

23 MAY 2019

SCO-RATS

Why in news?

- External Affairs Minister Sushma Swaraj on Wednesday said India was open to strengthening the Regional Anti Terror Structure or RATS of SCO to fight terrorism and security challenges in the region.

More on news:

- She said this while addressing the ministerial meet of SCO at Bishkek, Krygyz Republic.
- She also said India remained committed to regional connectivity and peace in Afghanistan.

About SCO-RATS:

- Regional Anti-Terrorist Structure (RATS) is a permanent organ of Shanghai Cooperation Organisation.
- It serves to promote cooperation of member states against three evils of terrorism, separatism and extremism.
- It is headquartered in Tashkent, Uzbekistan.
- The Head of RATS is elected for a three-year term.
- Each member state also sends permanent representative to RATS.

About Shanghai Cooperation Organisation:

- It is a Eurasian political, economic and security alliance, which was created on September, 2001.
- It has its headquarters at Shanghai, China.
- Its member countries include Russia, Tajikistan, Uzbekistan, China, Kazakhstan, Krygystan, India, Pakistan.
- Its observer states include Afghanistan, Belarus, Iran and Mongolia.
- The Heads of State Council is the supreme decision making body in the SCO, it meets once a year and adopts decisions and guidelines on all important matters of the organisation.
- Military exercises are also regularly conducted among members to promote cooperation and coordination against terrorism and other external threats. eg: SCO peace mission.



RISAT-2B

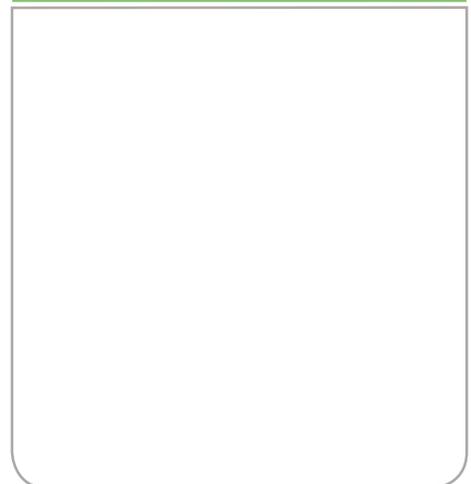
In news:

- RISAT-2B (Radar Imaging Satellite-2B) is a radar imaging advanced earth observation satellite intended to provide services in the field of Agriculture, Forestry and Disaster Management.
- With this ISRO has sent 354 satellites into orbit and crossed a landmark of lifting a total of over 50 tonnes of material into the space.

In brief:

- The RISAT-2B, a satellite created at the Space Applications Centre in Ahmedabad, is equipped with special X-band synthetic aperture radar that gives additional details such as size of objects on Earth, structures, movement and change.

NOTE



- Piggyback payload carried onboard this mission namely, Vikram processor and low cost MEMS based Inertial Navigation System (INS) developed by Semi-Conductor Laboratory (SCL), Chandigarh and ISRO Inertial Systems Unit, Thiruvananthapuram respectively.
- Reason why ISRO, which had launched only two Riset satellites in the last 10 years:
 - » Monitor increased activities of infiltrators, their hideouts along the Pakistan border
 - » The activities of Chinese warships in the Indian Ocean.
- India also has high-resolution optical imaging CartoSAT satellites, but it gets blinded by dense cloud cover.
- RISAT-2B will replace its predecessor RISAT-2. India had launched Israeli-built RISAT-2 in 2009 and RISAT-1 satellites in 2012, which helped security and intelligence agencies to plan surgical strike in 2016 on terror launchpads in Pakistan-Occupied Kashmir and the Balakot aerial strike
- Pakistan had launched the PAKTES 1A satellite - also supposed to be an X-band radar-enabled satellite - using a Chinese Long March rocket on July 9, 2018.
- ISRO plans to launch almost half a dozen all-weather radar imaging RISAT satellites in the next one year.

All - Season Satellite

RISAT-2B is a radar imaging earth observation satellite developed by ISRO

Key Features

Lift-off weight | 615 kg
Altitude | 557 km
Payload | X-Band radar
Inclination | 37 degrees
Mission life | 5 years

Key Features



Disaster management support



Forestry



Agriculture

AERIAL VERSION OF BRAHMOS MISSILE

In news:

- The Indian Air Force has successfully test fired the aerial version of the supersonic BrahMos cruise missile from a Su-30 MKI fighter aircraft.
- The IAF became the first air force in the world to have successfully fired an air-launched 2.8 Mach surface attack missile of this category on a sea target on November 22, 2017.

