



India's Biggest Hyperscale Data Centre

For Prelims: 5G, Yotta D1, NIC, e-Governance

For Mains: Need for a National Data Centre Policy, Role of Data Centres in e-Governance.

Why in News?

While inaugurating **north India's first hyperscale data centre 'Yotta D1'**, the Chief Minister of Uttar Pradesh explained that the state achieved the target of **installing 250 MW of storage capacity** with an investment of Rs 20,000 crore within a year of launching its **data centre policy**.

What is Yotta D1?

▪ About:

- Yotta D1, built at a cost of Rs 5,000 crore, is the **country's biggest and UP's first data centre**.
 - It is spread over an area of 3 lakh square feet at the upcoming Data Centre Park in Greater Noida, Uttar Pradesh.

▪ Significance:

- The data centre will **increase data storage capacity of the country**, which until now stood at 2% only despite the fact that **20% of the world's data is consumed by Indians**.
- It is also expected to increase [Gross State Domestic Product \(GSDP\)](#) significantly while creating **new avenues for investment and huge employment opportunities**.
- Yotta D1 features **Internet peering exchanges and direct fibre connectivity** to and from global cloud operators, making it extremely useful for global connectivity.
 - Yotta D-1 will be the **first pillar of North India's 5G revolution**.
- India's **data analytics industry** is estimated to reach more than **\$16 billion by 2025**. Therefore, paying special attention to promoting investment in data centre infrastructure is a step in the right direction.
- The presence of a data park would **allow big companies like Google and Twitter** to have a **data centre for hosting, processing and storing data**.
 - With 5G and edge data centres rolled out from this centre, consumers will get easy access to videos and banking facilities at a fast pace.

What is the Growth Story of India's Data Industry?

▪ Impact of Covid-19:

- The current size of the India data centre industry is **~USD 5.6 billion** and the unprecedented **Covid-19 crisis** propelled the data centre business providing an unexpected tailwind.
- Technology adoption and digitization across the sectors were fast-tracked globally and **India also leap-frogged at least a decade in the past couple of years**.
- The lockdown and subsequent restrictions became a **massive catalyst for digitisation**

across the sectors like banking, education, and shopping etc.

- This led to increased use of data consumption and internet bandwidth across the country.

▪ **NIC Data Centres:**

- The [National Informatics Centre \(NIC\)](#) has set up **state-of-the-art National Data Centres (NDCs)** at NIC Headquarters in Delhi, Pune, Hyderabad and Bhubaneswar and 37 small Data Centres at various State Capitals.
 - The **first Data Centre was launched in Hyderabad in 2008.**
- These **NDCs form the core of e-Governance Infrastructure** in India by providing services to various e-Governance initiatives undertaken by the Government of India.
- The foundation stone of the first **NDC for North Eastern Region (NEDC)** was laid by in **Guwahati, Assam** in February 2021.

▪ **Present and Upcoming Data Centres:**

- Currently, there are about **138 data centres (DCs) across India** with at least 57% of the current IT capacity being in Mumbai & Chennai.
 - The **primary colocation data centre area in India is Mumbai** with its location facing the west coast making it well connected to the Middle East and Europe due to multiple submarine cables landing there.
- The Indian **DC industry's capacity is expected to witness a five-fold increase** involving investments of Rs 1.05 -1.20 lakh crore in the next five years.
 - Over **45 more data centres are planned to come up** in India by the end of year 2025.
 - In terms of IT capacity (nearly 1,015 MW), over 69% of this planned new supply will come up in Mumbai and Chennai, with 51% in Mumbai alone.
 - There is **additional potential of nearly 2,688 MW** of future unplanned supply in India.

▪ **Legal Provisions for Data Centres:**

- The Ministry of Electronics and Information Technology plans to introduce a **National Policy Framework for Data Centre** soon under which it plans to offer incentives worth up to Rs 15,000 crore.
 - A [Draft Data Centre Policy](#) was also introduced in 2020.
- However, some states like **Tamil Nadu, Telangana, Uttar Pradesh, West Bengal and Odisha** have their own **State Data Centre Policies**.

Way Forward

- India is poised to create up to **\$1 trillion of economic value from the digital economy** by 2025, and North India is already a preferred destination for **Fortune 500 companies**.
 - Recognising the **region's potential and underserved data centre demand, continued investments** in data centres will lay a robust foundation for the Digital India growth story.
- Companies, worldwide, are relooking where they would like to relocate and where do they want to manufacture, distribute and set up their database and technology facilities.
 - Data centres are currently a fulcrum for a lot of the decision-making, especially in Asia Pacific and in India.
 - India has potential for establishing new projects, however, this **capacity must be judiciously released into the market to ensure price stability.**
- For India to become one of the major hubs of data centres, there is a **need to bring down power costs** as electricity is one of the major costs of running a data centre.
 - It is also of great importance to **ensure that such DCs use as much renewable energy as possible.**

Source: [IE](#)

