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Aridity Anomaly Outlook Index

Why in Newspapers?

Recently the Indian Meteorological Department (IMD) has released the 'Aridity Anomaly Outlook Index' for the month of July.

Quick Issue?

- The index monitors agricultural drought, a condition when rainfall and soil moisture are insufficient to support healthy crop growth until maturity, leading to unfavourable conditions for the crop.
- Normally an anomaly indicates water scarcity in these districts which can directly affect agricultural activity.
- It has been developed by the India Meteorological Department (IMD).

Other Key Facts?

Indian Meteorological Department (IMD)

- IMD was established in the year 1875.
- It is an agency of the Ministry of Earth Sciences.
- It is a major agency set up for meteorological observation, weather forecasting and seismology.

Historical Background?

- Water balance is considered in real time drought index. The Aridity Index (AI) is calculated for a weekly or fortnightly period.
- For each period, the actual dryness for that period is compared with the normal aridity for that period. A negative value indicates a surplus of moisture while a positive value indicates a lack of moisture.
- Determinant: The actual evaporation and the calculated potential evaporation require temperature, wind and solar radiation.
- Actual evaporation is the amount of water that is lost from the surface due to the processes of evaporation and transpiration.
- Potential transpiration is the maximum attainable or attainable transpiration for a given crop due to evaporation and transpiration.
- Application:- Drought affected areas in agriculture which are part of defined humid and dry climate system especially of tropics. Both winter and summer crop seasons can be estimated using this method.
- SPI is a widely used index that characterizes meteorological droughts over time.
- In the short run, the SPI is closely related to soil moisture, while in the long run, the SPI is related to groundwater and reservoir storage.
- The SPI on Drought Early Warning System (DEWS), a real-time drought monitoring platform managed by the Indian Institute of Technology, Gandhinagar (IIT-G), refers to the lack of consistent rainfall over these regions over the past six months.



Military Exercise Al Najah

Why in Newspapers?

The joint military exercise Al Najah-IV is being organized between the Indian Army and the Royal Army of Oman from 1 to 13 August 2022.

Quick Issue?

- This is the fourth edition of this exercise. The scope of the exercise includes formal dialogue, mutual understanding of exercises and procedures, establishment of joint command and control structures and elimination of terrorist threats.

Other Key Facts?

Other exercises with Oman

- Naval Exercise:- Naseem-al-Bahr
- Air Force Exercise:-Eastern Bridge

Historical Background?

- During this military exercise, the focus will be on joint physical training programmes, tactical exercises, adjustment of techniques and procedures, counter-terrorism military operations, regional security programs and peacekeeping operations activities under the Charter of the United Nations.
- Oman is India's strategic partner in the Gulf countries and an important negotiator for the Gulf Cooperation Council (GCC), the Arab League and the Indian Ocean Rim Association (IORA).
- Oman is at the entrance of the Strait of Hormuz, from where India imports one-fifth of its oil imports.
- The two countries across the Arabian Sea are linked by geography, history and culture and maintain cordial relations, which are important for the historical maritime trade relationship.
- Military Exercise between the Armies of India and Vietnam (VINBAX): It is designed to enable and train Vietnamese officers in UN peacekeeping operations.
- Fourth edition of India-Oman joint military exercise 'AL NAJAH-IV' (AL NAJAH-IV) between Indian Army and Royal Army contingents of Oman Foreign Training Node of Mahajan Field Firing Range (Rajasthan) from 01 to 13 August 2022 is being held in.
- Soldiers of the 18th Mechanized Infantry Battalion from the Indian Army are participating in this exercise. The major activities of the fourth edition of Exercise Al Najah include professional dialogue, mutual understanding of military exercises and practices, establishment of joint command and control structures and mitigation of terrorist threats.
- The previous edition of the joint military exercise Al Najah was held in Muscat from 12 to 25 March 2019.
- The aim of the joint military exercise is to enhance the level of defense cooperation between the Indian Army and the Royal Army of Oman and will go a long way in furthering the bilateral ties between the two countries.



Likely Question Asked In Preliminary Exam

Que. Which state is the venue of the India-Oman joint military exercise 'Al Najah' (AL NAJAH)?

- (a) Orissa (b) Kerala
(c) Rajasthan (d) Bihar

Ans : (c) Rajasthan

Que. The fourth edition of the joint military exercise 'AL NAJAH' has started between India and which country?

- (a) Vietnam (b) China
(c) Oman (d) Afghanistan

Ans : (c) Oman