About Brahmos Missile

It is a joint venture between the Russian Federation's NPO Mashinostroyeniya and India's Defence Research and Development Organisation (DRDO) who together have formed BrahMos Aerospace.

The name BrahMos is formed from the names of two rivers, the Brahmaputra of India and the Moskva of Russia.



NOTE



- It is a medium range two stage missile with solid propellant first stage and liquid propellant ramjet engine as second stage.
- It can travel at a speed of 2.8 Mach. It is the fastest cruise missile in the world.
- It has a range of 290 km and weighs 2.5 tonne.
- It operates on ‘Fire & Forget principle’ adopting varieties of flight on its way to target.
- Its cruising altitude varies from 10mts to 15 kms
- It can carry conventional warheads weighing 200 to 300 kgs
- It can be launched from air (being tested in Sukhoi-30MKI), sea (sub-sea too) and land.

A hypersonic version of the missile, BrahMos-II, is also presently under development with a speed of Mach 7-8 to boost aerial fast strike capability. It is expected to be ready for testing by 2020.

In 2016, as India became a member of the Missile Technology Control Regime (MTCR), India and Russia are now planning to jointly develop a new generation of Brahmos missiles with 600 km-plus range.

KOCHI OFFERS HELP TO SOLARIZE AIRPORTS IN ISA COUNTRIES

In news

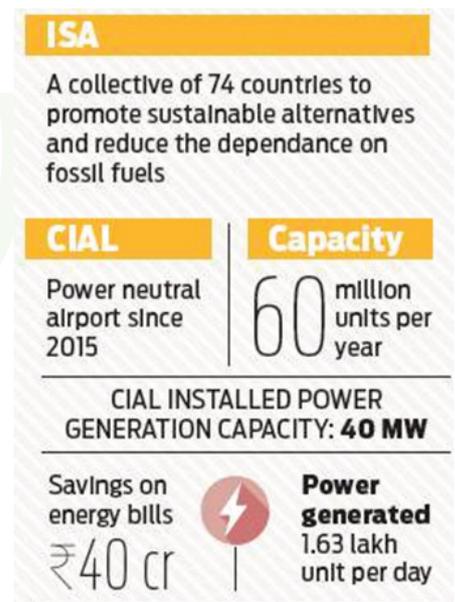
- The solar power project by Cochin International Airport Limited (Cial) may soon be a model for similar projects around the world.

In brief

- As part of International Solar Alliance (ISA)’s initiative to find out suitable models to be incorporated to achieve its plan of massive deployment of solar energy by 2030
- The Cochin International Airport, the country’s first airport built under the PPP model, has a 12 MW solar power plant that started operating from August.
- The Cochin airport claims to be the world’s first airport to completely operate on solar power.

International Solar Alliance

- The International Solar Alliance (ISA) is an alliance of more than 122 countries initiated by India, most of them being sunshine countries, which lie either completely or partly between the Tropic of Cancer and the Tropic of Capricorn, now extended to all members of UN.
- The primary objective of the alliance is to work for efficient exploitation of solar energy to reduce dependence on fossil fuels.
- This initiative was first proposed by Indian Prime Minister Narendra Modi in a speech in November 2015 at Wembley Stadium, in which he referred to sunshine countries as Suryaputra (“Sons of the Sun”).
- The alliance is a treaty-based inter-governmental organization.
- Countries that do not fall within the Tropics can join the alliance and enjoy all benefits as other members, with the exception of voting rights.



NOTE



PRELIMS BITS

BISHNOI COMMUNITY

- Bishnois are tribal group residing in Western Rajasthan.
- They are known for their commitment to the conservation of forests, trees and wild animals in and around their villages.
- Bishnoises do not cut trees for fuel and timber; they remove only the dead trunks and twigs.
- Spotted deer, black buck and blue bull can be seen foraging fearlessly in their fields.
- Even if the crop is consumed by herds of deer, the Bishnois do not chase away the animals.
- Jambaji or Guru Jambheshwar in 15th century had founded Bishnoi sect after a drought in the Marwar region of Rajasthan.
- He made a community having 29 principles to follow, which included worship of lord Vishnu and ban on killing animals and the felling of tress.

BHAWANA KANTH

- She created history by becoming the first woman to qualify for combat missions on a fighter jet.
- She has successfully completed the operational syllabus for carrying out combat missions on MiG-21 Bison aircraft.
- She was commissioned into the Indian Air Force as one of the first women fighter pilots in 2016.

NOTE

