District-Level GDP Estimation

For Prelims: Gross Domestic Product**, District Domestic Product,** Sectors of Indian Economy**,** Gross Value Added

For Mains: India’s AI Mission and Global Competitiveness, AI and Economic Growth in India

Source:BL

Why in News?

India's economic growth has long been assessed through **national and state-level Gross Domestic Product (GDP) estimates**, leaving **districts (District Domestic Product (DDP) Estimation)** overlooked in economic assessments.

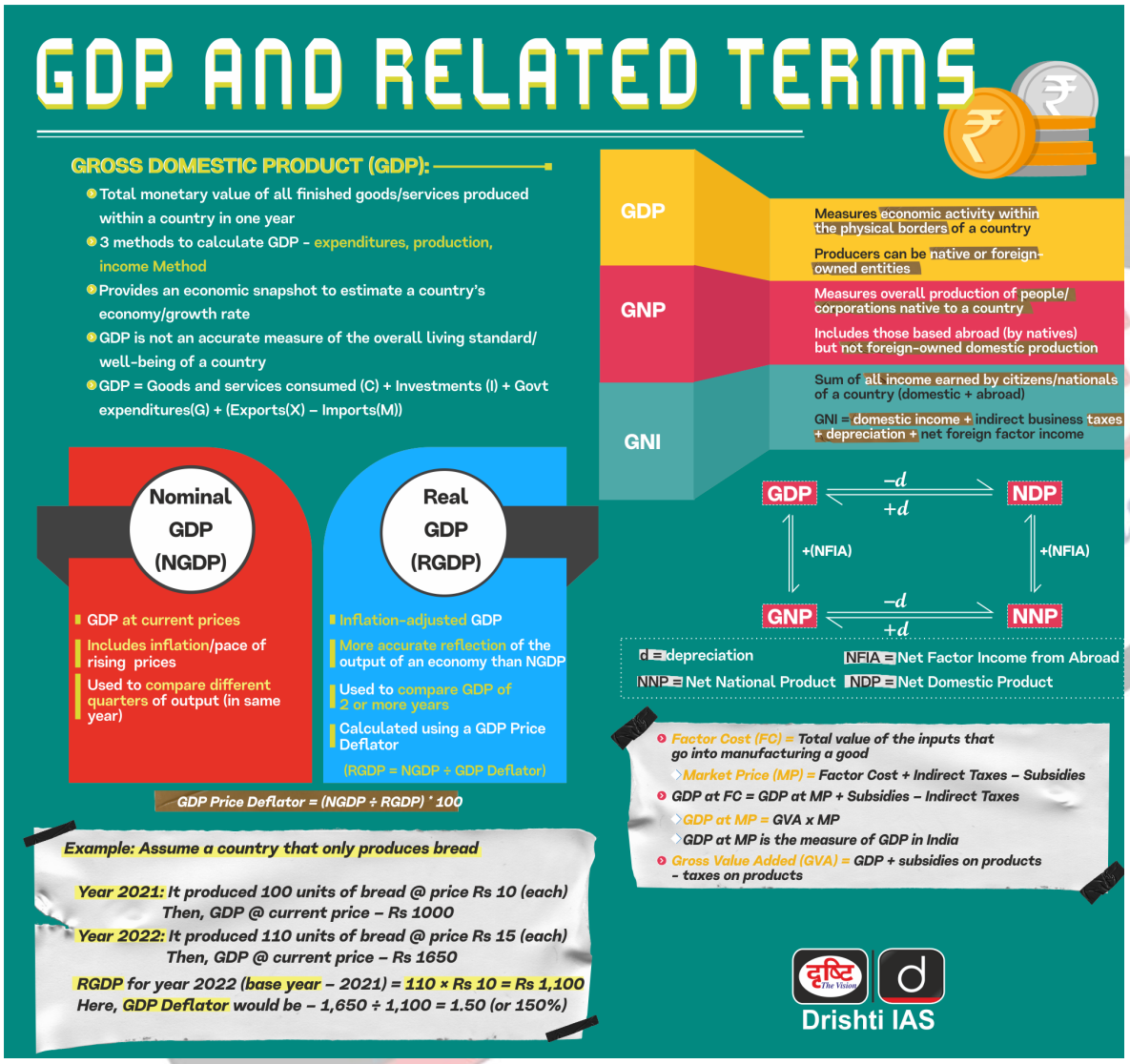
- Prime Minister Narendra Modi has emphasized that to achieve the USD 5 trillion economy target, India must determine district-wise contributions and implement localized development strategies.

What is the Current GDP Estimation Methodology?

