



## GS Paper 1-Places

### Rejosari Senik: rising above water

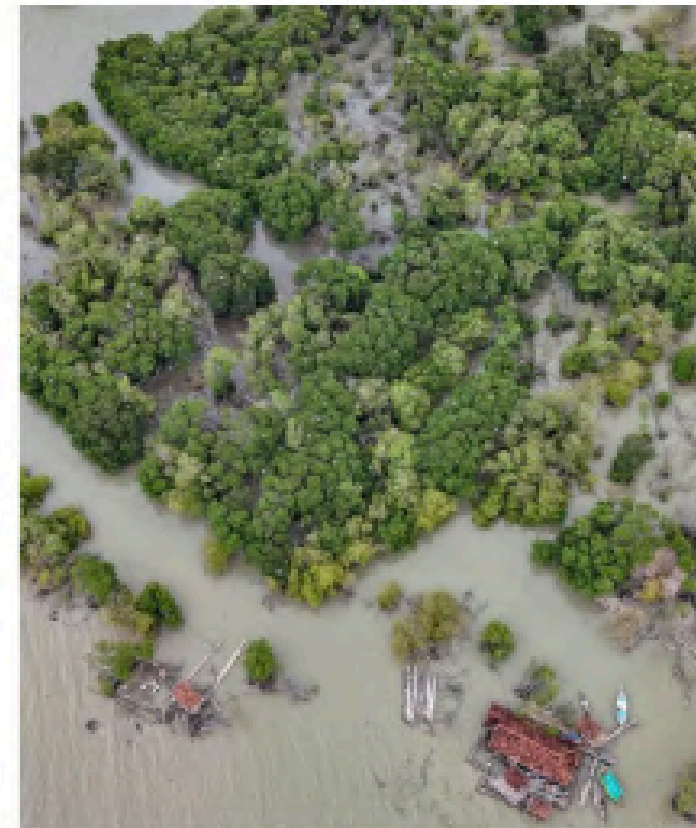
Rejosari Senik is a hamlet in the Demak district of Indonesia's Central Java province. In the 1970s, the distance between the hamlet and the nearest shoreline, on the Java Sea, was about 7 km. Today, the land on which the hamlet lies is permanently underwater.

Even by the mid 2000s, Rejosari Senik had become disconnected from mainland Java by erosion. The few structures in the hamlet still occupied today stand on stilts.

Its people once used to grow rice and vegetables. As global warming caused the local sea level to rise slowly but steadily, they switched to fish ponds, but many of them also moved further inland in search of new homes and better jobs.

But even by 2020, reports emerged that Rejosari Senik wore the look of a ghost town: the only reason it actually wasn't one is that it still counted a few residents.

One of them, Pasijah, is a 55-year-old



A drone view of the house belonging to Pasijah and other buildings, surrounded by mangrove planted by her, in Rejosari Senik. REUTERS

family have also been planting 15,000 mangrove trees a year for two

## KEY POINTS

- Rejosari Senik, a hamlet in Central Java, Indonesia, has been submerged due to rising sea levels.
- Once 7 km from the shoreline, the land is now underwater, and most residents have moved inland.





THE HINDU



## GS Paper 3-Environment

### *Tackle heatwaves with short- and long-term measures*

**O**n March 15, some States and cities in India experienced the first of severe heatwaves for the year 2025. This was 20 days earlier than the first severe heatwave in 2024. In the last decade, the number of severe heat days and the severity/intensity of heatwaves have been rising. The year 2024 was the warmest year on record at about 1.55°C above pre-industrial level, according to the World Meteorological Organization. In India, December 2022 was the hottest December since temperature monitoring in the country started in 1901. The frequency of heatwaves in India has increased in the last two decades, in comparison to the previous two decades.

The impact of rising external temperature and heatwaves along with humidity and wind speed, is reflected in the form of heat stress. When the outside temperature reaches close to our body temperature of 37° Celsius, the body fails to release the internal heat which is generated as a part of the basal metabolic rate. Thus, one starts to feel heat-stressed. Heat stress can affect multiple organs including the kidneys, the liver and the brain, and may cause sickness and even death.

#### **Socio-economic impact and equity issue**

However, heatwaves have many non-health and socio-economic impacts. Climate change



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another 150 years for the first heat and health action plans (HHAP) to be prepared in the European countries; ironically, the first such efforts were from the non-tropical regions, between 2003 to 2008.

In 2013, Ahmedabad, Gujarat, became the first municipal corporation in Asia to develop a heat action plan (HAP). Since then, and in the last decade, more than 23 Indian States and around 140 cities across India have State- and city-level HAPs. India's National Programme on Climate Change and Human Health (NPCCHH) also provides heat advisories and other health-related information through the National Disaster Management Authority (NDMA).

