

Climate phenomena and food security

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We should base our adaptation plans on the idea that current trends will continue. It's possible that as warming increases, total rainfall in parts of India may increase but the share of extreme rain events may go up



Wrath of the skies: The Kalka-Shimla railway track after it was damaged due to a landslide following heavy rainfall in Shimla on August 26.
PTI

1. What are the member countries of the Five Eyes alliance, and what kind of intelligence do they share?

2. Critically analyze the significance of the Five Eyes alliance in the contemporary global security architecture. How does it impact India's strategic interests?

3. Discuss the debate surrounding the expansion of the Five Eyes alliance. Should India be included? What are the potential benefits and drawbacks?

4. How do intelligence-sharing alliances like Five Eyes influence global power dynamics?

5. Compare and contrast the Five Eyes alliance with other multilateral security arrangements like QUAD or BRICS. What are the unique features and limitations of each?

13 SEP.

→ Climate phenomena and food security

• What data reveals?

↳ Destruction of Indira. - affected area: - by 2000-7,000 sq. km

↳ Population affect: 25 Lakh in Himalaya & Northern plain.

• Causes of climate change:

- ↳ Tourism
- ↳ BRO (Border road organisation)
- ↳ Western disturbance
- ↳ EL NINO

• EL NINO Phase: of the quasi periodic EL NINO SOUTHERN OSCILLATION (ENSO) - phenomena in Eastern & central tropic Pacific Ocean - likely to affect southwest monsoon.

• How EL NINO Affects Food security?

↳ Agriculture dependent on Green water + Blue water

↳ Tapped by food & Cash crops, atmospheric water.

↳ river, lake, reservoir.
↳ use: Irrigation in Agriculture.

Affect -ed by

- ↳ sowing affect, delay rains.
- ↳ Dry spells (crop & w rainfall)
- ↳ Govt. Policy
- ↳ Foreign policy.

↳ 3,268 L. require per person per day

↳ Tur dal, soyabean, groundnut maize rely on - Green water.

↳ 2015-16, El Nino year soyabean Production declined by 28%.

• El Nino & North East monsoon

↳ Rabi crops 2024 heavily to bank on blue water / irrigation.

↳ 43% rainfall by El Nino - Report

↳ central India's highland - 36 districts in state, MP, MH, CHHISG emerging as climate hotspot.

• Persistent Uncertainty:

↳ From 1950, declining of amount of monsoon precipitation.

↳ EL NINO.

↳ Events: - due to land use (infra.) led to high exposure & disaster.

• How we Respond:

↳ Reducing dependence on water-intensive crops. with millets
It'll save 30% blue water.

↳ short growing cycle - cereals.

↳ Food Processing.

↳ MNREGA through use water harvesting system.

↳ Drip irrigation.

↳ cloud seeding

↳ GM Crops.