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DIGITAL PUBLIC INFRASTRUCTURE OF INDIA

THIS ARTICLE COVERS 'DAILY CURRENT AFFAIRS' AND THE TOPIC DETAILS OF "DIGITAL PUBLIC INFRASTRUCTURE OF INDIA". THIS TOPIC IS RELEVANT IN THE "GOVERNANCE" SECTION OF THE UPSC CSE EXAM.

WHY IN THE NEWS?

Recently, a collaborative effort between Nasscom and Arthur D. Little resulted in the publication of a report titled "Digital Public Infrastructure of India – Accelerating India's Digital Inclusion."

KEY INSIGHTS FROM THE REPORT

IMPACT OF INDIAN DPIS IN 2022:

Existing digital entities like Aadhaar, UPI, and FASTag contributed around 0.9% of India's GDP in 2022. DPIs play a pivotal role in delivering financial, ecological, and procedural efficiencies to citizens, with global adoption of UPI and Aadhaar by over 30 countries grappling with similar social and economic challenges.

DPI MATURITY FRAMEWORK:

The DPI Maturity Framework encompasses key components, including Recency, Indirect benefits, Direct benefits in transaction value and volume, Total Addressable Market (TAM), and the reach of each DPI as a percentage of TAM.

An assessment of these components reveals two distinct clusters: 'matured digital entities,' characterized by widespread adoption and significant economic impact, and 'budding digital entities,' demonstrating successful proofs of concept and poised for extensive adoption.

ANTICIPATED ECONOMIC EXPANSION OF DPIS BY 2030

In the coming decade, DPIs hold the potential to elevate their contribution to the economic value add from the current 0.9% to a projected range of 2.9-4.2% of the GDP by 2030.

This growth trajectory is foreseen to be propelled by emerging digital entities like ABDM (Ayushman Bharat Digital Mission) and ONDC (Open Network for Digital Commerce), both of which have substantiated their viability through successful proof of concepts.

FOUNDATIONS AND PRINCIPLES OF INDIAN DPIS:

The foundational stack of India's DPIs is grounded in open APIs, interoperability, and principles centred on consent. These principles are structured across layers of identity, payments, and data.

Private entities have harnessed the potential of DPIs to construct innovative business models, with an emphasis on trust as a fundamental guiding principle.

ABOUT DIGITAL PUBLIC INFRASTRUCTURE

Digital Public Infrastructures **(DPIs)** represent a foundational framework designed to facilitate seamless and inclusive digital interactions within a society. These infrastructures are pivotal in harnessing the benefits of technology to enhance public services, governance, and overall socioeconomic development.

DEFINITION AND SCOPE:

DPIs encompass the digital backbone of a nation, comprising interconnected systems, platforms, and databases that enable the exchange of digital information. These infrastructures extend across various domains, including identity verification, payments, healthcare, education, and more.

KEY COMPONENTS:

Identity Layer: DPIs often include robust identity systems that authenticate individuals in the digital realm. This ensures secure access to services and enhances the efficiency of government processes.

Payments Layer: Facilitating secure and efficient digital transactions is a crucial aspect of DPIs. Electronic payment systems, such as Unified Payments Interface (UPI), contribute to financial inclusion and drive a cashless economy.

Data Layer: The data layer of DPIs involves the storage, management, and secure sharing of information. Open data principles and interoperability play a significant role in enhancing accessibility and usability.

FUNDAMENTAL COMPONENTS OF INDIA'S DPI ECOSYSTEM:

UPI (Unified Payment Interface):

With over 8 billion transactions per month and a monthly transaction value of USD 180 billion, Unified Payment Interface (UPI) stands as a formidable component within the National Payments Corporation of India (NPCI) operating systems. UPI surpasses other systems, including the National Automated Clearing House (NACH), IMPS, AePS, Bharat Bill Payment System (BBPS), and RuPay.

