Cross-cutting Topic:

"Dealing with economic shocks – countries report experiences through the pandemic including lessons learned and steps taken to mitigate measurement challenges for future economic shocks"

"India's Experience through the Pandemic & Steps taken to mitigate measurement challenges"

Government of India Ministry of Commerce & India Department for Promotion of Industry and Internal Trade Office of Economic Adviser India

Sequence of Presentation

- 1. Introduction
- 2. Economic impact of Covid-19 induced lockdown
- 3. Policy Response in India
- 4. Impact of Covid-19 on Survey based Price Indices
- 5. Measurement Methods & Issues:
 - Wholesale Price Index (WPI)
 - Consumer Price Index (CPI)
 - Index of Industrial Production (IIP)
- 6. Initiatives for other surveys conducted in the Economy
- 7. Lesson Learned

Introduction

- The pandemic was an exceptional economic shock causing significant disruptions in daily life and changes to way of life.
- Strict lockdowns in different phases were imposed in India to control the transmission of COVID-19 :
 - ▶ LD1.0: 25 Mar, 2020 to 14 Apr, 2020
 - ▶ LD2.0: 15 April to 3 May 2020,
 - ▶ LD3.0: 4 May to 17 May 2020,
 - ▶ LD4.0: 18 May to 31 May 2020.
- Combination of social exclusion, activity and mobility restrictions, steep income losses, and severely weakened consumer confidence.
- Marked contraction in private consumption demand, services output, and the labor market.
- Contact based sectors such as tourism; restaurants, hotels etc. were severely affected, while others, such as agriculture and related industries, etc. have displayed a remarkable degree of resilience.

Economic impact of Covid-19 induced lockdown

- Every economic activity was brought to a standstill with a collapse in both supply chains, and contraction in aggregate demand.
- Countries operated below potential with a cumulative loss to GDP in initial months in 2020, while health risks persist.
- India experienced a steep decline in GDP during the year 2020 which is said to be the biggest ever recorded for the nation.



INDIA

Source: World Bank Database

- Major effects were felt on productive output of industries, workers' and communities' livelihoods, as well as national and international supply networks.
- Manufacturing sector experienced the deepest drop, bearing the brunt of the output decline during the first wave of the pandemic in 2020



• Improvement in Industrial performance as a result of the economy's gradual opening up in June 2020, rising consumer demand, and continued policy assistance.

Policy Response in India

- Aatma Nirbhar Bharat (ANB) relief of Rs 29.87 lakh crores (15 % of India's GDP) in three tranches i.e., ANB 1.0, 2.0, and 3.0 on 13th -17th May, 2020, 12th October, 2020 & 12th November 2020 respectively.
- ANB relief packages with focus on the Five pillars:
 - 1. Economy
 - 2. Infrastructure
 - 3. System
 - 4. Demography
 - 5. Demand
- Bouquet of developmental and regulatory policy measures for strong and robust revival of economic activates in the economy were announced such as:
 - Emergency Credit Line Guarantee Scheme (ECLGS) and Subordinate Debt for Stressed MSMEs
 - Credit facility for Street Vendors.
 - > Additional Emergency Working Capital and Agri Infrastructure Fund for farmers.
 - Production Linked Incentive to champion sectors.
 - Increase borrowing limits of States for promoting State level reforms.
 - Aatma Nirbhar Bharat Rozgar Yojana to incentivize job creation during COVID-19 recovery.

Impact of Covid-19 on Survey based Price Indices

- Data collection and its availability were severely hampered and maintaining the quality standards of statistics became challenging.
- The compilation of indicators such as CPI, WPI, IIP, etc. were seriously hindered as a result of low response rates due to:
 - > No contact with the selected units
 - Limited communication on data
 - Temporary shutdown of units

	Response Rate (in %)		
Indicator	Pre- lockdown Period	Lockdown period	Post- lockdown Period
WPI			
СРІ	75% - 95%	45% - 70%	75%-95%
IIP			

• Quantum of imputation and estimation expanded with reduced response rate

Measurement Methods & Issues

- Accuracy and reliability of several indicators faced the challenge of data inadequacy.
- Data collection became more difficult due to the inability to conduct in- person visits and business shutdowns.
- Authorities in charge of gathering and disseminating real sector statistics began exploring alternative methods of data collection and estimation of non-response.
- Advice of multilateral agencies including the IMF and World Bank were sought on the practices to be followed for preparation of essential economic indicators in such challenging situations.
- Traditional face-to-face interviews were replaced by telephonic interviews and online surveys and other innovative methods.