#### **Heat action plans need nuances**

Most HAPs have four to five components, i.e., early prediction of heatwaves to raise alerts; increasing awareness among the communities/people on actions to be taken; and preparing and getting the health system ready to manage health conditions. The fourth component of such plans focuses on ensuring long-term measures to reduce heat, government initiatives to increase the number of trees and parks and keeping gardens open for public use. There is experience, from various cities, about painting rooftops white to reflect heat. The fifth component of HAP must be collecting, analysing

maximum temperatures. The HAPs in India also need to factor in the day and nighttime temperature monitoring. There is also a need for more sophisticated and specific warning systems which can predict thermal comfort and the timings during the day when temperatures are likely to be low. This can ensure health as well as continuity of work such as school and office functioning.

Fourth, the long-term preventive measures of HAPs need to be strengthened. Better building and urban infrastructure and building material need to be promoted. Heatwaves impact the poor the most, and it is during these periods that governments should also consider financial support for informal sector workers who may suffer wage losses.

Fifth, a 2022 study from three Asian countries (India, Pakistan and Bangladesh) suggested that the universal 'stay indoors' advisory during specific hours may not be helpful for all families. People in a poor neighbourhood and in a confined space that is surrounded by high-rise buildings may experience higher temperatures in their homes and outside, in comparison to the rest of the city. Even within cities, there is a need for geography and social context-specific heat advisories.

**Need for a people-centric approach**



## KEY POINTS

- India is experiencing more frequent and intense heatwaves, causing health issues and economic losses, especially in agriculture and construction.
- Heat Action Plans (HAPs) have been developed, but improvements in data collection, infrastructure, and localized heat advisories are needed.



## GS 3-Economy

### How India is looking to deepen local value addition in electronics manufacturing

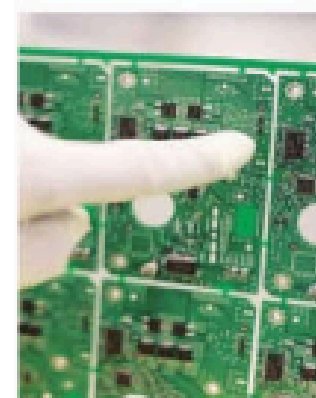
SOUMYARENDRA BARIK  
NEW DELHI, APRIL 20

A LARGE talent pool, government subsidies, and geopolitical headwinds that forced several companies to diversify from China – these are some crucial elements that came together for global smartphone companies, like Apple and Samsung to set up production bases in India. After successfully being able to localise smartphone assembly in the country for domestic consumption and some exports, the government has shifted its focus to deepening local value addition in the sector.

**THE RESULT:** subsidy schemes that look at incentives on the components level – through the Rs 76,000 crore India Semiconductor Mission for chip fabrication and packaging, and the recently notified Rs 23,000 crore scheme for passive electronics components. Alongside the production linked incentive (PLI) schemes for smartphone and laptop assembly, the government has now launched support for practically all layers of electronics manufacturing, making the sector a crucial growth driver for the Indian economy.

**THE KEY TARGET:** driving up

#### ₹22,919-CR SCHEME FOR COMPONENTS NOTIFIED



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**EARLIER THIS** month, the IT Ministry notified the Rs 22,919 crore incentive scheme for electronics component

#### The electronics components manufacturing scheme

Earlier this month, the IT Ministry notified the Rs 22,919 crore incentive scheme for electronics components, which takes the baton forward from its two PLI schemes, which largely focus on the relatively easy assembly of electronics items like smartphones and computers.

Under the new scheme, spread over six years, the government is targeting localising manufacturing of com-

ponents. The government wants to plug that gap. It is hoping that at least 91,600 direct jobs will be created as part of the scheme, and has tied participating entities' yearly subsidies to the number of jobs they create. The scheme is expected to generate production of Rs 4,56 lakh crore and bring in incremental investment of Rs 59,350 crore.

"Components import will reduce after this scheme. We need to come out of the import substitution mindset and go forward with export led promotion. Viability comes after large scale

programmes launched in 2020 for several sectors. The IT hardware PLI, initially a laggard, got a booster shot from the government in 2023, with increased allocation of Rs 17,000 crore. Under these schemes, the government offers an incentive, which is linked to incremental sales.

