

CURRENT AFFAIRS

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SCIENTISTS SOLVE THE CASE OF KARAKORAM ANOMALY

SYLLABUS: GS PAPER-I (GEOGRAPHICAL FEATURES)

CONTEXT: A group of scientists has postulated a theory on why glaciers in the Karakoram Range of Central-South Asia have not been as affected by climate change as others.

ABOUT KARAKORAM ANOMALY

- **Karakoram anomaly (KA)** is the **stability or abnormal growth of glaciers in Central Karakoram** in contrast to the retreat of glaciers in nearby mountain ranges of Himalayas as well as the other mountainous ranges of the world.
- A recent study has postulated a new theory to explain the reasons glaciers in Karakoram Range as resisting **glacial melt due to global warming**.
- While previous studies highlighted the **role of temperature** in establishing and sustaining the anomaly, it is for the first time that the **impact of precipitation in feeding the anomaly** has been highlighted.

REASONS OF KARAKORAM ANOMALY

- In a paper published in the **American Meteorological Society's Journal of Climate**, the group claimed that the **recent revival of western disturbance has been instrumental in triggering and sustaining the Karakoram Anomaly since the advent of the 21st century**. The study was supported by the Climate Change Programme of the Department of Science and Technology.
- WDs are the primary feeder of snowfall for the region during winters. They constitute about 65% of the total seasonal snowfall volume and about 53% of the total seasonal precipitation, easily making them the most important source of moisture.
- The **contribution of WDs in terms of snowfall volume over the core glacier regions of Karakoram have increased by about 27% in recent decades**, while precipitation received from non-WD sources have significantly decreased by around 17%.
- **Winter precipitation associated with WDs** over Karakoram Himalayas is one of the key drivers behind its emergence.



ABOUT HINDU-KUSH-HIMALAYAN (HKH) REGION

- The HKH region spans **Afghanistan, Bangladesh, Bhutan, China, India, Kyrgyzstan, Mongolia, Myanmar, Nepal, Pakistan, Tajikistan, and Uzbekistan**.
- It traverses about 5 million square kilometers and hosts a large and culturally diverse population.
- It is considered the **Third Pole** (after the North and South Poles), and has significant implications for climate.
- It contains vast cryospheric zones and is also the **world's largest store of snow and ice outside the polar region**.

PANEL ON MINIMUM SUPPORT PRICE (MSP), NATURAL FARMING AND CROP DIVERSIFICATION

SYLLABUS: GS PAPER-III (ISSUES RELATED TO DIRECT & INDIRECT FARM SUBSIDIES, MSP)

CONTEXT: The government constituted a committee headed by former Union Agriculture Secretary Sanjay Agrawal to investigate the issues of minimum support price (MSP).

BACKGROUND

The government had announced the decision to repeal the three farm laws and said it will constitute a committee to promote zero budget-based farming, change crop patterns keeping in mind the changing needs of the country and make MSP more effective and transparent.

MEMBERS

The Committee will consist of representatives of the Central and State governments, farmers, agricultural scientists and agricultural economists. The committee has 26 members.

OBJECTIVES OF THE COMMITTEE

- **On agricultural marketing system:** It will work for Agri marketing as per the changing requirements of the country to ensure higher value to the farmers through remunerative prices of their produce by taking advantage of the domestic output and export.
- **On natural farming:** It will suggest programmes and schemes for value chain development, protocol validation and research for future needs and support for area expansion under the Indian Natural Farming System.
- **On crop diversification:** It will look into the mapping of existing cropping patterns of agro-ecological zones of producer and consumer States.
- **Review and suggestion on micro irrigation scheme.**

ABOUT MSP

- The MSP is the **rate at which the government purchases crops from farmers, and is based on a calculation of at least one-and-a-half times the cost of production incurred by the farmers.**
- MSP is a “minimum price” for any crop that the government considers as remunerative for farmers and hence deserving of “support”.

EVOLUTION OF MSP REGIME IN INDIA

1960: Food scarcity in the early 1960s, importing PL-480 grains from USA

MSP introduced to incentivize farmers to use riskier High yielding varieties in the belt of Punjab, Haryana and Western Uttar Pradesh MSP was introduced as a floor price.

