



## 46 PILLAR#4: ECONOMIC SYSTEMS, PLANNING, NITI-PC

| आर्थिक प्रणाली →  | Capitalism<br>पूंजीवाद   | Mixed Economies<br>मिश्रित अर्थव्यवस्थाएँ  | Socialism<br>समाजवाद   |
|---|--|--|--|
| <i>Ownership of the industries?</i>   | Pvt. Sector  | Few industries reserved for public sector, remaining by Pvt. sector.   | Public Sector / Govt / Collective ownership. There is no 'pvt' property.                             |
| <i>What goods and services should we produce? More books or more bikes?</i> | 'Free Market Economy': Let the market forces of supply & demand decide it.   | <ul style="list-style-type: none"> <li>- Essential goods/services by Public Sector</li> <li>- Others by Pvt sector.</li> </ul>   | Govt. will decide what must be produced & in how much quantity.                                      |
| <i>During production shd we use more labour or more capital (machines)?</i> | Whichever mode of production is more cheaper.  | In public sector industries- govt will decide. In pvt sector- entrepreneur will decide.  | Preference for labour intensive modes of production.   |
| <i>How to sell/distribute those goods and services among people?</i>        | Only the consumers who can afford them, can purchase them. If a sick man cannot afford medicine, it is not govt's problem. | <ul style="list-style-type: none"> <li>- For essential goods and services → government may fix the prices e.g. NPPA-Stent.</li> <li>- For others → market forces will decide.</li> </ul> | Govt to decide who needs how much, and will distribute accordingly, using subsidy / rationing shops. |

- Presently, most nations are 'Mixed Economic System' including USA and India. While China officially claims to be 'Socialist' but, in practice, they too have become a Mixed Economy.
- The socialist economic system stopped in most nations after the collapse of USSR, except a handful of outliers like North Korea, Cuba & Venezuela.
- **Communism** is a branch of socialism, (usually) run by a totalitarian government made up of one and only one party.

Related terms: **Closed economy (बंद अर्थव्यवस्था)**= A country which does not have any import-export / economic relations with rest of the world. **Open Economy**= an economy that is not a closed economy.

### 46.1 ECONOMIC PLANNING: आर्थिक योजना

**Definition?** It is the process through which Govt. prepares a list of socio-economic problems e.g. Mass poverty, inequality, low productivity in agriculture, lack of industrial and infrastructural development etc.; and then Govt. sets goals / targets / plans to fix these problems.

#### 46.1.1 Economy Planning → Before Independence:

|             |   |
|-------------|---|
| <b>1934</b> | M. Visvesvaraya's book "The planned economy of India". He was an Engineer, Ex-Diwan of Mysore and Bharat Ratna recipient. |
| <b>1938</b> | Nehru's Congress plan. But not implemented due to WW2.  |
| <b>1944</b> | Bombay plan by noted industrialists such as JRD Tata, GD Birla et al.   |



|             |  |
|-------------|--|
| <b>1944</b> | Sriman Narayan Agrawal's Gandhian plan.                      |
| <b>1945</b> | MN Roy's _____ – with socialist leanings.                    |
| <b>1950</b> | Jayprakash Narayan's _____ Plan based on Vinoba's philosophy |

## 46.2 ECONOMY PLANNING → AFTER INDEPENDENCE

|                  |  |
|------------------|--|
| <b>1950-51</b>   | Inspired from the USSR / Soviet Model, PM Nehru established a Planning Commission योजना आयोग . 1st FYP starts from 1951.   |
| <b>1952</b>      | National Development Council (NDC/राष्ट्रीय विकास परिषद) made up of PM, CM etc. to approve the Five Year Plans/पंचवर्षीय योजनाएँ drafted by Planning Commission. |
| <b>2014</b>      | Modi shuts down Planning Commission.   |
| <b>2015, Jan</b> | Modi notified the formation of Niti Aayog: National Institution for Transforming India, to replace the Planning Commission.                                      |

PC, NDC and NITI were / are neither Constitutional nor Statutory bodies.

## 46.3 PLANNING COMMISSION → FIVE YEAR PLANS

Following table is more relevant for CDS, SSC & StatePCS than for UPSC-CSE.

| Plan                    | Period       | Theme/Model/Target   |
|-------------------------|--------------|--|
| <b>1st</b>              | <b>51-56</b> | <ul style="list-style-type: none"> <li>➤ Harrod Domar Model</li> <li>➤ Main focus: Agriculture, irrigation and power.</li> <li>➤ Got more GDP growth than its original target.</li> </ul>  |
| <b>2nd</b>              | <b>56-61</b> | <ul style="list-style-type: none"> <li>➤ _____ Model</li> <li>➤ Socialist model, Rapid industrialization, heavy industries.</li> </ul>   |
| <b>3rd</b>              | <b>61-66</b> | <ul style="list-style-type: none"> <li>➤ Sukhmoy Chakraborty and John Sandy Model</li> <li>➤ Also called “Gadgil Yojana”.</li> <li>➤ Failed to achieve its target due to droughts and wars with Pak-China</li> </ul>   |
| <b>Holidays</b>         | <b>66-69</b> | Plan Holiday declared thanks to #EPICFAIL of 3rd FYP.  |
| <b>4th</b>              | <b>69-74</b> | <ul style="list-style-type: none"> <li>➤ Ashok Rudra and Alon Manney Model.</li> <li>➤ growth with stability and self-reliance.</li> <li>➤ Indira gave ‘Garibi Hatao’ slogan in 1971 election campaign</li> <li>➤ #EPICFAIL due to Bangladeshi refugee problem and drought.</li> </ul> |
| <b>5th</b>              | <b>74-79</b> | <ul style="list-style-type: none"> <li>➤ C.Subramaniam and later redrafting by D.P.Dhar</li> <li>➤ Originally it was a 10 year long term perspective plan with focus on poverty removal and self-reliance</li> </ul>   |
| <b>_____ Plan</b>       | <b>78-80</b> | Morarji Desai's Janta government: “we'll measure progress every year and make new plans accordingly for next year.”  |
| <b>6th</b>              | <b>80-85</b> | <ul style="list-style-type: none"> <li>➤ Poverty removal, IRDP, NREM, TRYSEM etc.</li> </ul>   |
| <b>7th</b>              | <b>85-89</b> | <ul style="list-style-type: none"> <li>➤ Pranav Mukherjee Model</li> <li>➤ Focus on employment. Jawahar Rozgar Yojana started.</li> </ul>  |
| <b>Two annual plans</b> | <b>89-91</b> | Political instability at Centre. So, only annual plans.  |
| <b>8th</b>              | <b>92-97</b> | <ul style="list-style-type: none"> <li>➤ John W.Miller Model.</li> <li>➤ Prime Minister PV Narasimha Rao- LPG reforms</li> </ul>   |
| <b>9th</b>              | <b>97-02</b> | <ul style="list-style-type: none"> <li>➤ Growth with social justice and equity. Mostly “indicative” planning.</li> </ul>   |



|             |   |  |
|-------------|---|--|
|             |   | ➤ #EPICFAIL due to global slowdown after Asian Financial Crisis (which we learned in Pillar#3 currency convertibility).  |
| <b>10th</b> | <b>02-07</b>                                | Target 8% GDP growth rate, double per capita income in 10 years.   |
| <b>11th</b> | <b>07-12</b>                                | ➤ <b>Theme:</b> “Inclusive Growth”<br>➤ C.Rangarajan framed it with targets: 8-10% growth rate, 70 million new jobs, lower IMR, CMR, TFR etc.  |
| <b>12th</b> | <b>12-17<br/>Ended<br/>on<br/>31/3/2017</b> | ➤ <b>Theme:</b> “_____”.<br>➤ Target growth rates: 9% GDP, 4% Agriculture, 10% Mfg.<br>➤ 10% reduction in poverty, create 50 million new jobs.<br>➤ Get IMR:26, MMR:1000, Child Sex ratio: 950, TFR: 2.1<br>➤ Increase mean school years, forest cover, infrastructure investment, rural tele-density. |

**MCQ. The main objective of the 12th Five-Year Plan is (Asked in UPSC-Pre-2014)**

- (a) inclusive growth and poverty reduction
- (b) inclusive growth and sustainable growth
- (c) sustainable and inclusive growth to reduce unemployment
- (d) faster, sustainable and more inclusive growth

**MCQ. Arrange the following events in sequential order as they happened in India:**

**1. Mahalanobis Model 2. Plan Holiday 3. Rolling Plan. (Asked in CDS-II-2017)**

**Answer Codes:** (a) 1, 2, 3    (b) 3, 2, 1    (c) 2, 3, 1    (d) 1, 3, 2

#### **46.4 PLANNING COMMISSION: LIMITATIONS / SHORTCOMINGS**

- ✗ Achieved ~9% GDP growth-rate during 2005-07, thanks to American boom prior to Subprime crisis. But almost all nations of world including Pakistan had experienced high growth in that era. So 9% GDP did not come from PC's magic wand.
- ✗ Post-Subprime crisis, GDP-fell, food-inflation & NPA rose during 2008-13. PC couldn't fix it.
- ✗ PC was a toothless body, couldn't punish any government organisations if targets failed. Failed to implement land reforms and labour laws.
- ✗ PC designed CSS with 'One Size Fits' all approach and a few extra crores to NE/J&K/Hill-states and LWE-affected states. But for long, PC did not use pilot projects / sample testing / interaction with states. So, Indira Awas Yojana (IAY), ICDS-child development scheme etc. programs failed to show tangible result despite pumping crores of rupees over decades.
- ✗ PC tried to bypass State Governments by designing schemes that directly funded to NGO & private agencies. So, non-Congress states became unenthusiastic about implementing Central Schemes.
- ✗ Only in 2013, PC attempted to undo his mistakes by reducing number of Centrally sponsored schemes (CSS), Performance based funding to States etc. But it was too little too late.
- ✗ PC's shortcomings resulted in creation of new bodies like PM's project monitoring group, Group of Ministers (GoM) committees etc. → more lack of coordination. So, Modi felt that PC is a hopeless mess beyond repairs & replaced it with NITI Ayog.



