Disaster Proofing of Telecommunications - Kerala Floods

What is the issue?

\n\n

\n
- There were major failures in communications services during the recent Kerala floods.
\n
- It highlights the lack of preparedness on the part of telecom operators, policy-makers and disaster management agencies.
\n

\n\n

Why are communication services crucial?

\n\n

\n
- During a crisis situation well coordinated communication network is a must to mitigate the disaster risk.
\n
- Such an infrastructure, functioning during a crisis, can significantly enhance the resilience of communities exposed to risk.
\n
- The Department of Telecom has laid out a Standard Operating Procedure with clear instructions in this regard.
\n
- However, the fragility of country’s communications infrastructure in reality exposes the huge gap between the plan and practice.
\n

\n\n

How can this be dealt with?

\n\n

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

- **Location of equipments** - Optimum location that is least exposed to risk can reduce damage.
\n
- It can also make telecommunication installations less susceptible to natural disasters.
\n
- E.g. Equipments should be installed in buildings in higher locations where the risk of flooding is reduced.
\n
- Basements should be avoided as sites for equipment and reserve generators.
\n
- **Autonomous power supply** - This is the backbone of telecommunication network.
\n
- Besides, there should be sufficient fuel for back-up generators as power outages can be prolonged.
\n
- **Data Services** - Servers should be geographically dispersed and network elements can be based on a cloud platform.
\n
- As terrestrial network gets damaged during disasters operators should provide mobile base stations and backpack devices.
\n
- 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 -
\n

\n\n

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

\n\n

What is the international practice in this regard?

\n\n

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

to mitigate the disaster -
\n

\n\n

\n
1. Ensuring disaster reduction strategies as part of the communication development plans
\n
2. Helping developing countries with emergency telecommunications during disasters
\n
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

\n\n

What is the way forward?

\n\n

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

\n\n

\n\n

Source: BusinessLine

\n