Aadhaar:

Aadhaar serves as a strategic policy instrument fostering social and financial inclusion, driving public sector delivery reforms, managing fiscal budgets, enhancing convenience, and facilitating hassle-free,

people-centric governance. Individuals possessing Aadhaar can willingly utilize it for private sector purposes without the necessity for specific permissions.

DigiLocker:

DigiLocker, accomplished with a modest budget of INR 50 crore over seven years, boasts 150 million users and stores six billion documents digitally. Users can securely store a variety of documents such as insurance records, medical reports, PAN cards, passports, marriage certificates, school certificates, and more in a digital format.

DigiYatra:

DigiYatra represents a Biometric Enabled Seamless Travel (BEST) initiative built upon a Facial Recognition System (FRS). It envisions a paperless and contactless travel experience at airports, where travellers navigate various checkpoints using facial features to establish their identity, seamlessly linked to their boarding passes.

CHALLENGES TO DPIS IN INDIA

• DIGITAL DIVIDE:

The digital divide persists, with uneven access to digital resources and technology, particularly in rural and remote areas.

Unequal access hampers the inclusive benefits of DPIs, potentially excluding a significant portion of the population from reaping the advantages of digital services.

• CYBERSECURITY CONCERNS:

The increased reliance on digital platforms raises concerns about data security and the potential for cyber threats.

Cybersecurity vulnerabilities pose a risk to the integrity of DPIs, potentially compromising sensitive information and eroding public trust in digital systems.

• PRIVACY AND DATA PROTECTION:

Balancing the need for data-driven services with privacy concerns is a continual challenge.

Inadequate privacy measures can lead to misuse of personal data, raising ethical concerns and undermining citizen confidence in the security of digital transactions.

• TECHNOLOGICAL INFRASTRUCTURE:

Inadequate technological infrastructure, especially in remote regions, hinders seamless implementation and usage of DPIs.

Technological limitations may impede the accessibility and effectiveness of digital services, creating disparities in service delivery.

• DIGITAL LITERACY:

A significant portion of the population lacks digital literacy skills necessary for navigating and utilizing digital platforms effectively.

Low digital literacy rates hinder the adoption of DPIs, limiting their reach and effectiveness, especially among vulnerable or marginalized communities.

• RESISTANCE TO CHANGE:

Traditional resistance to change, bureaucratic inertia, and a lack of awareness can impede the swift adoption and integration of DPIs.

Slower adoption rates may delay the realization of the full potential of DPIs in streamlining governance and service delivery.

• INTEGRATION CHALLENGES:

Integrating diverse DPIs and ensuring seamless interoperability can be complex.

Lack of integration may result in fragmented digital services, hindering the holistic and interconnected functioning of the digital ecosystem.

PRELIMS PRACTICE QUESTION

Q1. Consider the following statements: (UPSC Prelims-2018)

- 1. Aadhaar card can be used as a proof of citizenship or domicile.
- 2. Once issued, Aadhaar number cannot be deactivated or omitted by the Issuing Authority.

Which of the statements given above is/are correct?

- (a) 1 only
- (b) 2 only
- (c) Both 1 and 2
- (d) Neither 1 nor 2

Answer: (d)

MAINS PRACTICE QUESTION

Q1. Discuss the importance of interoperability in India's Digital Public Infrastructures (DPIs). How does it contribute to creating a seamless and interconnected digital ecosystem? Provide examples to support your discussion.

Himanshu Mishra

NINTH EDITION OF 'RAISINA DIALOGUE' : INDIA EMERGING AS A GREAT POWER AT THE GLOBAL LEVEL

SOURCE - THE HINDU AND PIB.

GENERAL STUDIES – PAPER – 2 INTERNATIONAL RELATIONS, FOREIGN POLICY OF INDIA, INDIA AND GREECE STRATEGIC PARTNERSHIP, RAISINA DIALOGUE, INDIA – MIDDLE EAST – EUROPE ECONOMIC CORRIDOR, BALTIC – NORDIC FORUM, G-7 OR BRICS -10, G-20 GROUPS

WHY IN THE NEWS?



