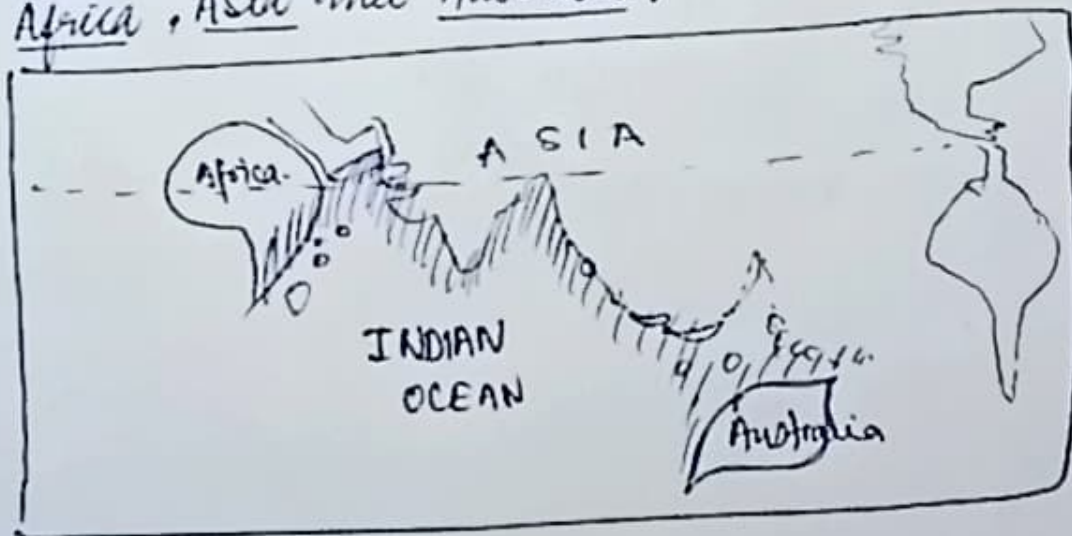


Ques

The Indian Ocean Rim Association (IORA) has significant potential for regional prosperity but institutional challenges hinder its effectiveness. Analyze these challenges & suggest how India can strengthen IORA's institutional framework. (250 W, 15 M).

Answer

Indian Ocean Rim Association (IORA) is an regional association of Indian ocean bordering states. It consist of 23 member states from Africa, Asia and Australia.



Potential of IORA

↳ ① Free, fair & Open trade

↳ ② Regional Connectivity

2.1 ↳ Infrastructure Building.

2.2 ↳ Technology Transfer.

↳ ③ Political Stability.

- ↳ ④ Strengthened ties via
4.1 ↳ Cultural ties → Hinduism & Buddhism etc.
4.2 - Historical ties

↳ ⑤ Securing Ocean by strengthened Military

↳ ⑥ Collaboration against → smuggling,
↳ Terrorism,
↳ etc.

are the potential significance of IORA which face setback as their exist no. of challenges also.

Institutional Challenges

1) Political Unstability among region impact the trade pattern hugely.
ex → Sri Lanka crisis.
ex → Maldives.

Frequent changing governments and differ in strategies causing overall effect on trade.

2) Increasing Influence of China with strategies like presence of military, debt-trap policy, string of pearls, further impact the trade and effectiveness of member countries.

3) Increase in activities like Terrorism, smuggling, piracy and Human trafficking causing security threats to the region.

4) Lack of Funding resources as IORA have both developed and developing nation further limiting the association.

• India is Vice-chairing the association and is all set up Chair by Nov 2025 which provide an opportunity to strengthen the institution.

India's Role

- 1) India with its largest ^{military} deployment in region can ensure security & stability.
- 2) India can leverage its diplomatic ties with countries making for investments. Ex Qatar Oman.
- 3) Also it can enhance connectivity ensuring infrastructure capabilities (private investments).
- 4) India's project SAGAR (Security and Growth for all in region) provides for maritime cooperation, peace and stability.
- 5) Facilitating Climate Change preparedness, Disaster risk Management and Sustainable Tourism etc. will further strengthening IORA.

Despite potential and challenges, IORA posses significance as it is home to 2/3rd population & 50% daily consumption ^{oil} route and 75% of overall global trade. making

Que Examine the impact of Global warming on world mountain ranges with suitable illustrations.
(250 W, 15 M).

Mountains are elevated platform with steep sides covering large portion of Earth around 33 Million sq km.

