants sufficient time for evacuation. Sutron Corporation, a worldwide leader in providing real time data collection, remote monitoring systems and hydrological/meteorological monitoring equipment, was awarded the project in March of 2010.



**Sutron 9210
XLite Datalogger**

Sutron teamed up with Iridium to provide the telemetry backbone for Bhutan’s GLOF Early Warning Project. Iridium’s fully-meshed constellation of 66 satellites enables worldwide continuity of service, regardless of how remote a location is. As part of this project, Iridium provides

two-way communications, essential for the functions of siren control, data on demand, station diagnostics and maintenance.

THE RESULTS

The Bhutan-based Early Warning System is designed to rapidly warn citizens of impending danger so they can take immediate action. It is anticipated that this system will be the first of many early warning systems for the Kingdom of Bhutan.

The Iridium Global Ecosystem

Solution Provider: Sutron Corporation

Enabling Product: Sutron 9210 XLite Datalogger and Tempest Software

Enabling Product Vendor: Sutron Corporation, an Iridium service provider based in the U.S., is a global leader in hydrological, meteorological, and oceanic monitoring products, systems, software and services.

Iridium Core Component: Iridium 9602 Short Burst Data® Transceiver

Iridium Key Network Capability: Iridium’s capability of providing global, low-latency, two-way communications makes it the ideal solution for safety services and early warning notification systems anywhere in the world.