

'Image-based technology can save more lives'

LIFE DETECTION
THERMAL IMAGING
CAMERAS ARE
THE LATEST
IN DISASTER
MANAGEMENT

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▶ **WHAT IS IT?**

A device that uses infrared radiation to form an image and detect life

▶ **WHY IS IT USED?**

To detect the presence of people and other living things in places that cannot be accessed or where there is no light

▶ **HOW DOES IT WORK?**

Sensors send signals on detecting physiological activity

▶ **HOW IS IT USED DURING CALAMITIES?**

Unlike life detection kits now in vogue in India that are primarily audio based, thermal imaging cameras can get accurate information on the number of people trapped, their location and even health condition

▶ **HOW IS THE INFORMATION USED?**

Using real-time data relayed by these cameras, a 3D hologram can be created or simulation models formed to prepare a close-to-life image of the site and spots where people are trapped.

- In many countries, thermal imaging cameras are advanced enough to form a triage – the process of quickly examining the medical condition of trapped people

In an admirable display of courage, will and commitment, the entire team involved in rescue efforts, primarily personnel from National Disaster Response Force, firemen, police and volunteers in addition to vehicle operators and paramedical staff worked round the clock, strained every single nerve to rescue many people trapped under the rubble.

But could more lives have been saved had sophisticated equipment driven by advanced technology been available at the disposal of the rescue team? Yes, feels an expert who has been involved in rescue efforts in disaster sites the world over.

Anoop Madhavan, who was involved in relief operations in the aftermath of the Haiti earthquake in 2010, says that while in manpower terms, India is second to none, she has yet to catch up with the rest of the world when it comes to using state-of-the-art equipment.

He says a glance at the inventory of equipment clearly reveals that the NDRF has fine gadgets but they are not exactly on a par with those possessed by countries that witness natural disasters at frequent intervals. Some equipment is audio-based, while we need gadgets to provide the exact location and condition of workers based on visuals.

For instance, a high-end thermal imaging camera with provisions to even supply fluids to trapped persons is being used the world over, says Mr. Madhavan, chief executive officer of Survival Instincts, authorised provider of the American Red Cross health and safety training programme.

The gadget can reach corners inaccessible to rescue personnel. "We still have a long way to go in terms of putting to use radio communication technologies that can be operated without satellite connectivity, SIM cards or even microwave towers," he adds.

PHOTO:
R. RAGU



THE HINDU

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