Recently released report of UNESCO on 1st World Water day (Mar 21, 2025) reported accelerating impact of Global warming on Mountains highlighting irreversible changes to the Ecosystem.

Importance of Mountains -

- a) Are Civilizational cradle.
- b) Barrier against calamities.
- c) Source of water resources.
- d) Biodiversity hotspot.
- e) Agriculture and Settlement

Provide
With huge significance and potential for lives in Mountains. However Mountains are facing threats with change in climate further impacting higher elevation more resulting various impact on resources.

Impact of Global Warming

- 1) Melting of Glaciers further due to

increase in temperature further causing scarcity of fresh water resources endangering lives and livelihood.

- Around 25-30% of glacier melting has taken place.

2) Thawing of Permafrost which triggers introduction of several viruses lying under the soil with huge Carbon dioxide (CO₂) and Methane.
Ex - Arctic Ocean is facing thinning of ice.

3) Sea level Rise directly influencing millions of population living in coastal region.

- World Meteorology Organisation (WMO) reported mean sea level rise 4.5 mm/year between 2013-2022.

ex - Indonesia capital shift from Jakarta to Nusantara.

4) Enhanced Glacial lake Outburst-flood (GLOF) is sudden and catastrophic flood.
ex - Sikkim GLOF in 2024.

5) Loss of Biodiversity as mountains are the home to ecology importance which includes Wildlife Flora & Fauna both.

ex - Himalayan Hotspot losing more than 70% its species.

- 6) Sudden Climate Change with causing live endangering activities like -
- ↳ landslides
 - ↳ frequent rainfall etc.

Ex: • Hearcest Rainfall in Dubai,

↳ Frequent Snowfall in Sahara desert etc.

- 7) Overflooding of Dams further impacting overall region as filled water exert pressure leading to Earthquake.

etc. are the impact of Global warming which is mainly Anthropogenic in nature.

Way Forward: • Implementation of Paris Agreement.

④

① Sustainable practice adoption.

② Inclusion of Electric Vehicles etc.

Despite above impact, Mountains are fragile ecosystem requiring dedicative approach like National Mission for Sustaining Himalayan Ecosystem for effective conservation.

Que

"The climate crisis is local, but our data wasn't," discuss the role of disaster education in enhancing community resilience. How can localized knowledge and education help mitigate the impacts of climate-induced disasters? (250 words)

"Azim Premji Institute of Climate change and Sustainability has recently provided local data for every district" to mitigate and strategies climate change as per local requirements, independent from Regional data as no two regions has same climate conditions.

Role of Disaster Education

- ↳ ^{Planning} local level Strategy facilitating locals ~~to~~ empowerment by cautions at initial level.
- ↳ Preparedness among community preventing lives and households with easy access to data.
- ↳ Increased Awareness among community about disaster preventing hazardous situations.
- ↳ Increased trained manpower and technology by including disaster education in school based education, certified courses etc.

- ↳ Ease to community especially Street Vendors, fishermen, workers in mines etc.

However disaster education provides for mitigation or preparedness etc. but Climate change taking place rapidly have large and irreversible impacts.

Impact of Climate Change Disaster -

- ↳ Floods (Eastern coast)
- ↳ Glacier Melt (Himalayan)
- ↳ Cyclone on coast (WB, Andhra pradesh, etc)
- ↳ Strong Winds
- ↳ Heatwaves (Northern plain)
- ↳ Wildfires (Mainly of Uttarakhand, Himachal Pradesh, MP, CG etc)
- ↳ Droughts (Deccan region)
- ↳ Glacial lake outburst flood (Sikkim)
- ↳ Landslides & Avalanche (Himalayan)
(Wayanad, Kerala)
- ↳ etc.

are the various ~~disasters~~ influenced by Climate change and demands specific approach for specific region.

Mitigation of Impact -

- ① Local level data strengthens admini-
- stration resulting data based strategy.

② Timely alert notification regarding changes

Ex → MP govt. provides messages during climate changes.

③ Increased Awareness among citizens
proactively participation among communities.

④ Empowers with Administration to
co-operate and collaborate with locals.

⑤ Regional Initiative can be taken.
for ex → Helpline no. of wildfires.
↳ locally available trained
resources.

⑥ Community based solutions providing
sense of ownership.

⑦ Easy classification of vulnerable areas
adopting measures for mitigation.

Though Disaster induced by Climate change are huge, Community based local knowledge provides huge potential if included in strategies with localised data providing resulting Sustainable development across regions.

resulting