It paved way for "Green Revolution" by increasing production of wheat and paddy.

CROPS UNDER MSP

- 7 types of cereals (paddy, wheat, maize, bajra, jowar, ragi and barley).
- 5 types of pulses (chana, arhar/tur, urad, moong and masur).
- 7 oilseeds (rapeseed-mustard, groundnut, soyabean, sunflower, sesamum, safflower, nigerseed).
- 4 commercial crops (cotton, sugarcane, copra, raw jute).
- In addition, the MSPs of toria and de-husked coconut are fixed on the basis of the MSPs of rapeseed/mustard and copra, respectively.

NEED FOR MSP

- Support farmers from distress sales.
- Procuring food grains for public distribution
- To safeguard farmers from market price fluctuations.
- Maintain a healthy supply of food grains in the market thereby helping in the fight against hunger.
- The guaranteed price for the crops and assured markets encourages higher investment and adoption of modern farming practices.

PRELIMS FACTS

DIGI YATRA PROJECT

- It is a project under the Ministry of Civil Aviation, conceived to **achieve contactless, seamless processing of passengers at Airports, based on Facial Recognition Technology (FRT)**.
- The project envisages that any traveler may pass through various checkpoints at the airport through a paperless and contactless processing, using facial features to establish the identity which would be linked to the boarding pass.
- It provides a **decentralized mobile wallet-based identity management platform** which is cost effective and addresses privacy/data protection issues in implementation of Digi Yatra.
- **Digi Yatra Foundation (DYF)** has been set up as a joint venture company with the objective of creating the **Digi Yatra Central Ecosystem**.

NAMASTE SCHEME

- The **Minister of State for Housing and Urban Affairs** has formulated a **National Action Plan for Mechanized Sanitation Ecosystem (NAMASTE)** scheme for cleaning sewers and septic tanks.
- It aims to achieve outcomes like zero fatalities in sanitation work in India, no sanitation workers come in direct contact with human fecal matter and all Sewer and Septic tank sanitation workers have access to alternative livelihoods.
- **Nodal Ministries:** Department of Drinking Water and Sanitation, Ministry of Social Justice, and Empowerment and the Ministry of Housing and Urban Affairs.

SANNATI

- The Archaeological Survey of India has now taken up conservation work at this important **Buddhist site near Kalaburagi.**
- It is an ancient Buddhist site on the bank of the Bhima River near Kanaganahalli in the Kalaburagi district.
- The Kanaganahalli excavation opened many marvels: Magnificent Maha Stupa, which was referred to as **Adholoka Maha Chaitya (the Great Stupa of the netherworlds)** in the inscriptions and, more significantly; the stone portrait of Emperor Ashoka, surrounded by his queens and female attendants considered to be the only surviving image of the Mauryan Emperor which had the inscription '**Raya Asoko**' in Brahmi on it.

KALA AZAR

- Kala-azar or **Visceral Leishmaniasis is a protozoan parasitic disease, spread by sandfly bites.**
- Sandflies are brown in color and have hairs on their bodies. The flies are infected with the **parasite called 'leishmania donovani.'**
- The disease affects some of the poorest people and is **linked to malnutrition, population displacement, poor housing, a weak immune system, and a lack of financial resources.**
- Leishmaniasis is also linked to environmental changes such as deforestation, and urbanization, according to WHO (World Health Organization).
- The disease is endemic in **Bihar, Jharkhand, Uttar Pradesh, and West Bengal.**
- Irregular bouts of fever over many days, weight loss, enlargement of the spleen and liver, and anemia are known symptoms. The skin may become dry, thin, and scaly in patches and hair may be lost. In people with a light skin tone, greyish discoloration of the skin of hands, feet, abdomen, and face may be seen, that is why the disease is also called "**Black fever.**"
- The government aimed to eliminate the disease in India by 2015, but that deadline was missed. However, the number of cases has been brought down significantly through the **National Kala-Azar Elimination Programme.**