As of February 2025, the PLI scheme for smartphones has generated:

- Cumulative investment of Rs 10,905 crore
- Cumulative production of Rs 7,15,823 crore
- Cumulative exports of Rs 3,90,387 crore
- Direct jobs for 1,39,670 people

In the same time frame, the PLI scheme for laptops and computers has generated:

- Cumulative production of Rs 10,365 crore
- Cumulative investment of Rs 522 crore
- Direct employment for 5,132 people

The Indian Express had earlier reported that under the PLI scheme for smartphones, the government has disbursed close to \$1 billion (Rs 8,700 crore) in the three years from 2022-23 to



## KEY POINTS

- India is strengthening its position as an electronics manufacturing hub by shifting focus from assembly to increasing local value addition. Key initiatives include the ₹76,000 crore Semiconductor Mission and a ₹22,919 crore components scheme aimed at reducing import dependence, especially on China, and boosting exports.





# PRESS INFORMATION BUREAU

## GOVERNMENT OF INDIA



## GS3-Defence

Ministry of Defence



### INDIAN AIR FORCE PARTICIPATES IN MULTINATIONAL EXERCISE DESERT FLAG-10 IN UAE

Posted On: 20 APR 2025 4:23PM by PIB Delhi

## KEY POINTS

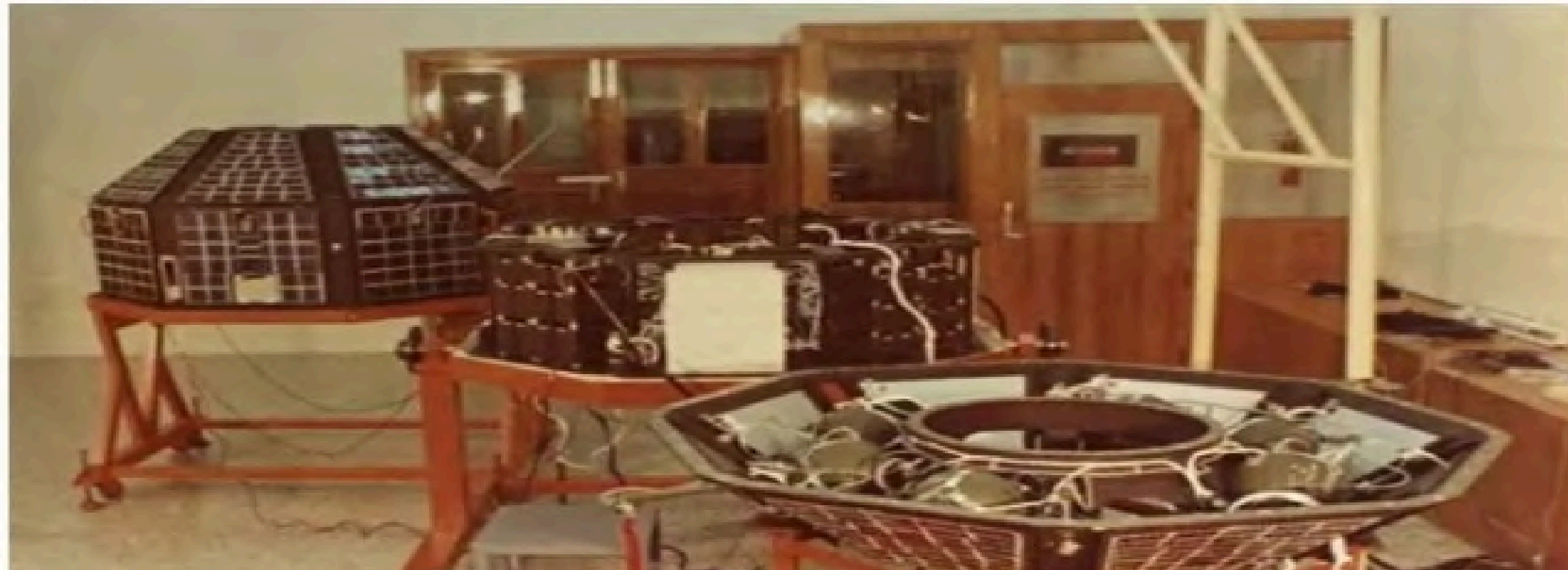
- The Indian Air Force has deployed MiG-29 and Jaguar aircraft to the UAE's Al Dhafra Air Base for Exercise Desert Flag-10, held from 21 April to 8 May 2025.
- This multinational air combat drill includes air forces from 12 countries and aims to enhance interoperability, exchange operational expertise, and strengthen defence ties.





# GS Paper 3-Science and Tech

**India's First Satellite, Aryabhata, Completes 50 Years**



## KEY POINTS

- Aryabhata, India's first satellite launched on April 19, 1975, marked the country's entry into space. Built by ISRO with USSR's help, it aimed to study solar physics, aeronomy, and X-ray astronomy.
- Despite a power failure after five days, it provided valuable data and experience.