## 46.5 PLANNING COMMISSION VS NITI AAYOG: STRUCTURE

| Position                        | Planning Commission   | NITI Aayog  |
|---------------------------------|---|---|
| <b>Born</b>                     | Born: 15/3/1950<br>Dissolved: 13/8/2014   | -----<br>was born on 1/1/2015   |
| <b>Chairman</b>                 | Prime Minister  | same  |
| <b>Vice Chairman</b>            | Last Dy.Chairman was Montek Singh Ahluwalia (Cabinet minister rank).                              | Economist Rajiv Kumar. (previously Arvind Panagariya). He enjoys Cabinet Minister rank in the warrant of precedence, but salary = Cabinet Secretary (IAS)   |
| <b>CEO</b>                      | Member-Secretary (IAS)  | A Secretary level bureaucrat with fixed tenure. Presently, Amitabh Kant (IAS).  |
| <b>Ex-officio members</b>       | <ul style="list-style-type: none"> <li>✓ Finance Minister</li> <li>✓ Planning minister</li> </ul> | PM has nominated following ministers <ol style="list-style-type: none"> <li>1. Home</li> <li>2. Finance</li> <li>3. Railway</li> <li>4. Agriculture</li> <li>5. Minister of state for planning.</li> </ol>  |
| <b>Full time members</b>        | 4-7 full time members, who enjoyed "Minister of State" rank.                                      | <ol style="list-style-type: none"> <li>1. Bibek Debroy (Economist)</li> <li>2. Ramesh Chand (Economist)</li> <li>3. V.K. Saraswat (Technocrat, missile scientist and Ex-DRDO chief.)</li> <li>4. Dr. V.K. Paul (Paediatrician, Public Health Expert)</li> </ol> They enjoy minister of state rank in warrant of precedence, but salary = Secretary rank (IAS) |
| <b>Special Invitees</b>         | N/A   | <ul style="list-style-type: none"> <li>- Union ministers for Transport, HRD, Social Justice.</li> <li>- PM can invite other experts as and when needed.</li> </ul>  |
| <b>Part-time members</b>        | N/A   | Tech experts from research institutes. Currently none declared.   |
| <b>Governing Council</b>        | National Development Council (NDC) with PM, CM etc.   | <ul style="list-style-type: none"> <li>➤ Chairman: Prime minister</li> <li>➤ CM of all states incl. Delhi, Puducherry</li> <li>➤ Lieutenant governors of all Union territories.</li> </ul>  |
| <b>Ad hoc Regional Councils</b> | N/A   | CMs & Lt.Govs of states/UTs that fall in the region. They'll be dealing with specific issue affected them e.g. irrigation, naxal-problem, infrastructure etc.   |

## 46.6 PLANNING COMMISSION VS NITI AAYOG: FUNCTIONS

While Finance commission (a constitutional body under Art.280) is responsible for the tax-devolution from Union to states, these two non-constitutional bodies look/looked after →

| Planning Commission                   | NITI Aayog  |
|---------------------------------------|---|
| Prepared the Five Year Plans of India | 2015 it drafted <ul style="list-style-type: none"> <li>✓ Three Year Action Agenda (2017-20).</li> <li>✓ Seven Year Strategy Document.</li> <li>✓ Fifteen Year Vision Document (2017-32).</li> </ul> |



|   |  |
|---|--|
|   | 2018: drafted Strategy for New India @ 75 covering the period 2017 to 2022-23.   |
| 1. How much money should union give to each state for implementation of centrally sponsored schemes (CSS)?<br>2. How much money should union give to the five year plans of the state governments?<br>PC would answer these questions using Gadgil Mukherjee formula (designed in 8TH FYP)- based on population, per capita income, special problems etc. of a state. | NITI doesn't decide how much money should be given to each state. That component is decided by the Finance Commission (tax devolution and grants) and Finance Ministry (Allocations for schemes).<br>1. NITI primarily serves as the think tank, helps in policy design.<br>2. Helps in monitoring schemes' implementation through its dashboard e.g. 'School Education Quality Index', 'SDG India Index', 'Digital Transformation Index' etc. |

#### 46.7 NITI → NOTABLE INITIATIVES / HOW DIFFERENT FROM PC?

|  |  |
|--|--|
| ----- Portal   | 2017 onwards: NGO register here, get unique id → apply for grants under various govt schemes.  |
| -----<br><b>District Programme</b><br>आकांक्षात्मक<br>जिला कार्यक्रम | - <b>2018 onwards:</b> to rapidly transform 115 backward districts on 49 key performance indicators (KPIs :मुख्य निष्पादन संकेतक) related to Health, nutrition, education, agriculture, water resources, financial inclusion, skill development, infrastructure etc.<br>- Their progress is monitored using NITI online dashboard called 'Champions of Change' → 2018 Ranking: #1: Dahod (Guj).  |
| <b>Strategic disinvestment</b><br>सामरिक/<br>रणनीतिक<br>विनिवेश      | - Strategic Disinvestment means selling Government shareholding to such portion that private entity gets into management control (i.e. private entity getting 51% / >). In other words it's 'privatization' but NITI prefers to use such sophisticated term<br>- NITI Aayog suggested strategic disinvestment of 30+ sick / loss making CPSEs such as Air India, Pawan Hans Helicopter, Scooters India etc.<br>(Planning Commission wouldn't have done this because of their Nehruvian 'pro-PSU' mindset.) |
| <b>POSHAN Abhiyaan</b>   | - Ministry of Women and Child Development (MWCD) is implementing POSHAN Abhiyaan to make India malnutrition free India by 2022 with focus on pregnant women, mothers and children. (More in Pillar#6)<br>- NITI Vice-Chairman is the head of POSHAN Abhiyaan's National Council.<br>(Planning Commission's focus would had been Food-calorie security through cheap wheat /grain only, whereas Nutritional Security is bigger.)  |
| <b>Bills and policies</b>  | Since it inception Niti Aayog has<br>- Helped framing various policies on Energy, Mineral etc.   |



|                    |  |
|--------------------|--|
|                    | <ul style="list-style-type: none"> <li>- Helped framing various bills, Model Acts on Agricultural Land Leasing, Livestock selling etc.</li> </ul>  |
| <b>Agriculture</b> | NITI helped revamping the MSP by suggesting price deficiency payments (under PM-AASHA), & revamping fertilizer subsidies through DBT mechanism to fertilizer companies. (Ref: Agro Handout)  |
| <b>SDG</b>         | For Sustainable Development Goals: टिकाऊ/सातत्यपूर्ण/सतत विकास लक्ष्यों, <ul style="list-style-type: none"> <li>- NITI developed SDG India Index to monitor our progress in 17 SDG goals</li> <li>- NITI suggested Govt. to focus on methanol / biofuel based economy for reducing the fuel bill by around 30% by 2030.</li> </ul> |
| <b>CSS</b>         | NITI helped developing Output Outcome Monitoring Framework to monitor the implementation of Govt schemes. PC simply launched schemes after schemes, without much attention to performance monitoring.  |
| <b>Seminars</b>    | NITI regularly organises various seminar, workshop, conferences for idea exchange with industries and academicians. PC was 'closed / introvert: अंतर्मुखी body' in terms of interaction with others.   |
| <b>Startups</b>    | NITI runs Atal Innovation Mission (AIM) and SETU to help startups.   |
| <b>Digital Age</b> | NITI developing National Program on Artificial Intelligence.   |

**Conclusion?** From above points, it is evident that NITI's approach is more modernised, forward-looking, less bureaucratic and less status-quo oriented than the erstwhile planning commission. With such initiatives, NITI Ayog is playing a pivotal role for economic growth, human development and good governance in India.

**Asked-GSM3-2018:** How are the principles followed by the NITI Aayog different from those followed by the erstwhile Planning Commission in India?

## 46.8 ECONOMY PLANNING → PM-EAC?

Prime Minister's Economic Advisory Council (प्रधानमंत्री की आर्थिक सलाहकार परिषद)

- Just like PC and NITI, this is also neither constitutional nor statutory body.
- Started in the 2000s to give advice on economic issues to the Prime Minister.
- After PM Manmohan Singh's term finished (2014), PM Modi did not reconstitute it for a while. But in 2017, our growth rate seemed declining in the aftermath of demonetisation and GST, so opposition parties & critics were making lot of hue and cry about PM's faulty economic policies. In that atmosphere, PM Modi again reconstituted this Economic Advisory Council (2017-Sept).
- **Composition?** Economist Bibek Debroy (Chairman) & other notable experts. NITI provides administrative / secretarial support to PM-EAC.
- **Controversy?** 2018-Dec: Its part-time member economist Surjit Bhalla resigned, a day after RBI Governor Urjit Patel's resignation.





#### 46.8.1 Economy Planning → PRAGATI?

2015: Pro-Active Governance and Timely Implementation (PRAGATI) is a web platform under Prime Minister's Office (PMO) for

1. monitoring scheme implementation
2. addressing common man's grievances related to tax refunds, EPFO claims etc.

PM uses this digital platform for monthly video conferencing with ministries & departments @Union, and Chief Secretaries(IAS) @States.

|                                       |   |
|---------------------------------------|---|
| <b>eSamikSha</b>                      | <ul style="list-style-type: none"> <li>- 2014: PM Modi launched web portal under Cabinet Secretariat.</li> <li>- After the Ministers / officials meet PM → various decisions / follow up actions are monitored through this portal.</li> <li>- If an IAS is sitting on a file, this webportal allows PM / Cabinet Secretary to digitally ask the IAS to explain the delay or expedite the decision-making.</li> </ul>   |
| <b>Project Monitoring Group (PMG)</b> | <ul style="list-style-type: none"> <li>- 2013: PM Manmohan set it under Cabinet Secretariat for fast tracking the approval / implementation of various public, private and PPP Projects.</li> <li>- They also operate a webportal 'e-Nivesh Monitor' for investment / business proposals.</li> </ul>  |
| <b>CPGRAMS</b>                        | <ul style="list-style-type: none"> <li>- 2007: Personal ministry → Department of Administrative Reforms &amp; Public Grievances (DARPG: प्रशासनिक सुधार और लोक शिकायत विभाग) launched the portal Centralized Public Grievance Redress And Monitoring System (CPGRAMS)</li> <li>- Any citizens can file complaint against any Central Ministries/Departments/Organisations for Corruption, Nepotism, harassment, mismanagement, absenteeism, Delay in providing services etc.</li> <li>- They also launched a mobile app 'My Grievance'.</li> </ul>  |
| <b>[Yearbook] Misc.</b>               | <p>Following don't fall under any 'Ministry or Dept'</p> <p><b>APEX/ INDEPENDENT OFFICES</b></p> <ol style="list-style-type: none"> <li>1. President's Secretariat (राष्ट्रपति सचिवालय)</li> <li>2. Cabinet Secretariat (मंत्रीमंडल सचिवालय) → Research and Analysis Wing (R&amp;AW)</li> <li>3. Prime Minister's Office (प्रधान मंत्री कार्यालय) → National Security Advisor (NSA: राष्ट्रीय सुरक्षा सलाहकार)</li> <li>4. NITI Aayog (National Institution for Transforming India)</li> </ol> <p><b>INDEPENDENT DEPARTMENTS</b></p> <ol style="list-style-type: none"> <li>1. Department of Atomic Energy (परमाणु ऊर्जा विभाग)</li> <li>2. Department of Space (अंतरिक्ष विभाग)</li> </ol> |

To prepare an economic plan, and to monitor its success or failure- statistical data is required. And that leads to the next topic →



## 46.9 [YEARBOOK] MOSPI, NSSO, CSO

Ministry of Statistics and Programme Implementation (MOSPI: सांख्यिकी और कार्यक्रम कार्यान्वयन मंत्रालय)'s administrative head is called Secretary & Chief Statistician of India (भारत के मुख्य सांख्यिकीविद्).- usually, Indian Statistical Service officer recruited by UPSC. MoSPI consists of →

### 1. National Statistical Office (NSO: राष्ट्रीय सांख्यिकी कार्यालय) →

- a. \_\_\_\_\_ (CSO: केंद्रीय सांख्यिकी कार्यालय) → computation of GDP, GSDP, IIP, ASI, CPI (Rural, Urban, All India) and Economic Census (6th was done in 2013);
- b. \_\_\_\_\_ (NSSO: राष्ट्रीय प्रतिदर्श सर्वेक्षण कार्यालय) → data collection for various socio-economic subjects, Annual Survey of Industries (ASI), Rural-urban prices and other data required for CSO's calculations.

