

Application of ICT in Disaster Management-An Overview

Er.A.K.Sabat

Software Engineer

Alcatel Development India Ltd.

What is Disaster

- Disaster is any event natural or man made which threatens human lives, damage private and public property and infra structure and disrupts social and economic life
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ICT Tools In Disaster Management

- Geographic Information System (GIS)**
 - Remote Sensing**
 - Satellite**
 - Internet**
 - Radio and T.V**
 - HamRadio**
 - Mobile, Fax and E-mail**
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Geographic Information System (GIS)

- GIS is used for managing the large volumes of data needed for the hazard and risk assessment
 - In the disaster preparedness phase it is a tool for planning of evacuation routes
 - In the disaster relief phase, GIS is extremely useful in combination with GPS (Global Positioning System) in search and rescue operations in areas that have been devastated and where it is difficult to orientate
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□ **Remote Sensing**

- Hazard and risk modeling of tsunamis, hurricanes, earthquakes and disease pandemics
 - Models of extreme oceanic, land and atmospheric phenomena as well as pandemic outbreaks
 - Remote Sensing based early warning systems for natural disasters such as tsunamis, hurricanes, earthquakes, floods, etc.
 - Satellite and/or airborne observations of extreme natural events in support of disaster response
 - Damage assessment using satellites and airborne sensors
 - Damage and loss estimation
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□ **Satellite**

- Emergency communications
 - Hazard forecasting, early warning systems and monitoring
 - Information exchange
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- Internet**
 - Radio and T.V**
 - Mobile, Fax and E-mail**
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Essentials for the success of use of ICT in Disaster management

- Good data management**
 - Understanding and participation
by personnel in the organization**
 - Need of identifying information
needs**
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Advantages in use of ICT in disaster management.

- Speed and accuracy**
 - Economy**
 - Flexibility**
 - Choice of configuration**
 - Information for management**
 - Promote organizational change and development**
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Conclusion

- Information and communication technology can play an important role in different phases of disaster management
 - Continuous and rapid development of ICT is essential for the protection of the people from the destructive effect of disaster
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Thank You