

Projected Changes and Projected Impact

① Simple extreme - ① Higher max. temp, hotter days, heat wave all land masses.

Projected
impact

Increased incidences of death and serious illness especially of older age group and urban poor. Increased heat stress to

live stock and wild life, shift of tourist destination

- Increased risk of damage to no. of crops.

② Higher minimum temp; fewer colder days, low frost and cold waves.

Decreased

③ Decreased cold related human morbidity and mortality

- decreased risk to no. of crops due to frost but extended range and activity of pests and disease vectors

③ More intense precipitation events

This is likely to occur in certain areas (in 1/2 of land masses)

- ↑ flood

- ↑ landslide

- ↑ soil erosion

- recharge of groundwater
- good

- ↑ pressure on government and private insurance system during disaster relief.

afrost - Very thin layer of snow

III) Complex extreme

① ↑ summer drying in most of mid latitude in continental interior and associated risk of drought.

② ↑ in tropical cyclone (mostly on coastal areas)

③ ↑ Asian summer Monsoon rainfall (this happens from mid latitude to above areas like equator → 40°N)

- heavy precipitation

Projected impacts

- Decreased crop yield
- ↑ damage to buildings foundations
- ↓ water resources and ↑ risk of fire
- ↑ risk to human life and also more infectious diseases increase in coastal erosions, damage to buildings and ecosystem

↓
 • coral reef } are most affected.
 • Mangroove vegetation }

- ↑ in flood
- ↑ risk to human life and health
- Loss of property and infrastructure and ↑ risk to different ecosystem.

GREENHOUSE MITIGATION SCENARIO

Greenhouse gas ~~emission~~ scenario depends upon

- (1) Economy → indirectly depends.
- (2) Emission → directly depends.

(1) Economy - High growth rate. It can be achieved by
 (a) GDP should be > 8%
 (1) industrialization

Industrialization lead to more GHG emissions thus they contribute to global warming.

Four Mitigation Scenarios are indicated based on market and governance.

| | | | |
|------------|---------------|--|--|
| | | Market | |
| | | High | Fragmented |
| Governance | Centralized | (1) High growth rate IA ₁ (short form given by IPCC) | (2) IA ₂ BAU (Business as usual) |
| | Decentralized | (3) IB ₁ (Sustainable development) | (4) IB ₂ (Self-reliance) |

not dependent for anything to anyone.

India

At time of independence growth rate = 2-3%.

Before " " " = 4-5%.

At present " " " = 6-7%.

- In Indian economy, agriculture contribute only 35% but at time of independence its contribution was upto 75%.

* China growth rate > 8% always
≅ 12% sometimes.

(1) High growth rate scenario:

- GDP should be > 8%.
- Rising income.
- Technological progress.
- Shift from agriculture to industry.
- Access of global knowledge.

- Governmental support for small businesses exports
- Increase of global trade

Investment flows

- Free convertibility of currency
- Good neighbourhood relationship, etc.

* 40% of Indian economy is spend on defence

- In this scenario on environmental front, the emphasis is on management rather than conservation