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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- However, the fragility of country’s communications infrastructure in reality exposes the huge gap between the plan and practice.
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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.
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- Basements should be avoided as sites for equipment and reserve generators.
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- **Autonomous power supply** - This is the backbone of telecommunication network.
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- Besides, there should be sufficient fuel for back-up generators as power outages can be prolonged.
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- **Data Services** - Servers should be geographically dispersed and network elements can be based on a cloud platform.
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- As terrestrial network gets damaged during disasters operators should provide mobile base stations and backpack devices.
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- Priority needs to be given to designated users engaged in relief operations as the data traffic tends to increase during crisis situations.
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- Other steps to achieve the objective of disaster proofing include -
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i. earthquake-proofing towers in known risk areas
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ii. developing a satellite-based system to provide back-up communications and data connectivity
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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 -
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1. Ensuring disaster reduction strategies as part of the communication development plans
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2. Helping developing countries with emergency telecommunications during disasters
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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
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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.
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- India needs to collaborate with all stakeholders, at both local and global levels to build an all-weather communication network.
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Source: BusinessLine

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