

Disaster Proofing of Telecommunications - Kerala Floods

What is the issue?

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• There were major failures in communications services during the recent Kerala floods.

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 It highlights the lack of preparedness on the part of telecom operators, policy-makers and disaster management agencies.

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Why are communication services crucial?

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• During a crisis situation well coordinated communication network is a must to mitigate the disaster risk.

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• Such an infrastructure, functioning during a crisis, can significantly enhance the resilience of communities exposed to risk.

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• The Department of Telecom has laid out a Standard Operating Procedure with clear instructions in this regard.

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 \bullet However, the fragility of country's communications infrastructure in reality exposes the huge gap between the plan and practice. \n

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How can this be dealt with?

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• Disaster proofing of telecommunication is an essential prerequisite to ensure hassle-free rescue efforts.

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• Location of equipments - Optimum location that is least exposed to risk can reduce damage.

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• It can also make telecommunication installations less susceptible to natural disasters.

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- E.g. Equipments should be installed in buildings in higher locations where the risk of flooding is reduced.
- Basements should be avoided as sites for equipment and reserve generators.
- Autonomous power supply This is the backbone of telecommunication network.

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- \bullet Besides, there should be sufficient fuel for back-up generators as power outages can be prolonged. $\ensuremath{\backslash n}$
- **Data Services** Servers should be geographically dispersed and network elements can be based on a cloud platform.
- As terrestrial network gets damaged during disasters operators should provide mobile base stations and backpack devices.
- \bullet Priority needs to be given to designated users engaged in relief operations as the data traffic tends to increase during crisis situations. \n
- Other steps to achieve the objective of disaster proofing include -

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- i. earthquake-proofing towers in known risk areas \n
- $_{\text{ii.}}$ developing a satellite-based system to provide back-up communications and data connectivity $_{\text{in}}$

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What is the international practice in this regard?

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• The International Telecommunication Union (ITU) - Telecommunication Development Bureau has provided the following guidelines to the countries to mitigate the disaster - \n

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1. Ensuring disaster reduction strategies as part of the communication development plans

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- ${\hbox{$2$. Helping developing countries with emergency telecommunications}} \\ {\hbox{$during disasters}}$
- 3. Working with developing countries and the private sector to rebuild or develop communication systems that will bring the benefits of the information society to all \n

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What is the way forward?

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- As India is aspiring to be a global digital power it has to provide a dependable communications network to its citizens during all times.
- \bullet India needs to collaborate with all stakeholders, at both local and global levels to build an all-weather communication network. $\mbox{\sc h}$

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Source: BusinessLine

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