### 2. Programme Implementation wing ( कार्यक्रम कार्यान्वयन स्कंध) →

- a. **Member of Parliament** \_\_\_\_\_ (MPLADS-1993: सांसद स्थानीय क्षेत्र विकास योजना) → each MP can suggest development works worth ₹ 5 crore per year in his constituency. Rajya Sabha MP: any district in their State. Nominated MP can select any district in the anywhere in India. Central Sector Scheme =100% funded by Union.
- b. Twenty Point Programme (2006: बीस सूत्री कार्यक्रम) to measure performance of various schemes related to poverty alleviation, employment generation, housing, education, health, etc.
- c. Infrastructure Monitoring and Project Monitoring (आधारी संरचना प्रबोधन और परियोजना प्रबोधन)

## 46.10 NATIONAL STATISTICAL COMMISSION (राष्ट्रीय सांख्यिकी आयोग)

Setup in 2005 by Cabinet resolution. So, neither constitutional nor statutory.

- **Structure?** 1 part time chairman, 4 part time members + NITI Secretary is ex-officio member = 6 people. Chief Statistician of India serves as 'Secretary' to this commission.
- **Functions?** It replaced the erstwhile Governing council of the NSSO. So, basically the nodal body designing the standards of data collection - data publication, coordination among the different agencies involved.
- **Controversy?** 2019-Jan: Two members resigned citing "Over the months, we have been feeling that we were not been taken seriously and being sidelined by the government. NSC had approved the Annual Employment Survey 2017-18 but it's not yet released." Critics allege this Employment survey shows jobs fell after demonetization / Modi raj so Modi doesn't want data released.

## 46.11 COLLECTION OF STATISTICS ACT 2008

- It regulates the collection of statistics related to social, economic, demographic, scientific and environmental aspects, by central, state and local governments.





- Penalty if companies, individuals and households doesn't give information / give false information to the data collectors.
- 2017 Amendment : extended this act to J&K as well.

**Sidenote:** Data collection / classification is done as per the System of National Accounts 2008 (SNA 2008) by United Nations Statistical Commission (UNSC).

## 47 PILLAR#4: INDICATORS → UNEMPLOYMENT (बेरोजगारी)

- **Voluntary Unemployment:** a person is out of job on his own choice. Either he wants higher wages or doesn't want to work at all.
- **Involuntary unemployment (अनैकच्छिक बेरोजगारी):** It is a situation where a person is willing to work at the prevailing wage rates, but unable to find work due to factors beyond his control.

### 47.1 UNEMPLOYMENT → INVOLUNTARY → TYPES

| Types   | Features   |
|---|--|
| <b>Cyclical (चक्रीय)</b>                                      | mainly occurs during recession or depression when workers are laid off on mass scale.  |
| <b>Frictional (प्रतिरोधात्मक बेरोजगारी)</b>                   | When a person is out of one job and is searching for another job. During this transition time, he's deemed frictionally unemployed.  |
| <b>-----<br/>Unemployment (प्रच्छन्न बेरोजगारी)</b>           | Unemployment which is not visible because person seems visibly working but his marginal productivity / contribution is zero. E.g. Farming family of 4 persons produces 200 kgs of wheat, but even if you remove 3 persons still production remains at 200 kgs. |
| <b>Seasonal (मौसमी बेरोजगारी)</b>                             | Labourers in Agriculture, Salt-pans, Sugar Mills, Ice-factory, Tourist spots, Marriage Catering-Orchestra etc. ,   |
| <b>Underemployment (अल्परोज़गार) or Educated unemployment</b> | person is employed but not in a befitting position or salary corresponding to his qualification. e.g. M.Com working as Swiggy delivery boy, M. Tech working as Bank clerk and Dentist working as Dy. Section Officer.  |
| <b>Technological (प्रौद्योगिकी)</b>                           | Technological unemployment occurs when men are replaced with machines e.g. textile / automobile.   |
| <b>Open / Structural (संरचनात्मक बेरोजगारी)</b>               | Lack of jobs when person's skill/qualification is insufficient for the jobs available in the market e.g. An IT Graduate knows C++ but demand is for Python/JAVA computer language experts.   |

### 47.2 UNEMPLOYMENT → NSSO MEASUREMENT

- Unemployment Rate: = Total no. of unemployed / total labour force (of all people in the working age.)
- NSSO measures unemployment in 3 different approaches viz.

|                              |  |
|------------------------------|--|
| <b>-----<br/>(UPS)</b>       | <ul style="list-style-type: none"> <li>- Unemployed for majority of the year.</li> <li>- In official reports, this figure is given more prominence.</li> </ul> |
| <b>Current Weekly Status</b> | If not employed even 1 hr work in a week   |
| <b>Current Daily Status</b>  | If not employed even 1 hr work in a day.   |

**Controversy?** NSSO's periodic labour force survey (PLFS) says it's 6.1% (UPS: 2017) which is highest in last 45 years. The unemployment rate is higher in urban areas than rural areas



of the country. Although Govt maintains “it’s not finalised. It is a draft report, and look at this loan data from MUDRA Yojana, if so many loans taken so it means jobs are created etc etc etc”.

**Asked-GSM3-2015:** The nature of economic growth in India is described as jobless growth. Do you agree with this view? Give arguments in favour of your answer.

#### 47.3 UNEMPLOYMENT → EMPLOYED IN UNORGANIZED SECTOR

- An unorganized sector firm is not registered under any law like Shop Establishment Act, Factory Act, Companies Act, Statutory Corporation, Govt organization etc.
- Unorganized sector consists of individuals / self employed workers engaged in non-trade-unionized casual / seasonal work with irregular payments & lack of social security coverage like EPFO/ESIC.
- Government has enacted Unorganized Sector Workers' Social Security Act, 2008 to provide them with life and disability cover, health and maternity benefits, old age protection etc.

#### Labour Ministry classification →

|  | Examples of Unorganized worker <List not exhaustive>  |
|--|---|
| <b>Occupation wise</b>                 | Small and marginal farmers, landless agricultural labourers, share croppers, fishermen, those engaged in animal husbandry, beedi rolling, labeling and packing, building and construction workers, leather workers, weavers, artisans, salt workers, brick kilns and stone quarries, workers in saw mills, oil mills. |
| <b>Nature of employment</b>            | Attached agricultural labourers, bonded labourers, migrant workers, contract and casual labourers.  |
| <b>Specially distressed categories</b> | Toddy tappers, Scavengers, Carriers of head loads, Drivers of animal driven vehicles, Loaders and unloaders.  |
| <b>Service categories</b>              | Midwives, Domestic workers, Fishermen and women, Barbers, Vegetable and fruit vendors, News paper vendors etc.  |
| <b>Miscellaneous</b>                   | Cobblers, Hamals, Handicraft artisans, Handloom weavers, Lady tailors, Physically handicapped self employed persons, Rickshaw pullers, Auto drivers, Sericulture workers, Carpenters, Tannery workers, Power loom workers and Urban poor.   |

- **Unorganised worker** = Person working in above sectors. There are more number of workers in unorganized sector, than in the organized sector.
- **Informal worker** = Person who is not in the formal records / contract of a firm. So he could be in unorganized sector and he could be even in ‘organized sector’ e.g. driver / Security Guard / Chowkidaar / gardener in Reliance Ltd.

**MCQ. Which of the following statements about India's unorganised sector are true? [UPSC-CDS-2014-I]**

1. Labour is more in number than that in the organised sector.
2. Job security and work regulation are better in unorganised sector.
3. They are usually not organised into trade unions.
4. Workers are usually employed for a limited number of days.

Answer Codes: (a) 1, 2 and 4 (b) 1, 3 and 4 (c) 3 and 4 (d) 1 and 3



## 48 PILLAR#4: INDICATORS → GDP

- Gross Domestic Product (सकल घरेलू उत्पाद) is the \_\_\_\_\_ during a specified time period, usually one year.
- Here, domestic territory means political frontiers of the country including its territorial waters, ships, aircrafts, fishing vessels operated by the normal residents of the country; AND its embassies and consulates located abroad. (as per NIOS)

