General Studies-2; Topic: Important aspects of governance, transparency and accountability, e-governance- applications, models, successes, limitations, and potential; citizens charters, transparency & accountability and institutional and other measures.

Open Data, Open Government

1) **Introduction**
   - Open government data means publishing information collected by the government to all.
   - It includes government budgets, spending records, health-care measures, climate records, and farming and agricultural produce statistics.
   - Open government data is a silent but powerful movement unfolding globally.
   - Over 100 governments have already signed a charter to proactively share data collected by various government departments, for public consumption.

2) **India's Current Position**
   - The Ministry of Electronics and Information Technology has made some efforts, including a policy around open data.
   - India was one of the first to set up the Open Government Data (OGD) platform in India at data.gov.in to provide access to data sets published by Government departments.
   - India currently houses more than 1.6 lakh data resources.
   - India has published over 4,015 application programme interfaces (APIs) from across 100-plus departments.
   - As a result, India's global ranking by the Global Open Data Barometer has jumped.
   - While India publishes data points, very little of it is getting utilised by data consumers, scientists and corporates.
   - Hence the socio-economic impact is limited.

3) **Significance**
   - Research shows that open data can add an additional 1.5% to the country's GDP.
   - It promotes transparency, accountability and value creation by making government data available to all.
   - By encouraging the use, reuse and free distribution of datasets, governments promote business creation, innovative and citizen-centric services.
   - Data sets such as government budget usage, welfare schemes and subsidies increase transparency and thereby build trust.
   - It paves the way to develop technology-led innovations which can unlock massive economic value, thereby benefitting even the poorest of poor, the under-represented and the marginalised.
   - Availability of data on yearly produce of crops, soil data health cards and meteorological data sets can help companies develop customised crop insurance solutions with specific risk-based pricing.
   - Data on literacy rates, demographic data and density of educators can help develop customised solutions for villages.
   - Information on availability of facilities in public hospitals, current occupancy rates, hospital and demographic data can pave the way for curated health-care applications.
   - It can also help double farmers' incomes by 2022, provide universal health coverage and micro loans to MSMEs.

4) Way Forward

- The time is now ripe for the government to create a data-driven governance architecture.
- Need for developing data management, storage and privacy laws.
- Ensure completeness of data stacks opened for use either through machine-readable formats or direct application programme interfaces (APIs).
- For example, a comprehensive agri-data set would have digitised data sets on soil data, rainfall, crop production as well as market rates.
- Technologies like Blockchain and Internet of Things (IoT), can help in automating data collection and reducing manual intervention and therefore the chances of error.
- Combining data sets which can lead to the creation of applications such as farm insurance from weather, soil and crop cycle data.
- Encourage data usage like Aadhaar/identity data which has seen exponential growth.
- Aadhaar has led to the development of Aadhaar-enabled payment system, and direct benefit transfers which are pushing the "financial inclusion".
- When Artificial Intelligence is coupled with open data, there will be a paradigm shift.