Himalayas reach environmental tipping points

The authors of a new study believe the Himalayas are at crisis point – with millions of lives and livelihoods threatened – and have proposed a path to resilience based on sustainable development

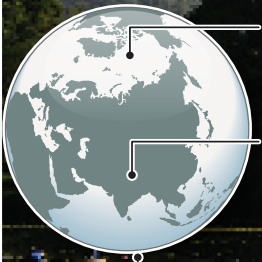
TIPPING POINTS – CASCADING FEEDBACK LOOPS

Nature loop: Melt speeds up thawing
*Glacial retreat exposes darker rock, lowering **albedo** – ability to reflect sunlight – so it absorbs more heat*

Hazard loop: Each triggers another disaster
From glacier collapse, to landslide, dam and flood in under two hours

Economic loop: Disaster recovery crowds out investment in resilience
Reconstruction in Nepal could cost 10% of GDP

WORLDS' THIRD POLE



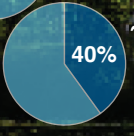
Arctic

Himalayas
Contain 4 of world's 36 biodiversity hotspots

Antarctic

Glacial area lost in industrial era





Historic figures unavailable

People reliant for sustenance

~4 million

~2 billion

~5,000

Peak Water: Expected by mid-century – maximum glacier meltwater runoff, after which shrinking glaciers provide less water downstream

SYSTEMIC SHOCKS

Food, water insecurity

Displacement, mass migration

Sovereign debt strain

Source: SystemIQ

Picture: Getty Images

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