### 48.1 GDP CALCULATION METHOD#1 → VIA EXPENDITURE (व्यय द्वारा)

If anything is produced then someone must have paid money for that. So, accordingly we can derive GDP = \_\_\_\_\_

| GDP Expenditure Method   | Examples  |
|--|---|
| (C) Consumption of final goods and services<br>उपभोग हेतु अंतिम उत्पाद | <ul style="list-style-type: none"> <li>- Purchasing new car, mobiles, computer etc. Both Indiamade &amp; (Imported) foreignmade are counted.</li> <li>- If existing house, its 'notional rent' is counted (i.e. even if you didnot rent the property.)</li> </ul> <p>IGNORE purchase of second hand goods, because we are only measuring 'new' things "MADE in India" in present year.<br/>IGNORE of new house is not counted here, it's counted in (I)</p>   |
| (I) Investments<br>निवेश   | <ul style="list-style-type: none"> <li>- Purchase of tangible capital assets like New House, land, building, factory, truck, machinery.</li> <li>- Purchase of intangible capital assets like IPR / patents, computer software etc.</li> <li>- Purchase of raw material / intermediate goods for production.</li> </ul> <p>IGNORE savings in bank, shares and bonds etc. (because it'd have been given to entrepreneur as 'Capital' to buy above things).</p> |
| (G) Government Purchases<br>सरकार द्वारा की जाने वाली खरीद             | <ul style="list-style-type: none"> <li>- Salaries to employees, Procurement of computer, stationery, fans, tubelines, vehicles etc.</li> </ul> <p>IGNORE Government's scholarship, subsidy etc. 'transfer payments'. They're counted in "C" (Private) consumption by the respective beneficiaries.</p>  |
| (X-M) Export MINUS Imports<br>निर्यात -आयात                            | <ul style="list-style-type: none"> <li>- Export is added because it means a foreigner must have bought goods/services "MADE in India" so it's part of India's GDP.</li> <li>- Whereas, Import is subtracted because some Indians must have Consumed (C) foreign products that were not "MADE in India", So if you do not subtract the 'Import(M)', it will give wrong estimation of India's GDP.</li> </ul>   |
| Total = GDP  | The GDP thus arrived is called GDP at Current Market Price (सकल घरेलू उत्पाद वर्तमान मूल्य पर).   |



|  |  |
|--|--|
|  | When we adjust it with inflation against base year 2011 → GDP at Constant Market Price (स्थिर मूल्य पर). |
|--|--|

## 48.2 GDP CALCULATION METHOD → VIA EXPENDITURE (CSO REAL LIFE)

| Textbook formula                            | CSO's Real life formula  |
|---|--|
| (C) Consumption of final goods and services | (+) _____ (PFCE)   |
| (I) Investments                             | (+) Gross Fixed Capital Formation (GFCF)+ Change in Stocks (CIS) |
| (G) Govt Purchases                          | (+) Government Final Consumption Expenditure (GFCE)              |
| (X-M) Export MINUS Imports                  | (+) Net Export of Goods & Services.                              |
|   | (+) Discrepancies (विसंगतियां)                                   |
| Total =                                     | Total = GDP @Current Market Price                                |

## 48.3 GDP CALCULATION METHOD → VIA PRODUCTION/GVA (उत्पादन द्वारा)

Production method is also known as \_\_\_\_\_ method (GVA: सकल वर्धित मूल्य)

| Amt in ₹  | Mining Company →                     | Engine Company →         | Tractor Company →         | Total  |
|---|--------------------------------------|--------------------------|---------------------------|--|
| <b>A) Total Production →</b>                        | Steel: 1 lakh                        | Engine: 5 lakh           | Tractor: 10 lakh          | 1+5+10=16 lakh<br>Value of Final Goods produced by firms |
| <b>B) Intermediate Goods →</b><br>मध्यवर्ती वस्तुएँ | 00 (suppose ore dug from free land!) | 1 lakh (Steel purchased) | 5 lakh (Engine purchased) | 0+1+5= 6 lakh Value of Intermediate Goods used by firms  |
| <b>Value Added (A-B)=</b>                           | 1 lakh →                             | 4 lakh →                 | 5 lakh →                  | GVA =16-6<br>= 1+4+5 =10                                 |

- Here, GVA = Value of final MINUS intermediate = (16-6) = 10 lakh. Alternatively, GVA = Value added at each stage = 1 + 4 + 5 = 10 lakh.
- The amount thus derived is called GVA (at basic price: मूल कीमत पर).

### 48.3.1 From GVA to GDP

|   |                  |
|---|------------------|
| GVA at Basic price: (Suppose a country only produce LPG cylinders)                            | <b>₹ 600</b>     |
| Indirect Taxes: CGST + SGST (Earlier, Excise + VAT)   | <b>(+) ₹ 100</b> |
| But Petro ministry is also giving subsidy on the purchase of LPG cylinders under PAHAL scheme | <b>(-) ₹ 200</b> |
| GDP at Current Market Price (वर्तमान बाजार कीमत)<br>= GVA (+) Indirect taxes (-) Subsidies    | <b>₹ 500</b>     |

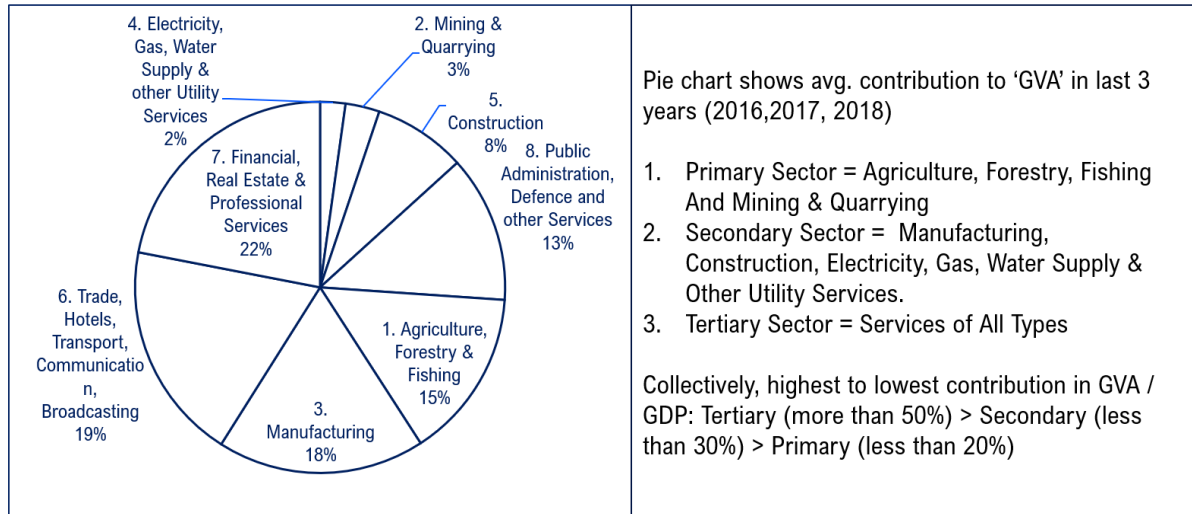
When we adjust Current Prices (वर्तमान) with inflation against base year 2011, we get GVA / GDP Constant Prices (स्थिर मूल्य).

Here are actual sector specific GVA, Arranged from Lowest to Highest →

| GVA in crores<br>Figures adjusted @constant Basic Price    | 2016-17 | 2017-18 | 2018-19 (est) | Growth in 2017 vs 16 | Growth in 2018 vs 17 |
|--|---------|---------|---------------|----------------------|----------------------|
| 4. Electricity, Gas, Water Supply & other Utility Services | 246,491 | 267,720 | 289,193       | 8.6                  | 8                    |
| 2. Mining & Quarrying                                      | 348,089 | 365,677 | 370,237       | 5.1                  | 1.2                  |
| 5. Construction  | 917,754 | 969,194 | 1,055,917     | 5.6                  | 8.9                  |



|  |           |           |           |          |            |
|--|-----------|-----------|-----------|----------|------------|
| 8. Public Administration, Defence and other Services     | 1,394,269 | 1,560,252 | 1,692,866 | 11.9     | 8.5        |
| 1. Agriculture, Forestry & Fishing                       | 1,717,467 | 1,803,039 | 1,852,580 | <b>5</b> | <b>2.7</b> |
| 3. Manufacturing   | 2,055,043 | 2,176,923 | 2,353,618 | 5.9      | 8.1        |
| 6. Trade, Hotels, Transport, Communication, Broadcasting | 2,145,415 | 2,312,214 | 2,469,571 | 7.8      | 6.8        |
| 7. Financial, Real Estate & Professional Services        | 2,494,444 | 2,649,146 | 2,841,805 | 6.2      | 7.3        |



The sum of above things will be GVA at Basic Prices (मूल कीमत पर) → Add indirect taxes minus subsidies = GDP at Market Price (बाजार कीमत).

- While GVA gives a picture of economy from the producers' side or supply side, the GDP model gives the picture from the consumers' / demand side perspective. (Because it considers Indirect taxes and subsidies).
- Therefore, from 2018-April, RBI decided to use GDP instead of GVA to measure the economic activities for its policy making / big data analytics.

#### 48.4 GDP CALCULATION METHOD → VIA INCOME (WIPR)

This method follows the simple idea that whatever is "MADE in India", its revenues must have been distributed among the factors of production. So,

- GDP = Wages to labourers (W) + Interest on Capital to Lenders (I) + Profits to Entrepreneur / Owners of the firm (P) + Rent on land (R).
- The GDP thus arrived is called GDP at Current Factor Cost (वर्तमान कारक लागत पर).

#### 48.5 GDP CALCULATION METHOD → VIA INCOME (CSO REAL LIFE)

|                                  |  |
|----------------------------------|--|
| Theoretical                      | CSO' real life income formula  |
| Wages                            | <b>Compensation</b> (i.e. Employees salary + Employer's contribution to his Social Security Account e.g. EPFO / ESIC).   |
| (+) Income                       | <b>(+) Operating Surplus, Mixed Income.</b> (Because in a family run farm / enterprise it is difficult to separate income and profit, unlike a corporate balancesheet) |
| (+) Profit                       |  |
| (+) Rent                         | <b>(+) Consumption of fixed assets during production</b>   |
| <b>Total= "GDP @Factor Cost"</b> | Here total is called <b>"GVA @Factor Cost"</b>   |

In CSO' (real life) income formula the answer arrived is called 'GVA'. Further,



|  |   |
|--|---|
| Further →  | <b>GVA at Factor Cost</b>   |
| add production level taxes i.e. taxes “independent of volume”              | (+) Professional Tax, Stamp Duty, Land Revenue  |
| Subtract production level subsidies i.e. subsidies “independent of volume” | (-) Farmer interest subvention because it is given irrespective of whether he produces 100kg or 1000 kg; similarly, Govt paying EPFO contribution on behalf of industrialist etc. |
| Answer=  | <b>GVA at Basic Prices</b>  |
| add Product Taxes i.e. taxes “dependent of volume / value of product”      | (+) Excise / VAT / GST / Custom Duty- Because their absolute figures will vary as per the quantum of production   |
| Subtract Product Level subsidies i.e. subsidies “dependent of volume”      | (-) LPG Pahal subsidy that depends on number of cylinders purchased, MSP that depends on amount of grains procured etc.   |
| Answer=  | GDP at Current Market Price (MP). When we adjust it with inflation against base year 2011 → GDP at Constant Market Price.   |

