

## (FOIP)

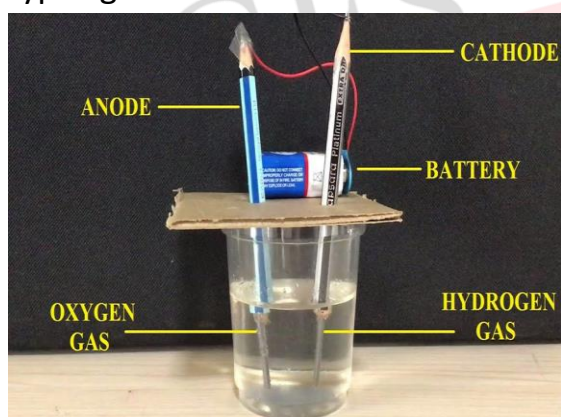
- On global and bilateral issues, focused on cooperation between the G-7 and the G-20 (Japan and India hold their presidencies, respectively). Besides this, Mr. Kishida also unveiled “Japan’s New Plan for a Free and Open Indo-Pacific” (FOIP) and exchanged views about deepening the “Japan India Special Strategic and Global Partnership”.
- The New Plan for the FOIP lays stress on the need to uphold the rules-based order and respect each other’s territorial sovereignty
- FOIP will be able to work with and embrace diverse voices and create an atmosphere of cooperation and collaboration rather than division and confrontation.
- For attaining this atmosphere of cooperation, ‘rule-making through dialogue’ should be encouraged.
- In the first pillar, it has been pointed out that vulnerable countries usually suffer the most if there is an erosion in the rule of law.
- Therefore, Japan wants to engage in economic development programmes such as promoting the implementation of the G-20 Principles for “Quality Infrastructure Investment”
- Under the second pillar, Mr. Kishida talked about the “expansion of cooperation for the FOIP by incorporating realistic and practical projects in a wide range of areas, such as climate change, food security, global health, and cybersecurity”.
- Japan has been working for a long on connectivity projects bilaterally with many countries in the Indo-Pacific region.

### Four pillars of FOIP

- Four pillars of cooperation’ under the new FOIP have been outlined: principles for peace and rules for prosperity; addressing challenges in an Indo-Pacific way; multi-layered connectivity; and extending efforts for security and safe use of the “sea” to the “air”.
- Under the third pillar, the three areas identified for introducing more such projects are Southeast Asia, South Asia, and the South Pacific/Pacific Island countries.
- Japan has made a new commitment of \$100 million towards the Japan-ASEAN Integration Fund; it will promote the Bay of Bengal -Northeast India industrial value chain concept in cooperation with India and Bangladesh, and the new Palau International Airport Terminal

project (an archipelago in the western Pacific Ocean) supported by Japan has also taken off.

- Under the fourth pillar, Japan will help in strengthening the capabilities of maritime law enforcement agencies in other countries
- Towards these objectives, Japan will implement the “strategic use of Official Development Assistance (ODAs)”, revise the Development Cooperation Charter and set forth guidelines for ODA for the next 10 years, and introduce an “offer type” cooperation and a new framework for “private capital mobilization type” grant aid.



## THE HINDU

### New foreign trade policy 2023

- The Key Approach to the policy is based on these 4 pillars: (i) Incentive to Remission, (ii) Export promotion through collaboration - Exporters, States, Districts, and Indian Missions, (iii) Ease of doing business, reduction

in transaction cost and e-initiatives and (iv) Emerging Areas E-Commerce Developing Districts as Export Hubs and streamlining SCOMET policy.

- Foreign Trade Policy (2023) is a policy document that is based on the continuity of time-tested schemes facilitating exports as well as a document that is nimble and responsive to the requirements of the trade. It is based on principles of ‘trust’ and ‘partnership’ with exporters.
- In the FTP 2015-20, changes were done subsequent to the initial release even without the announcement of a new FTP responding dynamically to emerging situations.
- Hereafter, the revisions of the FTP shall be done as and when required. Incorporating feedback from Trade and Industry would also be continuous to streamline processes and update FTP, from time to time.
- The FTP 2023 aims at process re-engineering and automation to facilitate ease of doing business for exporters.
- It also focuses on emerging areas like dual-use high-end technology items under SCOMET, facilitating e-commerce export, and collaborating with States and Districts for export promotion.

- The new FTP is introducing a one-time Amnesty Scheme for exporters to close the old pending authorizations and start afresh.
- The FTP 2023 encourages recognition of new towns through the “Towns of Export Excellence Scheme” and exporters through the “Status Holder Scheme”.
- The FTP 2023 is facilitating exports by streamlining the popular Advance Authorization and EPCG schemes and enabling merchanting trade from India.
- The combination of this land and ocean warming has enhanced the duration, frequency, and intensity of heat waves over India in the pre-monsoon season.
- Meteorologists have also blamed the northern Arabian-Sea warming for the increase in heavy rainfall events over northwest India in the monsoon season.
- .Rapid warming over West Asia produces low sea -level pressure locally, which sets up a northward pressure gradient over the Arabian Sea from the equator to its northern waters.

