

Breach of Luti Reservoir in Chhattisgarh

Why in News?

A breach in the **Luti (Satbahini) reservoir** in Dhaneshpur village of Chhattisgarh's Balrampur district **caused a <u>flash flood</u>**, resulting in fatalities, injuries, and significant property damage.

Key Points

- **About:** The Luti Dam, also known as the Luti (Satbahini) reservoir, is a **small dam** located in Dhaneshpur village near Vishramnagar in Balrampur district, Chhattisgarh, India.
 - It was **constructed in the early 1980s** and served as a key water source for local irrigation and agriculture.
 - Reports indicated concerns over dam leakage and structural integrity for several years, but recent intense monsoon rains overwhelmed the aging infrastructure.

Key Details About Luti Dams	
Attribute	Detail
Name	Luti Dam
Purpose	Irrigation
River	Upka Nala
Nearest City	Surajpur
District	Surguja
Basin	Ganga

Flash Flood

- Definition: Flash floods are sudden increases in water levels during or immediately after intense rainfall. They are highly localized and short-lived events, typically occurring within 6 hours of rainfall.
- Causes: Flash floods are primarily caused by intense rainfall that overwhelms the soil's absorption capacity and drainage systems.
 - Apart from heavy rain, flash floods can also result from rapid snowmelt due to sudden temperature rise, dam or levee breaches, ice or debris jams, and sudden glacial lake outbursts.
 - Additionally, <u>urbanisation</u> with impervious surfaces like roads and buildings increases runoff, reducing water absorption and intensifying flood risks.
- **Examples:** Himachal 2023, Uttarakhand 2013, and Mumbai 2005 each caused by intense rain, leading to heavy loss of life and property.