#### 48.6 GDP → GROWTH RATE & DEFLATOR (वृद्धि दर, अपस्फीतिकारक)

- Growth Rate (%) = {GDP (Present year - Last Year) / Last Year} x 100
- But, quantitatively the production may not have improved (From 1 kg onions to 2 kg onions), and only because of inflation in the prices (₹ 10/kg onion to ₹ 100/kg) the growth rate may appear high.
- Therefore (to remove the inflation impact on growth rate), we must select a base year, and convert the current prices to constant prices.
- The ratio of these GDPs is called ‘GDP deflator’, it presents a picture of inflation like CPI and WPI but, unlike CPI & WPI it’s not based on a fixed basket of commodities.
- 

$$GDP\ Deflator = \frac{\text{Nominal GDP at Current Prices (2018)}}{\text{Real GDP at Constant Prices (BaseYear 2011)}} \times 100$$

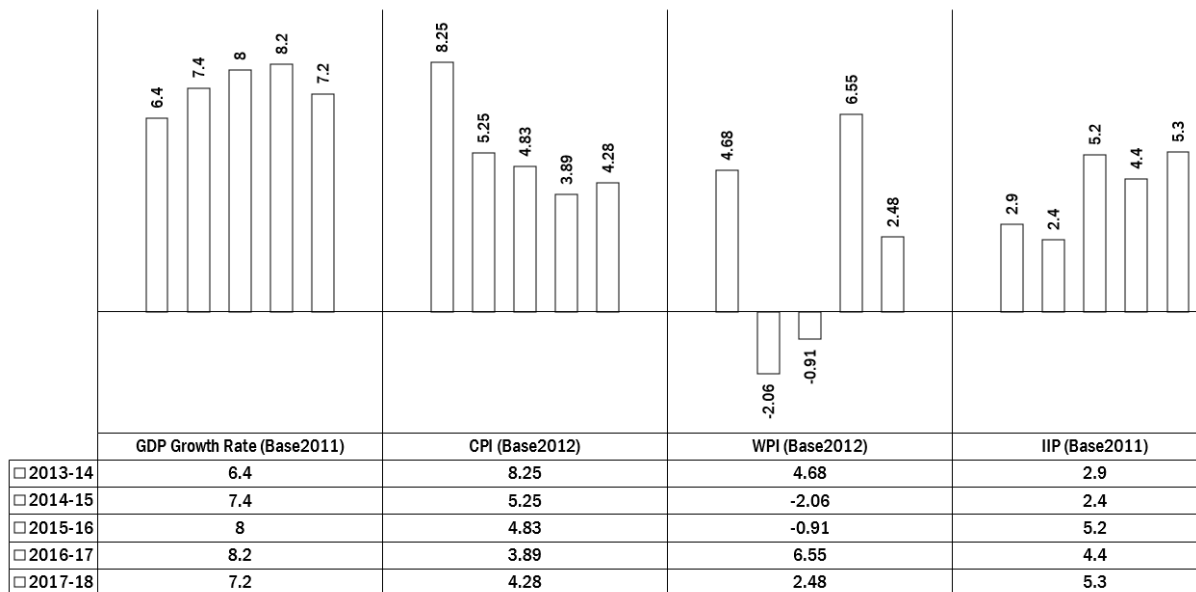
| CSO Release in 2019-Feb → ₹ crores                                     | 2016       | 2017                   | 2018 (est)              |
|--|------------|------------------------|-------------------------|
| A) Nominal GDP @Current Basic Prices in crores [Production GVA Method] | 15,362,386 | 17,095,005             | 19,053,967              |
| Nominal Growth Rate @Current Prices (against Previous Year)            | ***        | 11.3% growth than 2016 | 11.5 % growth than 2017 |
| B) Real GDP @Constant Prices (BaseYear2011)                            | 12,298,327 | 13,179,857             | 14,100,119              |
| Real Growth Rate @Constant Prices (against Previous Year)              | ***        | 7.2% growth than 2016  | 7.0% growth than 2017   |
| GDP Deflator = {A÷B} x 100   | 124        | 129                    | 135                     |

These figures are revised as the new data arrives.

- E.g. 2019-Jan: CSO says 7.2% growth forecasted for 2018-19 (ending at 31/3/2019), then in 2019-Feb revises it downwards to 7.0%. CSO will also prepare quarterly growth rates (compared to previous quarters) and then engage in upwards / downwards revision.



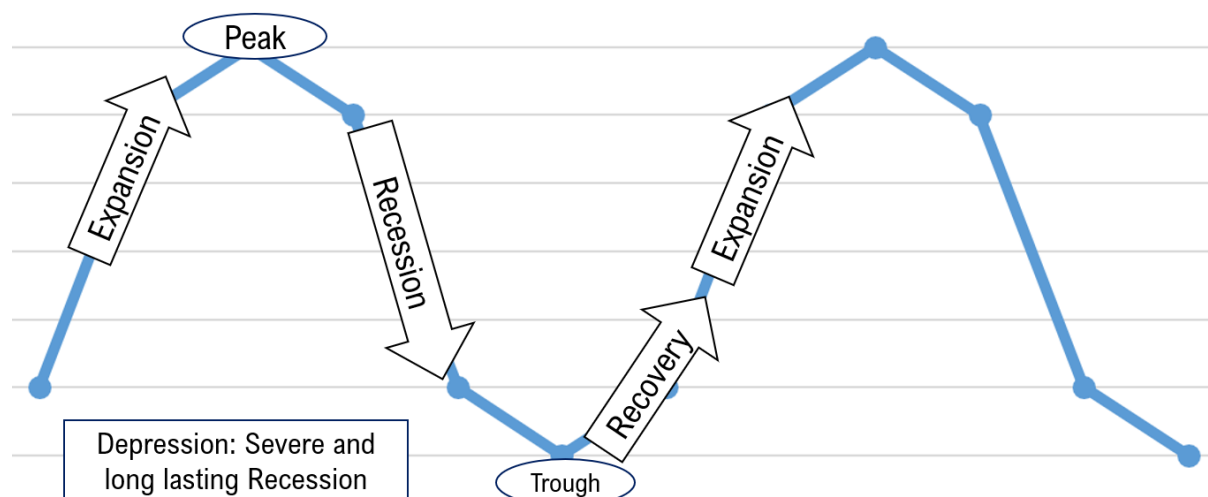
- Similarly, RBI, IMF, Rating Agencies will forecast & then revise it upwards and downwards. But that ball by ball commentary NOTIMP.



**MCQ. The 8% growth rate registered by Indian economy during the year 2015-16 is based on [UPSC-CDS-2017-I]**

- Gross National Product at market prices.
- Gross Value Added at constant prices.
- Gross Domestic Product at market prices.
- Gross Domestic Product at constant prices.

## 48.7 GDP → GROWTH RATE → ECONOMIC CYCLE



1. **Expansion**, Prosperity, Boom, Upswing of economy (तेजी का दौर).
2. **Recession** Phase (मंदी): from peak prosperity to moving downwards. Usually evident from continuous negative growth rate for two successive quarters (=6 months). E.g. USA 2007-09 in the aftermath of Subprime crisis .
3. **Depression** Phase (घोर मंदी): Severe and long lasting Recession e.g. USA 1929-39 in the aftermath of stock market crash. It resulted in great fall in GDP, income, employment, industrial production, and wholesale-retail sales.



4. **Recovery Phase** (समुत्थान): from recession / depression towards prosperity.

## 48.8 GDP → GROWTH RATE → HOW TO IMPROVE?

|                             |   |
|-----------------------------|---|
| <b>Savings</b>              | It's the Income excess of Consumption. Subdivided into Private Savings [by households & business firm] and Public Savings by Govt organizations.  |
| <b>Investment</b>           | It's the domestic Savings + NET foreign money WHICH IS put in Real (physical) Assets like machines, tools, buildings, office spaces, storehouses, roads, bridges, airports  |
| <b>GFCF</b>                 | Gross Fixed Capital Formation Rate (सकल निश्चित पूंजी निर्माण दर)<br>= INVESTMENT – DISPOSAL of assets (liquidation, condemnation).<br>Thus, GFCF shows the net increase in physical assets. It IGNORES depreciation, and land purchases. |
| <b>Capital Output Ratio</b> | It is the amount of capital needed to produce one unit of output. It depends on factors such as technological progress, prices of capital goods / machinery. In India, High Capital Ratio is among the reasons for subdued growth rates.  |

### Economic Survey 2018 observed that

- Pre-Subprime crisis, above indicators had peaked over 30% of GDP. But then falling down, then struggling zig-zag.
- Pre-subprime crisis our growth rate was in the peak 9%, presently it's struggling in ~7% range.
- Some countries take as much as 17 years to come out of such crisis.

If we want to quickly recover, & bring our growth rate back to 9% then we must increase investment → GFCF will increase → then growth rate will automatically increase → savings will automatically increase. Therefore,

|  |  |
|--|--|
| <b>Increasing Investment / GFCF: should be our urgent priority</b>   | <b>Increasing / mobilizing savings is important but should not be our urgent priority</b>  |
| Resolve TBS, encourage Make in India & Startup India, Reforms in Tax Laws, Labour Laws, Environment Clearance, FDI approval etc. | PMJDY, Pension-Insurance schemes, Sovereign Gold Bonds, Unearthing black money, Demonetization etc. They're important but not "URGENT" |

### MCQ. Economic growth in country X will occur if: (Asked in UPSC-Pre-2013)

- there is technical progress in the world economy.
- there is population growth in X.
- there is capital formation in X.
- the volume of trade grows in the world economy.

### MCQ. Despite being a high saving economy, capital formation may not result in significant increase in output due to (Asked in UPSC-Pre-2018)

- weak administrative machinery
- illiteracy
- high population density
- high capital-output ratio

**2018: NITI's Strategy for New India @ 75** accepted this & has set following targets



| Target for 2022-23   | Challenges?   |
|--|---|
| Increase the Gross Fixed Capital Formation (GFCF) from present 29% → 36% of GDP by 2022-23           | <p><b>To increase Public Sector / Government led-investment:</b></p> <ul style="list-style-type: none"> <li>- Must improve Tax:GDP by combating tax evasion and avoidance.</li> <li>- Must decrease Revenue deficit by combating Subsidy leakage through JAM-trinity.</li> <li>- Government has to exit from loss making public sector enterprises</li> <li>- PPP for Infrastructure.</li> </ul> <p><b>To mobilize private households' investment</b></p> <ul style="list-style-type: none"> <li>- Greater coverage in Sovereign Gold Bond, Jan Dhan Account, Pension-Insurance schemes etc. ; Preventing Ponzy &amp; Chit Fund scams...</li> </ul> <p><b>To mobilize domestic &amp; foreign companies' investment</b></p> <ul style="list-style-type: none"> <li>- Addressing the NPA crisis, reforms in the FDI policy, Ease of Doing Biz etc.</li> </ul> |
| Increase India's growth rate to 9-10%.<br>Increase size of Indian economy (=GDP) to __ trillion USD. | <p>For this we must increase our 'NET Exports' so,</p> <ul style="list-style-type: none"> <li>- Address various bottlenecks styming our agriculture and manufacturing sector.</li> <li>- Ease the complex labour and land laws.</li> <li>- Readiness for the industrial revolution 4.0, artificial intelligence, IoT etc.</li> <li>- Skilling of Indian youth, increasing female participation in labour force.</li> <li>- Renewable energy to decrease import bill.</li> <li>- Trade agreements with like-minded countries &amp; regional blocks</li> </ul>  |

**Conclusion?** Higher economic growth can help increasing employment avenues for citizens & tax revenues for the Governments. Collectively, this results in improved living standards through higher expenditure on health & education by both the citizens and the State. Therefore, we must leave no stone unturned to accomplish above targets / address above challenges on priority basis.

