Doubling of the glacial meltdown – The Unnerving fact.

What is the issue?

The fact that the Himalayan glaciers are melting rapidly is known but what is serious is that the rate of their erosion has doubled in recent years (a study says).

What is the importance of Himalayan glaciers?

- The Himalayan snow deposits, the **lifeline of the rivers** emanating from this mountain chain.
- It is critical to **meet the water needs** of millions of people in India and other Asian countries.
- The Himalayan altitude and snow have been protecting India from outside invaders since the early times thus serving as a **defence barrier**.
- By virtue of their scenic beauty, they have developed a large number of **touristspots**.

What does the study say?

- A recent satellite data-based study estimates that the **rate of decline in the snow coverhas doubled**.
- This means that the Himalayas are losing nearly 8 billion tonnes of frozen water every year, which is **not recompensed through snowfall**.

What may be the cause?

- This study holds that**global warming** as the most dominant cause for snow decay.
- Italso adds that the rampant **environmental pollution** in the plains along the Himalayan hills as also a cause.
- The air pollutants, such as black soot (carbon) and dust, which find their way to the glacial ice, absorb heat from the sun and hasten snow melting.

What are the consequences?

- The study says that even if the Paris agreement's goalsare met — the Himalayas could **still lose over a third of their ice cover** by the end of this century.
- Glacier meltdown of this scale has **varied repercussions** for the water flows

in the 10 major rivers and countless rivulets and other water streams originating from these hills.

- The **water flows** in these channels would turn **uncertain**, irregular and unpredictable.
- **In the shorter run** – Theincreased snow melting may swell the water stocks, heightening the risk of floods.
- **In the longer run** –Withthe perceptible contraction of the snow cover by around the 2050s, the flows would tend to taper off, causing frequent water shortages downstream.
- The **mighty rivers** like the Ganga and the Brahmaputra, would also **witness considerable variations in water availability** because the pre-monsoon flows may dwindle.

Source: Business Standard.