## THE HINDU

### Why the month of March is cooler?

- The month of March in Mumbai was relatively cooler and drier than normal. Winds in March usually tend to flow from West Asia to Mumbai, signaling the beginning of a sweltering heat and humidity build-up through May.
- This gradient pulls winds northward, disrupting those that should actually be flowing east, from West Asia toward Mumbai.
- So the winds came to Mumbai from the north-northwest, bringing cooler and drier air instead of the usually hot and humid air from the desert.

### Why was this March cooler and drier?

- A study, which this writer was part of, recently reported that West Asia has been warming more rapidly than other tropical land regions.
- The northern Arabian Sea has also been warming.
- These wind changes created an unusual anticyclone over the Arabian Sea in March. An anticyclone has a clockwise ocean circulation in which warm waters converge. As a result, sea surface temperatures warmed by over 1o C just during March.

### Will this affect monsoons?

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- A warmer Arabian Sea in the pre-monsoon season tends to favor a good monsoon.
- On the other hand, 2023 is expected to be an El Niño year, and an El Niño tends to suppress the monsoon, especially when it follows a La Niña winter, which was the case in 2022
- As seasonal land heating continues into April and May, the south-westerly winds will set out from the equator into the central Arabian Sea.
- The normal eastward winds from West Asia towards Mumbai should also get stronger. These westerly winds bring heat from West Asia, over the warm Arabian Sea, into India.
- Winds also sweep in from the northwest over the mountains of Afghanistan and Pakistan, setting up heat waves.
- The evolution of winds and sea surface temperatures clearly show rapid warming of the North Indian Ocean, especially the Arabian Sea, which augurs even more heat events

#### **What will be the consequences?**

- Reports of unseasonal rain and hail leading to devastating crop damages in the northwest are a preview of what may be in store in terms of heat waves and heavy rain over these parts. Since only about 50% of El

Niño years have so far produced a drought over India, we may end up with a 'normal' monsoon.

- But it is quite likely that warming over West Asia plus the Arabian Sea is going to once again produce heavy rainfall events over northwest India and Pakistan.

#### **THE HINDU**

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### **5G vs 6G**

#### **Why did the government put out a 6G vision document?**

- The government has indicated that it wants to accelerate India's wireless data consumption and assume leadership in setting the standards for 6G in the coming years.
- This may involve everything from encouraging local manufacturing of telecom gear to supporting Indian companies and engineers in international discussions around standardization.
- Influence in the latter is key, as telecommunications standards are usually adopted globally.
- Another key motivation is the delay in previous generations of telecommunication technology rolling out in India 5G started rolling out in India years after countries like

South Korea and the U.S. had already blanketed their major urban areas with high-speed wireless connectivity.

- India does not want a repeat of that; the government even says in the 6G vision document that it wants to make sure it grabs 6G “from the oven.
- The vision document says the government will financially support “research pathways” where breakthroughs are most likely to advance connectivity goals, leveraging talent in academia and companies. The government said an “apex body” will be set up to shepherd these groups through roadblocks.
- Some indicative goals are to guarantee every citizen a minimum bandwidth of 100Mbps; ensure every gram panchayat has half a terabit per second of connectivity; and blanket the country with over 50 million internet hotspots, with thirteen per square kilometers.

#### **Use of different spectrum**

- 5G and 6G use wireless spectrum of higher range for data transmission faster than 4G, 3G, and 2G networks. However, when comparing 5G vs 6G, the former is allocated for low band and high band frequencies sub-6

GHz (Gigahertz) and above 24.25 GHz respectively.

- The latter one will be operative at the frequency range 95 GHz to 3 THz (Terahertz). Since different spectrum is used, 5G vs 6G technology can have multiple use cases for a variety of industrial sectors to enhance their efficiency.

#### **Faster than 5G technology**

- Taking into the performance factor, 6G will contribute to higher performance which is far better than newly deployed 5G wireless networks. Operating at terahertz frequency bands, 6G will deliver a peak data rate of 1,000 gigabits/s having air latency less than 100 microseconds. When we talk about 5G vs 6G network speed, 6G speed is expected to be 100 times faster than 5G with enhanced reliability and wider network coverage.

#### **6G wireless accelerate IoT after 5G**

- Internet of Things (IoT) is becoming a reality today with the implementation of 5G-based solutions following extensive 5G network testing which was not possible with previous networks like 4G LTE due to poor planning of frequencies applied. The frequencies used were too narrow and crowded

for transmitting data required by smart devices to give desired results.

- This is where 5G filled in the gap and moving ahead with 6G we expect to connect ten times more devices per square kilometers with an increase in the number of connected devices in the upcoming years.

### **Low latency in both G's**

- The time taken by a packet of information transmitted over a frequency is known as latency. 4G networks had a latency of about 50 milliseconds (ms) whereas 5G networks had ten times lower latency than 4G i.e., 5ms.
- With 6G internet, latency will slip down to range 1millisecond to 1microsecond, lowering latency to five times than that of fifth-generation network making massive data transmissions possible in less than a second.



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