#### 48.8.1 GDP Misc Topics → Backseries Controversy?

- During PM Manmohan-raj GDP base year was **2004-05**.
- 2015: PM Modi changed GDP base year to 2011-12. Then, Manmohan-raj GDP figures have to updated / re-adjusted as per the new base year.
- The (new) GDP-data thus re-produced for 2005-2011 is called "Backseries" data.
- 2018 - August: MoSPI → National Statistical Commission → Committee on Real Sector Statistics under the Chairmanship of Dr. Sudipto Mundle → He discussed various approaches to prepare such Backseries.
- 2018- November: NITI released backseries data, showing UPA/Congress Raj GDP growth was pathetic.
- Critiques alleging "*Methodology is wrong, and MoSPI/CSO should have released the report. NITI Ayog should not have released it on their behalf. So, it's all Modi's manipulated data just to show his growth figures are higher.*"



| Growth rate           | Base year 2004 | Base year 2011            |
|-----------------------|----------------|---------------------------|
| UPA-1 era (2004-09)   | 8.1%           | ~ 6.7% (using Backseries) |
| UPA-2 era (2009-14)   | 7.0%           | ~ 6.7% (using Backseries) |
| Modi-era (2014-2018*) | N/A            | ~ 7.4%                    |

#### 48.8.2 GDP Misc Topics → Discrepancy?

- Theoretically, the GDP calculated by production method should equal to GDP by expenditure method.
- However, in real life GDP (production) will not equal GDP (expenditure); because factory production data is systematically captured by Government machinery such as Corporate Affairs ministry's MCA-21 portal, CSO's Annual Survey of Industries (ASI) etc. But, all of the final private consumption may not be captured in the official statistics due to unreported transactions (e.g. due to black money etc.)
- As a result, mismatch / 'discrepancy' will be observed in GDP (expenditure) figures, and mentioned in the official CSO report.
- Therefore, GDP (Production Method GVA) is considered more accurate method among the three methods (Production, Expenditure, Income).
- So, while CSO computes data using all 3 methods, but **official GDP & growth figures are presented based on the 'Production GVA' method.**

#### 48.8.3 GDP Misc Topics → Changing base years to 2017 & 18

2018-Feb: MoSPI declared that it'll 'initiate' steps to change base years:

| Indicator | Present Base year | Proposed New Base Year from 2019 |
|-----------|-------------------|----------------------------------|
| GDP & IIP | _____             | 2017-18                          |
| CPI       | _____             | 2018-19                          |

This is proposed to 'accommodate' the changes take place in the economic scenario of the country (e.g. GST, Demonetization, RERA).

#### 48.8.4 GDP Misc Topics → (Proposed) City-level GDP

- 2018: Ministry of Housing and Urban Affairs (MoHUA) asked the the Economist Magazine's Economist Intelligence Unit (EIU) to prepare feasibility of calculating City level GDP for Indian cities.
- This can help the municipal administrators to know the economic potential of their area, and decide municipal property tax rates & user fees; development projects for water / sanitation / transport / infrastructure accordingly.

### 48.9 GDP → GNP TO NNP TO PER CAPITA INCOME

First, we've to derive Gross National "Product" (GNP: सकल राष्ट्रीय उत्पाद) i.e.

- India's GDP
- PLUS (wages, interest, profit, rent) earned by residents from overseas.
- MINUS (wages, interest, profit, rent) earned by non-residents from India.

IGNORE transfer incomes such as remittances gifts, donations, charities, fines.

IGNORE the incomes from second hand goods.

$$\text{GNP (Market Prices)} = \text{GDP} + \text{"NET" factor income from abroad.}$$



Whenever something is produced, capital assets get consumed due to wear and tear. This wear and tear is called Depreciation (मूल्यहास). Since, depreciation does not become part of anybody's income, so it has to be subtracted.

**Net National Product (NNP@Market Price) = GNP MINUS Depreciation.**

However, here we are getting the NNP at 'Market Prices'. We've to convert it to Factor cost.

**NNP (Factor Cost) = NNP (Market Price) \_\_\_\_\_ .**

**NNP (Factor Cost) is the National Income of India, says NCERT Class12.**

**Per Capita Income = NNP ÷ population of India**

| Per Capita Income (प्रति व्यक्ति आय) | 2016     | 2017     | 2018 (Est) |
|--------------------------------------|----------|----------|------------|
| Population in Crores                 | 129      | 131      | 133        |
| At ₹ Current Prices                  | 1,04,659 | 1,14,958 | 1,26,699   |
| At ₹ Constant Prices (@BaseYear2011) | 82,931   | 87,623   | 92,718     |

**MCQ. National product at factor cost is equal to [UPSC-CDS-2014-II]**

- Domestic product + Net factor income from abroad.
- National product at market prices - indirect taxes + subsidies.
- Gross domestic-product - depreciation.
- National product at market prices + Indirect taxes + subsidies.

#### **48.9.1 GDP → National Income → Misc. concepts**

|  |  |
|--|--|
| <b>Gross national income (GNI)</b>                         | OECD defines it as GDP + NET receipts from abroad (wages, interest, profit, rent) plus net taxes & subsidies receivable from abroad. Here, 'Wages and salaries' from abroad = 'Guest' workers who reside abroad for less than 12 months and whose centre of economic interest remains in their home country. The technical difference between GNP and GNI=notIMP |
| <b>National disposable income</b><br>राष्ट्रीय प्रयोज्य आय | = NNP + Other Current Transfers from rest of the world (remittances, gift, donations etc.)<br><br>National Disposable Income gives an idea of what is the maximum amount of goods and services the domestic economy has at its disposal.   |
| <b>Personal income (PI)</b>                                | Very contrived formula, not important.   |
| <b>Personal Disposable Income</b>                          | Personal Income MINUS Personal Tax Payments (e.g. income tax) MINUS Non-tax Payments (e.g. fines)  |

You can satiate further scholastic curiosity by studying (new) NCERT macroeconomics class 12 page 24 onwards but poor cost : benefit.

#### **48.10 GDP & PER CAPITA INCOME → CRITICISM / LIMITATIONS**

- Provides only quantitative picture and does not consider the qualitative aspects / negative externalities (नकारात्मक बाह्यताएँ) e.g. More coal based thermal power production= more GDP, disregarding how much pollution it created.
- Ignores non-marketed activities e.g. domestic work done by mother.



3. Ignores the Opportunity Cost (अवसर लागत) e.g. A child labour produced ₹ 50000 rupees worth firecracker annually = added in GDP. But, child labourer could not pursue education ELSE he **could have** become a doctor/engineer and produced ₹ 5,00,000 rupees worth of annual goods and services - such angles are not considered in computing GDP.
4. Ignores inequality of income among people. (आय की असमानता)

#### 48.10.1 GDP → is everyone benefitting?

| Economic -----<br>आर्थिक वृद्धि  | Economic -----<br>आर्थिक विकास   |
|--|--|
| It measures the increase in the production of goods and services in a country.                                     | It measures whether economic growth has resulted in improving the quality of life & the socioeconomic structure of the country?  |
| Quantitative measurement: gross Domestic Product (GDP), Consumption, Government Spending, Investment, Net Exports. | Qualitative measurements such as UNDP's HDI (Human Development Index), life expectancy, gender- related indices, infant mortality, literacy rate etc.                                      |
| GDP divided by total population = per capita income.   | It'll focus on 'Inequality of income distribution' e.g. obtained through World Bank Gini coefficient or Oxfam NGO's Inequality report.   |
|  | Related: Sustainable Development (सतत विकास) is development that meets the needs of the present generation without compromising the ability of future generations to meet their own needs. |

In pillar#4 our focus is economic growth (GDP), whereas in pillar#6 we will be focusing on Economic Development (Human aspect).

#### MCQ. Increase in absolute and per capita real GNP do not connote a higher level of economic development, if(Asked in UPSC-Pre-2018)

- (a) industrial output fails to keep pace with agricultural output.
- (b) agricultural output fails to keep pace with industrial output.
- (c) poverty and unemployment increase.
- (d) imports grow faster than exports.

#### 48.10.2 Mains Questions in past UPSC-GSM3

|  |      |
|--|------|
| Among several factors for India's potential growth, savings rate is the most effective one. Do you agree? What are the other factors available for growth potential?   | 2017 |
| The nature of economic growth in India is described as jobless growth. Do you agree with this view? Give arguments in favour of your answer.   | 2015 |
| Capitalism has guided the world economy to unprecedented prosperity. However, it often encourages shortsightedness and contributes to wide disparities between the rich and the poor. In this light, would it be correct to believe and adopt capitalism driving inclusive growth in India? Discuss. | 2014 |





## 49 PILLAR#4: INDICATORS → INFLATION

- Inflation (मुद्रास्फीति) is the -----
- Deflation (मुद्रा अवस्फीति) is inverse of above definition. Deflation occurs when the inflation rate falls below 0%

### 49.1 INFLATIONARY AND DEFLATIONARY GAPS

- In his book “General Theory on employment, interest, money”, British Economist J.M.Keynes (1883) said, “when economy is functioning at full employment, aggregate supply will match aggregate demand.” At this equilibrium, we'll have ‘General Price’ level → any increase → inflation, decrease → deflation.