Wholesale Price Index (WPI)

- Response rate declined to 65 percent, against the usual response rate of 93-95 percent.
- All Commodities WPI could not be computed for the month of April-2020 due to unavailability of substantial data.
- Out of the 22 National Industrial Classification (NIC) two-digit groups for Manufactured products, indices were compiled only for 5 manufacturing groups.
- Price movement of Sub-groups/Groups of WPI was worked out by taking the prices of items for which at least 25% of price quotations were reported.
- Operational factories/manufacturing units across the country were briefed about the submission of price data through different means i.e. through telephonic enquiry, email, data submission portals, etc.
- The provisional figures of WPI (in April 2020) with limited response rate were made final after a period of eight weeks/ two months by ensuring submission of almost all the required price data using alternative methods.

- Numbers of Virtual training/discussions were organized on a frequent basis with the Field Offices of National Statistical Office (NSO)
- Price collectors were contacted through telephone daily for resolving their issues and duly validating the submitted data.
- Manufacturing units were requested to submit the Expected/tender prices for maintaining continuity and smooth flow of price data during lockdown through different means.



Consumer Price Index (CPI)

- Price collection of CPI through personal visits of price collectors was suspended in March 2020.
- Prices were collected from 674 urban markets and 524 villages, out of 1114 urban markets and 1181 villages for commodities which were being transacted during the initial month of lockdown.
- With limited transaction of products in the market, imputed figures for CPI for two consecutive months during the first wave of the pandemic in 2020 were published.
- Partial indices of CPI were compiled.
- Field enumerators collected data through telephone from the designated outlets and augmented this with visits to the neighborhood shops for items being transacted.

- A separate exercise based on the imputation of the missing price was adopted to address the non-availability of data for several sub-groups during lockdown .
- Price movement of Sub-groups/Groups of CPI was worked out by considering prices which met the principles of adequacy :
 - Price of only those items were included which have been reported from at least 25% of markets, separately for Rural & Urban sector and constituted more than 70% weight of the respective Sub-groups/Groups.
 - The all India indices have been compiled using Direct Approach by considering a common market at the national level in both Rural & Urban sectors separately.



Index of Industrial Production (IIP)

- Imposition of nationwide lockdown resulted in freezing of economic activities except for some essential services.
- Negative impact on production levels, turnover and income generated from the manufacturing sector in the country, further impacting workforce capacity and disrupted supply chains.
- A core team was set up for Day-to-Day monitoring of response from the establishments through whatsapp group, emails, etc.
- Data collection was done through telephonic surveys wherever possible so as to maintain smooth flow of data.
- In order to enhance the data response from factories based on the response rate pattern, source agencies follow-up with non-responding factories and the factories showing delayed response.

- Production estimates for the non-responding units were developed using various methods:
 - Repetition of last available data;
 - Average production data for the last few months;
 - Previous year's growth rate
- Method of estimation was changed during the lockdown period for realistic reflection of the production. Post Covid, the method was again reviewed, and initial method of estimation was reinstated/resumed.



Initiatives for other surveys conducted in the Economy

- New high frequency indicators of economic activity were combined with conventional indicators to generate alternative aggregate measures that helped assess the impact of the pandemic on the economy and also the pace of normalization.
- Electronic Data Submission Portal (EDSP) was modified with enhanced security features for facilitating International Banking Statistics (IBS) data submission.
- Reserve Bank of India temporarily substituted its Computer Aided Personal Interview (CAPI) based surveys of households with telephonic surveys.
- Training of reporting entities and investigators were also on online platforms.
- Proportions of interviews verified through audio and telephonic verification were increased.

Lesson Learned

- A mix of developmental and innovative measures needs to be put in place to lessen the damaging impacts of such crisis and facilitate data availability in future.
- These measure may include:
 - Building a uniform data-driven framework with new data collection methods and new data sources linked to digitalization involving low human interference.
 - Harmonizing data reporting/collecting norms across different states.
 - Continuous training of data collectors and supervisors to collect data through alternative data collection methods.
 - Building a system of auxiliary information.
 - Training on Crisis Management
 - > Alternative source of data needs to be tapped such as machine learning, traffic, etc.
 - A system for assessment of various method of estimation needs to be put in place for adoption of appropriate method giving optimum result.

Thank You