- Recently, the ninth edition of the three-day 'Raisina Dialogue' was organized in New Delhi from 21 to 23 February 2024 in India.
- The 9th edition of Raisina Dialogue was inaugurated by the Prime Minister of India Narendra Modi in New Delhi. In which the Prime Minister of Greece Kyriakos Mitsotakis was the chief guest in this inaugural session.
- Raisina Dialogue is a major conference organized by India on geopolitics and geo-economics.
- Raisina Dialogue is committed to addressing the most challenging issues facing the international community.
- The main theme of this edition will be organized in 2024 'Chaturanga: Struggle, Rivalry, Cooperation, Creation'.
- The three-day Raisina Dialogue held in India was attended by representatives of more than 100 countries, including Foreign Ministers, Defense Ministers and Finance Ministers, former Heads of State and Government, military commanders, academicians, journalists and scholars.
- In this meeting, Greek Prime Minister Kyriakos Mitsotakis said that "India is a great power at the global level and is also an important ally for global peace and security".
- He also said that "India is an emerging power in the G-20 organization and a leading and important country in fighting the threats posed by climate change".
- He urged Indian Prime Minister Modi to further strengthen the mutual partnership between India and Greece.
- Greek Prime Minister Kyriakos Mitsotakis inaugurated the event. Connectivity projects like India-Middle East-Europe Economic Corridor Talked about the importance of Global governance, inequality at the apex of the UN Security Council and the need for reform were also discussed.
- Greek Prime Minister Kyriakos Mitsotakis said that " **Today is a time to celebrate the** partnership between the two countries because it is a partnership between two countries that share the same values and this partnership is the relationship between the world's oldest democracy and the world's largest democracy ".
- Raisina Dialogue also on India's role in hosting the G-20 in the year 2023 and its successful discharge by India. InMentioned again and again. Due to the meeting of G-20 Foreign Ministers in Brazil, five permanent members of the Security Council, important G-7 or BRICS-10 There was no presence of any senior minister level from the countries.
- A large ministerial delegation from Central and Eastern Europe was present, including all
 ministers from the Baltic-Nordic Forum. This made possible a new diplomatic engagement for
 the government which is seeking trade agreements and investment relations with this part of
 Europe. This segment is often overlooked, but it is economically competitive.



MAIN TOPICS OF THE NINTH EDITION OF RAISINA DIALOGUE 2024:

Following are the six main topics of the ninth edition of Raisina Dialogue 2024 -

- 1. Peace with the Planet: Investment and Innovation.
- 2. Defending Democracy: Society and Sovereignty.
- 3. War and Peace: Arsenals and Contradictions.
- 4. Tech Frontiers: Regulations and Realities.
- 5. Decolonization and inclusion of multilateral institutions.
- 6. The post-2030 agenda: people and progress.



INTRODUCTION TO RAISINA DIALOGUE:

• The headquarters of the Ministry of External Affairs of India is located in the South Block of Raisina Hill in New Delhi. Therefore, this meeting was named after Raisina Hill located in New Delhi, India Known as 'Raisina Dialogue'.

IMPORTANCE OF RAISINA DIALOGUE:



- In India, Raisina Dialogue was started in New Delhi in the year 2016.
- It is an annual conference organized to discuss Geo Political and Geo- Economic issues. It is jointly conducted by the Ministry of External Affairs of India and the Observer Research Foundation (ORF).
- It is a multi-stakeholder, cross-sectoral meeting involving policy-makers and decision-makers, stakeholders from different countries, politicians, journalists, senior officials and representatives of industry and business.
- Under this, foreign, defense and finance ministers of different countries are included.
- Observer Research Foundation (ORF) in India was established in the year 1990. Whose headquarters is located in New Delhi, which functions as an 'independent think tank'.

MAIN OBJECTIVE OF RAISINA DIALOGUE:



- The main objective of the Raisina Dialogue is to explore possibilities and opportunities for Asian integration as well as better coordination with Asia with the rest of the world.
- Raisina Dialogue is a multilateral conference that is a platform to commit to address the challenging issues facing the global community.
- Global leaders from across policy, business, media and civil society from around the world are invited annually to the Raisina Dialogue to discuss a wide range of international policy issues.