Aggregate Demand

= Consumption(C) + Investments(I) + Govt Purchases (G) + {Exports (X) — Imports (M)}

| Inflationary Gap (मुद्रास्फीतिकारी अंतर )   | Deflationary Gap (अवस्फीतिकारी अंतर )  |
|---|--|
| It could have occurred because of <ul style="list-style-type: none"> <li>- ↑ Money supply</li> <li>- ↑ Propensity to consume,</li> <li>- ↑ Investment expenditure</li> <li>- ↑ Fiscal deficit</li> <li>- ↑ NET exports</li> <li>- High growth → higher Aggregate demand → could lead to inflation.</li> </ul>                     | It could have occurred because of <ol style="list-style-type: none"> <li>1. ↓ Money supply</li> <li>2. ↑ Propensity to SAVE / Consumer delaying purchase with hopes of further fall in prices.</li> <li>3. ↓ Investment expenditure</li> <li>4. ↑ Fiscal consolidation</li> <li>5. ↓ NET exports</li> <li>6. Depression / Recession that results into falling ‘Aggregate demand’.</li> </ol> |
| <p style="text-align: center;"><b><u>Inflationary Spiral</u></b><br/> <b><u>(मुद्रास्फीति में उत्तरोत्तर वृद्धि)</u></b></p> <p>When inflation increases, workers demand higher wages to keep up with the cost of living → firms pass these higher labor costs on to their customers → higher prices → more inflation → .....</p> | <p style="text-align: center;"><b><u>Deflationary Spiral</u></b></p> <p>Fall in prices → lower profit to firm → lower production, lower wages / workers laid off → lower demand → lower prices → ...</p>   |

**MCQ. A rise in general level of prices may be caused by (Asked in UPSC-Pre-2013)**

1. An increase in the money supply.
2. A decrease in the aggregate level of output.
3. An increase in the effective demand.

Answer Codes: (a) 1 only      (b) 1 and 2 only      (c) 2 and 3 only      (d) 1, 2 and 3

**MCQ. Economic growth is usually coupled with? (Asked in UPSC-Pre-2011)**

- (a) Deflation      (b) Inflation      (c) Stagflation      (d) Hyperinflation

**MCQ. Which is an appropriate description of deflation? [UPSC-CDS-2012-II]**

- (a) it is a sudden fall in the value of a currency against other currencies.  
 (b) It is a persistent recession in the economy.



(c) It is a persistent fall in the general price level of goods and services.

(d) It is fall in the rate of inflation over a period of time.

## 49.2 INFLATION: TYPES BASED ON CAUSATION (कारणता के अनुसार)

|  |   |
|--|---|
| -----<br><b>Inflation</b><br>(मांगजनित)                  | It's 'too much money chasing too few goods' i.e. Prices are rising because people have excess money → demand for goods and services exceeds the available supply. MNREGA, Pay Commission, PM KISAN6k/Rahul's NYAY72k/Universal Basic Income(UBI) etc. could lead to this.   |
| <b>Monetary inflation</b>                                | When RBI printing of more money results in inflation ( <i>Recall 'Monetising the deficit' from Pillar#2: FRBM Handout</i> ).  |
| -----<br><b>Inflation</b><br>(लागतजनित)                  | Price rise due to increased cost of inputs e.g.<br><ul style="list-style-type: none"> <li>- Expensive crude oil → higher costs for Transport Companies.</li> <li>- Trade / labour unions' protests / strikes → wage hike.</li> <li>- Natural disasters → Lower potato / chilly production → Chips makers have to pay more for inputs.</li> </ul>  |
| <b>Profit – Push Inflation</b>                           | When Cartels / Monopolists / Oligopolists deliberately cut down the supply / production or hike the prices because of greed / profit motive.  |
| <b>Built-in-Inflation</b>                                | Linked to the “price/wage inflationary spiral” i.e. when inflation rises, workers demand higher wages to keep up with the cost of living → firms passing these higher labor costs on to their customers as higher prices → more inflation.  |
| <b>Repressed Inflation</b><br>(दमित स्फीति)              | During war, Government imposes price controls and rationing to keep prices under check. But the moment such controls are withdrawn, prices will go up (because traders will want to cover up their previous losses by raising prices). This is called <i>Repressed Inflation</i> .  |
| -----  | Persistent high inflation, high unemployment and low growth resulting into a stagnant economy.  |
| <b>Skewflation</b>                                       | Term to denote episodic price rise in one / small group of commodities while Inflation in the remaining goods and services remain usual. E.g. pulse / tomato / onion inflation in india.  |
| <b>Headline Inflation</b><br>(सुखि)                      | It is the measure of the total inflation within an economy, usually presented in the form of CPI or WPI.  |
| <b>Core inflation</b><br>(प्रमुख मुद्रास्फीति)           | Headline inflation MINUS inflation in ----- articles.   |
| <b>Reflation</b><br>(पुनः मुद्रास्फीति)                  | In Pillar#1: Philip curve we learned that deflation → unemployment, so, RBI tries to stimulate economy by increasing the money supply, Govt tries to give 'fiscal stimulus' by reducing taxes / increasing public procurement.... Such actions take economy from deflationary path towards inflation path, this is process is 'Reflation'.  |
| <b>Structural Inflation</b><br>(संरचनात्मक मुद्रास्फीति) | Inflation that is part of a particular economic system. A complete change in economic policy would be needed to get rid of it. e.g.<br><ul style="list-style-type: none"> <li>- To keep farmers happy, Govt keeps raising MSP for wheat / rice but not so much for pulses → inflation in pulses.</li> <li>- APMC reforms not taken → cartelization &amp; hoarding → inflation in vegetables.</li> <li>- When global crude prices are falling, Govt raises Excise / VAT</li> </ul> |



|  |  |
|--|--|
|  | to get more money for their schemes, so, petrol-diesel not getting cheaper & so on.... |
|--|--|

### 49.3 INFLATION TYPES BASED ON SPEED / QUANTUM

1. **Creeping Inflation:** ~4% per annum. It's regarded safe and essential for job creation and economic growth.
2. **Walking / Trotting Inflation:** >4% onwards → **Running Inflation:** When it shifts to double digit.
3. **Gallop / Hyperinflation (अति स्फीति):** Very high level. 20%-100%-even 10,000% or more, as observed in Germany after Treaty of Versailles due to monetized deficit. Modern day Venezuela and Zimbabwe due to misgovernance of ruling parties resulting into broken economy & shortage of essential commodities. Here, money becomes quite worthless and new currency may have to be introduced.

**MCQ. Which one of the following is likely to be the most inflationary in its effect?**

*(Asked in UPSC-Pre-2013)*

- (a) Repayment of public debt
- (b) Borrowing from the public to finance a budget deficit
- (c) Borrowing from banks to finance a budget deficit
- (d) Creating new money to finance a budget deficit

#### 49.3.1 Inflation → Base Effect?

- Suppose price of 1 kg onion = 100 (2010), 110 (2011), 120 (2012). So, as such their price is increasing at the rate of ₹ 10 per year.
- However, the % rise in inflation over previous year is 10% for 2011 (110 vs 100), and 9.09% for 2012 (=120 vs 110).
- Thus, the choice of base (denomination) could make the inflation look too high or too low even if the price rise has been same as the same.

**MCQ. A rapid increase in the rate of inflation is sometimes attributed to the "base effect". What is "base effect"? (Asked in UPSC-Pre-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 year on the calculation of inflation rate
- (d) None of the statements

### 49.4 EFFECTS ON INDIVIDUALS

| Effect                              | During Inflation  | During Deflation   |
|-------------------------------------|---|--|
| <b>Businessman, Borrowers</b>       | They make huge profits because the price of final product is rising at a much faster speed than the price of raw materials.   | They make losses because prices of final products fall faster than the cost of production → lay-off workers to cut salary bill.    |
| <b>Fixed Income Groups, Lenders</b> | <ul style="list-style-type: none"> <li>- Salaried individual, pensions suffer.</li> <li>- Lenders suffer because even if borrowed money is returned their 'real Purchasing Power' would have declined due to the</li> </ul> | While they will benefit because the value (=purchasing power) of money will increase, but some workers / employees will lose their |



|                        |   |  |
|------------------------|---|--|
|                        | fall in Real Interest Rate.   | jobs during deflation as per the Philip Curve. |
| <b>Currency itself</b> | Since rupee's purchasing power will decline, its exchange rate value will weaken against foreign currencies, as foreigners get less keen to buy from India. | Reverse will happen.                           |

**MCQ. Consider the following statements: (Asked in UPSC-Pre-2013)**

1. Inflation benefits the debtors.
2. Inflation benefits the bondholders.
3. Both 1 and 2
4. Neither 1 nor 2

#### **49.5 COMBATING INFLATION OR DEFLATION**

|             | <b>Fighting inflation</b>  | <b>Fighting deflation</b>   |
|-------------|--|---|
| <b>RBI</b>  | Tight / dear / Hawkish Monetary Policy to make the loans expensive   | Cheap / Easy / Dovish - to make loans cheaper   |
| <b>Govt</b> | <ul style="list-style-type: none"> <li>- Tax deduction / exemption / subsidy benefits towards producers to decrease the cost of production.</li> <li>- Curtailing Fiscal Deficit.</li> <li>- Curtailing schemes and subsidies that are increasing money in the hands of beneficiary without increasing production.</li> <li>- Ordering RBI to issue inflation Indexed Bonds, Sovereign Gold Bonds</li> <li>- Essential commodities act, Stock limits, minimum export price, FCI's Open Market Sale Scheme, Operation Greens for TOP, Price stabilisation fund, Offering higher MSP to farmers to increase cultivation of a particular crop etc.</li> </ul> | <ul style="list-style-type: none"> <li>- Tax deduction / exemption / subsidy type benefits to consumers to encourage purchase / consumption. (e.g. cut GST on Television, Computers, Cars)</li> <li>- Increasing the expenditure on public projects e.g. highway, dam etc. to boost demand in steel / cement industry → workers get money → demand → towards inflation .</li> </ul> |

**MCQ. Which of the following measures should be taken when an economy is going through in inflationary pressures? [UPSC-CDS-2012-I]**

1. The direct taxes should be increased.
2. The interest rate should be reduced.
3. The public spending should be increased.