- **Current GDP Estimation Methodology:** India’s GDP is estimated using a mix of **top-down** and **bottom-up** approaches, depending on the sector.
    - The **primary sector** (agriculture, forestry, fishing, and mining) follows a **bottom-up** approach, aggregating data from the district level upwards.
    - The secondary **(manufacturing, construction)** and **tertiary (services, trade, banking) sectors** follow a **top-down** approach, where national GDP is apportioned to **states and districts** based on indicators like employment levels and infrastructure presence, rather than measuring economic activity directly at the district level.
- **Limitations:** Current GDP Estimation method overlooks **local sectoral strengths**, particularly in the **secondary and tertiary sectors**.
    - Economic growth varies across districts even within the same state, but a **lack of granular data leads to generic policies**.
        - The approach misses real-time activity, causing inaccuracies, while data gaps in the unorganised sector (unpaid labor (especially by women) weaken GDP estimates.
    - The **State of Working India (SWI 2023) report** highlights that the link between GDP growth and employment is weak at the national level, and this issue is even more pronounced at the district level.
        - Without employment-linked GDP data, development policies may focus solely on economic output rather than job creation and social equity.

Case Study

- During Covid-19, the **Ministry of Statistics and Programme Implementation (MoSPI)** applied a uniform GDP distribution, leading to discrepancies.
    - Uttar Pradesh (UP) objected, citing significant errors in its estimated **Gross State Value Added (GSVA)**. With **25% GSVA from agriculture** and **65% of its workforce in the sector,** UP argued that its economy was less affected than industrial states.
- The one-size-fits-all approach exaggerated UP's GDP decline, highlighting the need for a **bottom-up, district-level GDP estimation** for accuracy.



What are the Challenges in Implementing District-Level GDP Estimation?

- **Informal Sector:** Regional units like **districts** face challenges in DDP estimation due to the **high reliance on informal labor and the unorganized sector,** leading to underestimation.
    - Additionally, the free movement of goods, services, and factor payments across district boundaries further complicates accurate assessment.
- **Financial & Logistical Barriers:** Setting up a **robust statistical framework** for district-level GDP estimation requires **significant investment** in **infrastructure, training, and digital**

tools.

- **Inconsistent Data Collection:** Statistics under the **Concurrent List** creates fragmentation between the **Centre and States**, while the decentralized statistical system across ministries lacks uniformity, making **DDP estimation inconsistent.**
    - The absence of standardized district-level data collection leads to inaccuracies across states.
- **Lack of Standardized Methodology:** No internationally accepted framework, like the System of National Accounts (SNA) 2008, for estimating DDP.
    - Defining key metrics such as the **base year is challenging due to variations in economic activities across districts**.
- **Political and Administrative Hurdles:** States are responsible for compiling Sub-State/DDP but often fail to execute it effectively.
    - Variability in state policies and political priorities leads to delays and inconsistencies in data collection, affecting the uniformity and reliability of DDP estimation.

What are the Benefits of District-Level GDP Estimation?

- **Boosting Fiscal Federalism:** Decentralized economic data empowers district administrations to develop tailored strategies, ensuring **better resource utilization and targeted investments.**
- **Accurate Economic Analysis:** Helps assess how national or state-level policies impact different districts.
- **Equitable Growth:** Ensures **rural and underdeveloped districts** are included in the growth narrative, preventing economic disparities.
- **Policy Reforms:** The **15th Finance Commission** recommended **performance-based grants** for local governance, district GDP data can help allocate these resources effectively.
    - **State and national policies** should be adjusted based on **district-level economic insights.**

What Should Be the Way Forward for Robust DDP Estimation?

- **Pilot Project:** The government can start with a **pilot project** in districts with high economic activity to test DDP estimation models. Successful models can then be scaled to other districts.
    - Strengthen collaboration between states and research institutions, as seen in the Assam-Pahle India Foundation MoU, to develop **district vision documents.**
- **Local Data Collection Mechanisms:** The government should strengthen district statistical offices, train local data collectors, and ensure strong Central-State collaboration for accuracy.
    - Every **USD 1 investment in data yields USD 32** in development benefits, underscoring its long-term value.
- **Real-Time Economic Indicators:** Aligning with the Sub-National Accounts Committee's recommendations for improving GSDP and DDP estimation, district-level economic dashboards can be developed to track employment trends, tax collections, credit growth, and business activity.
    - Digital tools like **Artificial Intelligence**, **satellite imagery, and big data analytics** should be leveraged to improve **district-level economic measurement.**
- **Expand Role of MoSPI:** The role of MOSPI should be expanded beyond technical guidance and capacity building to ensure uniformity and interstate comparability in DDP estimation.

Drishti Mains Question:

Discuss the limitations of India’s current GDP estimation methodology. How can a bottom-up approach improve economic policymaking?

UPSC Civil Services Examination, Previous Year Questions (PYQs)

Prelims

Q. A rapid increase in the rate of inflation is sometimes attributed to the "base effect". What is "base effect"? (2011)

(a) It is the impact of drastic deficiency in supply due to failure of crops
(b) It is the impact of the surge in demand due to rapid economic growth
(c) It is the impact of the price levels of previous years on the calculation of inflation rate
(d) None of the statements (a), (b) and (c) given above is correct in this context

Ans: (c)

Mains

Q. Explain the difference between computing methodology of India's Gross Domestic Product (GDP) before the year 2015 and after the year 2015. **(2021)**