BENEFITS TO INDIA FROM RAISINA DIALOGUE:

- The Raisina Dialogue provides a platform for the government to articulate its position on various situations and issues of international relations.
- Raisina Dialogue increases the diplomatic capacity of the Government of India.

CONCLUSION / PATH TO SOLUTION:



- There was a lack of diversity in the context of foreign policy due to the non-participation of various other countries in the discussions on foreign policy at the Raisina Dialogue, but a large part of the discussions at this meeting focused on global conflicts.
- The heavily attended gathering of dignitaries from Europe focused attention on Russia's war in Ukraine, and panels on military and naval strategy also focused on the need to counter China's aggressive expansionist policies.
- There was no attempt at balance in the discussions held at the "Raisina Dialogue" because neither Russia nor China were invited to the meeting.
- There was minimal attendance from Southeast Asia, Latin America, and even South Asia (except Nepal and Bhutan).
- Panels on democracy naturally avoided lively debates within India about declining freedoms, but the absence of non-governmental civil society organizations from these discussions created a narrow view of the challenges facing democracies around the world.
- There was also no significant discussion of the Israeli war in Gaza. This does not just mean a lack of diversity in the discussions on this unique forum for foreign policy thinking of India, but it also reflects the views of India's External Affairs Minister S. This diminishes the significance of Jaishankar's otherwise well-founded comment that the Raisina Dialogue -'Made in India' edition of 'Global Public Square' has been made.
- Both India and Greece naturally have a similar outlook on global challenges. As India strengthens its reach abroad, Greece has emerged as a favorable destination country for India.
- India's day-by-day growing interest and active engagement in the Mediterranean region is an important aspect of India's continued growth at the diplomatic level, which will serve as a pillar for India-Greece mutual diplomatic and trade partnership. .

- India is already investing heavily in Greece's infrastructure. These also include the construction of a new airport. Therefore, bilateral trade between India and Greece is continuously increasing.
- The Prime Minister of Greece said that India is the fastest growing economy in the world. Greece has achieved the fastest growth rate of any European country over the years. Therefore, mutual investment between India and Greece is a major objective of our bilateral relations.
- Mr Kyriakos Mitsotakis and Indian External Affairs Minister Subramaniam Jaishankar also addressed the Raisina Dialogue meeting. He said that as two civilizational countries, India and Greece have a special responsibility to contribute to the development of the existing global order.
- Except for Southeast Asia, Latin America, and even countries in South Asia such as Nepal and Bhutan, other countries had minimal presence. A larger presence of South Asian countries in this meeting would have brought out a more diverse approach and would have also revealed the pressures they are facing due to the said conflicts and efforts would have been made to solve those problems through the Raisina Dialogue as much as possible.

PRACTICE QUESTIONS FOR PRELIMINARY EXAM:

Q.1. Consider the following statements regarding Raisina Dialogue.

- 1. Raisina Dialogue is a quadrennial meeting programme. Which is organized every four years in New Delhi.
- 2. The main theme of this edition organized in the year 2024 'Chaturanga: Struggle, Rivalry, Cooperation, Creation 'Is.
- 3. In India, Raisina Dialogue was started in New Delhi in the year 2016.
- 4. Raisina Dialogue is jointly organized by the Ministry of Home Affairs, Defense Ministry, Ministry of External Affairs and Observer Research Foundation of India.

Which of the above statement / statements is/are correct?

- (A) Only 1 and 4
- (B) Only 2 and 3
- (C) Only 1 and 3
- (D) Only 2 and 4

Answer - (B)

PRACTICE QUESTIONS FOR MAIN EXAM:

Q.1. Highlighting the main theme of the ninth edition of Raisina Dialogue, discuss how Raisina Dialogue is relevant in the context of changing Geo- diplomatic and strategic relations at the global level?

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