Answer Codes: (a) Only 1      (b) Only 2      (c) 2 and 3

(d) 1 and 2



## 50 PILLAR#4: INDICES: CPI, WPI, IIP & OTHERS

|                      |   |
|----------------------|---|
| <b>Laspeyre</b>      | German economist Etienne Laspeyres formula is used in calculation of WPI, CPI and IIP index. It is a weighted arithmetic mean (average) of a basket of commodities that tracks price / production level against the base year.<br>Formula NOTIMP. |
| <b>Paasche Index</b> | German economist Hermann Paasche's index tells us what today's "Basket" of commodities, would have cost @base year's price.   |
| <b>Fisher Index</b>  | American Economist Irving Fisher's index is the Geometric mean of (Laspeyres and Paasche), to give a more accurate picture.   |

### 50.1 INDEX → INFLATION INDICES

| Inflation Index  | By   | Base year |
|--|--|-----------|
| Consumer Price Index: 1) Rural 2) Urban 3) All India. उपभोक्ता मूल्य सूचकांक | -----  | 2012      |
| Consumer Food Price Index (CFPI)<br>उपभोक्ता खाद्य मूल्य सूचकांक             |  | 2012      |
| CPI Industrial Workers (IW)  | Labour Ministry's<br>Labour Bureau<br>Min. of Labour | 2001      |
| CPI Rural labourers (RL), Agri.l labourers (AL)                              |  | 1986      |
| Wholesale Price Index (WPI)<br>थोक मूल्य सूचकांक                             | Economic Advisor to<br>DPIIT, Commerce Min.          | 2011      |

**MCQ. Which of the following brings out the 'Consumer Price Index Number for Industrial Workers?(Asked in UPSC-Pre-2015)**

- (a) The Reserve Bank of India                      (b) The Department of Economic Affairs  
(c) The Labour Bureau                                (d) The Department of Personnel and Training

#### 50.1.1 Index → Inflation → CPI (All India), CSO, Base: 2012

| Monthly CPI Components in (All India) Index → (decreasing order)        | Wt.   |
|---|-------|
| -----   | 45.86 |
| Services: (Transport & communication > Health > Education > Recreation) | 20.62 |
| -----   | 10.07 |
| Fuel & Light  | 6.84  |
| Clothing / footwear   | 6.53  |
| Misc. Personal care (soap etc)  | 3.89  |
| Household goods & Services  | 3.80  |
| Pan Masala, Tobacco, Intoxicants  | 2.38  |
| Total Weight  | 100   |

- For Individual CPI for Urban and Rural areas, these weights are assigned differently. E.g. CPI rural has zero weight to housing & 54.18 weight to food and beverages.
- **Headline CPI (सुखि मुद्रास्फीति)** = The inflation figure arrived based on all of the above components of CPI (All India).
- **Core CPI (प्रमुख मुद्रा स्फीति)** = Headline CPI MINUS (inflation in food & energy)



- **Trend?** CPI was towards Inflationary path in UPA/Manmohan era, Deflationary path during Modi era- mainly due to falling food prices. Food commands ~46% weight in CPI calculation. (Ref: Agro Handout: Food Inflation)
- RBI Monetary policy rate cuts in 2019-Feb & 2019-April to address the deflationary trend in CPI.

#### 50.1.2 Index → Inflation → Wholesale Price Index, EA-DPIIT, Base: 2011

| Monthly WPI Components in descending order→   | Wt.         |
|---|-------------|
| <b>Manufactured products:</b> Processed Food, Edible Oil, Paper Products, Chemicals, Plastic, Cement, Metal Products, Transport Equipments etc.         | ~64%        |
| <b>Primary Articles:</b><br>A. (Unprocessed) food articles, eggs, meat-fishes, oil seeds etc. (~19%)<br>B. Crude Petroleum (~2%)<br>C. Minerals (~0.8%) | ~23%        |
| <b>Fuel &amp; Power:</b> High Speed Diesel (HSD) > _ _ _ _ _  | ~13%        |
| <b>Total</b>  | <b>100%</b> |

WPI: monthly growth is zigzag although towards deflationary path nowadays. During initial Modi raj it even went into **negative zone** for some months due to fall in global crude price (although since Union/State Govts kept raising Excise/VAT so it was not felt in real life).

#### 50.1.3 WPI calculation: reforms in 2017

- Base year changed from 2004 to 2011.
- Separately, we'll publish WPI FOOD INDEX to measure collective inflation in unprocessed and processed food.
- Introduced new items, removed the redundant items (e.g. VHS player).
- Following the international practices, we have decided to measure only 'price' of products. (Not 'Price + indirect TAX').
- Technical Review Committee (TRC) under Secretary (IAS) of DPIIT. They'll meet will meet at least once a year to update the methodology, weightage, list of items in WPI.

#### 50.1.4 Index → Inflation → Other Indices

| Index  | Features  |
|--|---|
| <b>Producer's Price Index (PPI:</b><br><b>उत्पादक मूल्य सूचकांक)</b> | <ul style="list-style-type: none"> <li>- WPI covers only goods but not services.</li> <li>- Whereas, PPI covers both goods and services. It measures price change from sellers' perspective. OECD nations use PPI to measure inflation @wholesale level. Their PPI only measures price (and not PRICE + Taxes).</li> <li>- 2014: DPIIT setup Dr. B.N.Goldar Committee to explore this for India.</li> </ul> |
| <b>Experimental Service Price Index</b>                              | EA to DPIIT preparing these experimental indices separately for Railway Services, Port Services, Air Services, Postal Services, Telecom Services, Banking Services, Insurance,  |
| <b>Banking Business Service Price by RBI.</b>                        | It measures the inflation in the fees charged by Banks for NEFT-RTGS, Mobile Banking, Card Transactions, Issuing Demand Drafts / Bank Guarantee, annual fees for opening DEMAT account etc. [Base Year 2011]  |





|   |   |
|---|---|
| <b>Inflation Expectation Survey for Households by RBI</b> | RBI quarterly survey of ~5k households across 18 cities, asking them what is their 'expected level' of inflation for the next 3 months and 1 year.  |
| <b>RESIDEX by National Housing Bank (NHB)</b>             | Measures inflation in the residential house prices in selected Indian cities. 2018 Reforms →<br>1. NHB changed base year from 2012 to 2017.<br>2. NHB introduced new indices to measure inflation in Land Price, Building Materials & Housing Rental. |

## 50.2 INDEX → PRODUCTION → \_\_\_\_\_ (IIP)

औद्योगिक उत्पादन सूचकांक is a monthly index prepared by CSO, Base Year 2011 and Laspeyres Index Formula.

IIP measures production of 407 item groups related to:

- Primary goods (प्राथमिक वस्तु):** directly obtained from natural sources e.g. Ores, Minerals, Crude Oil; And energy goods such as Petrol, Diesel, Electricity (Both **Renewable and Non-Renewable**).
- Capital goods (पूंजीगत सामान):** Plants & machinery used for further production e.g. Boilers, Air & Gas Compressors, Engines, Transformers, Commercial Vehicles etc.
- Infrastructure/ construction goods (बुनियादी ढांचागत/निर्माण वस्तु):** e.g. paints, cement, cables, bricks and tiles, rail materials, etc.
- Intermediate goods (बुनियादी ढांचागत/निर्माण वस्तु):** which goes as input in production e.g. Cotton yarn, Plywood, Steel Tubes/ Pipes, Fasteners, etc.
- Consumer durables (टिकाऊ उपभोक्ता सामान):** Products directly used by consumers and having a longer durability (2 years or more). E.g. Pressure Cooker, TV, AC, Tyres, Telephone, Mobile, Cars, Motorcycles, Scooters, Jewellery etc.
- Consumer non-durables (गैर-टिकाऊ):** Products that are directly used by consumers and can't be preserved for long periods. e.g.: Soyabean Oil, Milk Powder, Maida, Rice, Biscuits, Sugar, Tea, Cigarettes etc.

| Sector        | Weights(%) | Item groups |
|---------------|------------|-------------|
| Mining        | 14.373     | 1           |
| Manufacturing | 77.633     | 405         |
| Electricity   | 7.994      | 1           |
| Total         | 100        | 407         |

**Trend?** IIP went into negative territory during UPA/Manmohan raj for some months due to subprime crisis, fall in exports demand. Presently, gradual improvement but Zigzag.

### 50.2.1 Index → Production → IIP → 8 Core Industries

It's a sub-type of IIP index that measures production in 8 core industries viz.

- \_\_\_\_\_ > Electricity > Steel > Coal > Crude Oil > Natural Gas > Cement > \_\_\_\_\_. (Arranged in the descending order of weight).
- Collectively, these 8 industries command 40.27% weight in the overall IIP.



**Trend?** From Feb-2018 to Feb-2019 →

- Negative growth in all months = Crude Oil Sector.
- Negative growth in some months = Refinery Products, Natural Gas, Steel.

**MCQ. In the 'Index of Eight Core Industries', which one of the following is given the highest weight? (Asked in UPSC-Pre-2015)**

- (a) Coal production (b) Electricity generation  
(c) Fertilizer production (d) Steel production

**MCQ. Which of the following are among the 8 Core Industries of IIP?(Asked in UPSC-Pre-2012)**

- 1.Cement 2.Fertilizers 3.Natural Gas 4.Refinery products 5.Textiles

Answer Codes: (a) 1 and 5 only (b) 2, 3 and 4 only (c) 1, 2, 3 and 4 only (d) 1, 2, 3, 4 and 5

### 50.3 INDEX → PRODUCTION → MISC. INDICES

| Indexes  | Features   |
|--|--|
| <b>Annual Survey of Industries (ASI)</b>           | <ul style="list-style-type: none"> <li>➤ By CSO, covering all registered units under factories act, and electricity companies.</li> <li>➤ <b>NOT Surveyed:</b> Defense Factories, Oil-gas Storage, Restaurants, Hotels, Café, Computer Services, Departmental Units such as Railway Workshops, Govt. Mints, Sanitary, Water Supply, etc.</li> </ul>  |
| <b>Index of Service Production (ISP)</b>           | Because IIP & ASI only cover manufactured items & electricity, so, CSO working on (Experimental) Index of Service Production covering Banking, Insurance, Education, Telecom and transport.  |
| <b>RBI's OBICUS</b>                                | <ul style="list-style-type: none"> <li>➤ Order Books, Inventories and Capacity Utilization Survey.</li> <li>➤ Quarterly survey to assess consumption &amp; investment demand.</li> </ul>   |
| <b>Economic Health Indices by Commercial Banks</b> | <ul style="list-style-type: none"> <li>➤ <b>HSBC's Purchasing Manager Index (PMI)</b> : by surveying 400+ companies senior executives.</li> <li>➤ <b>SBI's Composite Index</b> based on its loan portfolio, inflation, consumer spending etc.</li> </ul> <p>Such indices have scale of 0-100 points. Above 50 means economic growth, below 50 means contraction compared to previous period.</p> |
| <b>Baltic Dry Index</b>                            | London's Baltic Exchange measures the cost to transport raw material by sea. If increasing → world economy is growing, and vice versa. Post-Subprime crisis fell, then rose from 2016-18, then again falling in 2018 due to protectionism.   |

**Past Mains Questions** from inflation and production indices: Curiously, nothing specific asked so far since the syllabus change of 2013.