

## **Index of Industrial Production (Base Year 2004-05=100)**

### **What is IIP?**

- A single representative figure ( an abstract number) to measure the general level of industrial performance in the economy.
- A short term macro-economic indicator of industrial growth.
- Used extensively by Government Departments, Industrial Associations, Research Institutes, Academicians, etc. for research and policy making.

### **Need**

- To facilitate comparative studies on performance of various States/UTs in the industrial sector.
- To bring uniformity in selection of item basket and preparation of weighting diagram, formula with a common methodology.

### **Coverage**

Three major sectors:

- Mining and Quarrying
- Registered Manufacturing
- Electricity

### **Selection of Item Basket**

- Based on ASI detailed data.
- All the items having at least 0.20% contribution in the total output of respective NIC 2-digit categories are selected.
- Criteria adopted with flexibility, keeping in view the overall size of the item basket.

To begin with 22 item groups (NIC 2 digit level) and 697 factories were selected in manufacturing sector keeping in view the guidelines, coverage and the possibility of collection of quarterly production data, etc. All these factories have been addressed to furnish yearly production particulars from 2004-05(base year) to 2011-12 and the quarter wise production from 2012-13 onwards for selected items being manufactured by them.

## Weighting Diagram

- GVA is used at all levels except at item level.
- GVO is used at item level.
- Total weights are taken as 1000.
- The total weights are first be allocated to mining, manufacturing and electricity sectors based on GVA figures.
- The manufacturing sector's weight is then be further distributed to 2, 3, 4-digit groups (15-36) of NIC-04 in proportion to their GVA figures.
- 4-digit level weights are then distributed to the selected items in proportion to their GVO figures.
- Criteria explained above for arriving at item level weights for industry groups .

<b>Sectoral weight</b>	<b>GVA</b>	<b>WT</b>
Manufacturing	688305	707.12
Mining	3357	3.45
Electricity	281724	289.43
Total	973386	1000.00

## Selection of Units

- Item-wise frame of Industrial Units are supplied by CSO (IS Wing) .
- The units producing a particular items arranged in descending order of production.

## Collection of Data

- For manufacturing sector, the collection of regular data from field units preferably through an on-line system.
- For mining sector, the requisite data for compilation of index of industrial production is supplied by National Fertilizer Limited, Naya Nangal.
- For Electricity sector the necessary data is obtained from the Punjab State Power Corporation, Patiala.

## Compilation of Index

- IIP is a weighted arithmetic mean of production relatives calculated by Laspeyre's formula:

$$I = \frac{\sum (W_i R_i)}{\sum W_i}, \quad i=1 \dots N.$$

Where **I** is the Index, **R<sub>i</sub>** is the production relative of the *i*th item for the month in question and **W<sub>i</sub>** is the weight allotted to it.

- The index is calculated in stages, initially for the item, then major group (2-digit), division (sectors) and finally for all divisions combined (general index).
- At each higher stage, the index is the weighted average of the indices calculated at immediate lower stage.