



**NATIONAL APEX CHAMBER**

# **Analysis of COVID at International and Sub- National Level- Speed of spread, Mortality and Recovery rate**

**April 29, 2020**

**PHD RESEARCH BUREAU**

**PHD CHAMBER OF COMMERCE AND INDUSTRY**

PHD House 4/2 Siri Institutional Area, August Kranti Marg,  
New Delhi 110016

Phone: 91-11-49545454 | Fax: 91-11-26855450,  
26863135, Email: [research@phdcci.in](mailto:research@phdcci.in) | Website:  
[www.phdcci.in](http://www.phdcci.in)

## Executive Summary

The growing severity of the impact caused by the widespread pandemic COVID-19, on our economy, its people and the Nation as a whole is a matter of deep concern. Globally, around 210 countries including USA, Spain, Italy, France, Germany, among others have been severely impacted and the death toll has reached more than 2 lakhs, taking the mortality rate to the level of 7%.

The timely proactive and combative measures undertaken by the Government of India to curtail the spread of pandemic COVID-19 are highly appreciable. As a result, India remains resilient in fighting COVID-19 despite being one of the densely populated countries across the world. The average speed of spread of COVID cases in India stands at about 7% with a COVID mortality rate of 3% and recovery rate of 23% amongst 20 most impacted countries globally during the last week which is far better in comparison to various developed and emerging and developing economies.

The top 20 mostly impacted countries due to pandemic COVID-19 during the last week (20th to 26th April 2020), the average speed of spread of COVID cases stands highest in Ecuador at 17%, followed by Russia at around 10%, Peru at around 9%, Brazil at 7%, India at around 7%, Canada at 4%, USA at around 4%, among others. On the other hand, the COVID mortality rate stands highest in Belgium at 15%, followed by France, UK and Italy at around 14% each, Netherlands at around 12%, among others, said Industry Body PHD Chamber.

The COVID mortality rate in USA and China stands at around 6% each, while in India it stands at 3%, said Dr Aggarwal. While, China records the highest recovery rate of around 94%, followed by Iran at 77%, Switzerland at 75%, Germany at 73%, Spain at 52%, among others. While, India's COVID recovery rate stands at 23% so far.

At domestic front among the top 10 mostly affected states due to pandemic COVID-19 with highest number of cases, the average speed of spread of COVID cases during the last week (20th to 26th April 2020) stands highest for the state of Maharashtra at 11%, followed by West Bengal (10%), Gujarat (9.7%), Andhra Pradesh (9.1%), Uttar Pradesh (8%), among others.

The COVID mortality rate of top 10 mostly affected states stands highest for Madhya Pradesh at 5.1%, followed by Gujarat at 4.5%, Maharashtra (4.3%), West Bengal (2.8%), Andhra Pradesh (2.6%), among others during the last week. While, Tamil Nadu records the highest recovery rate of around 57%, followed by Telangana (32%), Rajasthan (30%), Delhi (28%), Andhra Pradesh (20%), among others during the last week.

At this juncture, a calibrated approach should be adopted by the Government that brings about a fine balance between normalizing economic and social activity and containing the spread of pandemic COVID-19. This would enable the country to witness a V-shaped recovery in the economic growth trajectory rather than a U-shaped recovery.

We appreciate the opening up of all kinds of shops in green areas with 50% strength of work force to revive economic and business activities. It is suggested that 50% strength of workforce may be allowed in all activities of area including government, economic, business, trade and industry, among others expect public gatherings with strict adherence to social distancing and precautionary measures. Accordingly special guidelines should be made to the each State so that no body is harassed for resuming economic activities.

As economic activity is going to be opened sooner than later, we suggest that the Government should make transportation provision to call back all the migrant workers in the factories to resume the work activities. Going ahead, we urge suggest the Government to provide financial stimulus of Rs 16 lakh crore which is around 7% of GDP sooner than later to mitigate the impact of Pandemic COVID-19 on economy, trade and Industry through various relief measures and benefits to India's trade and industry.

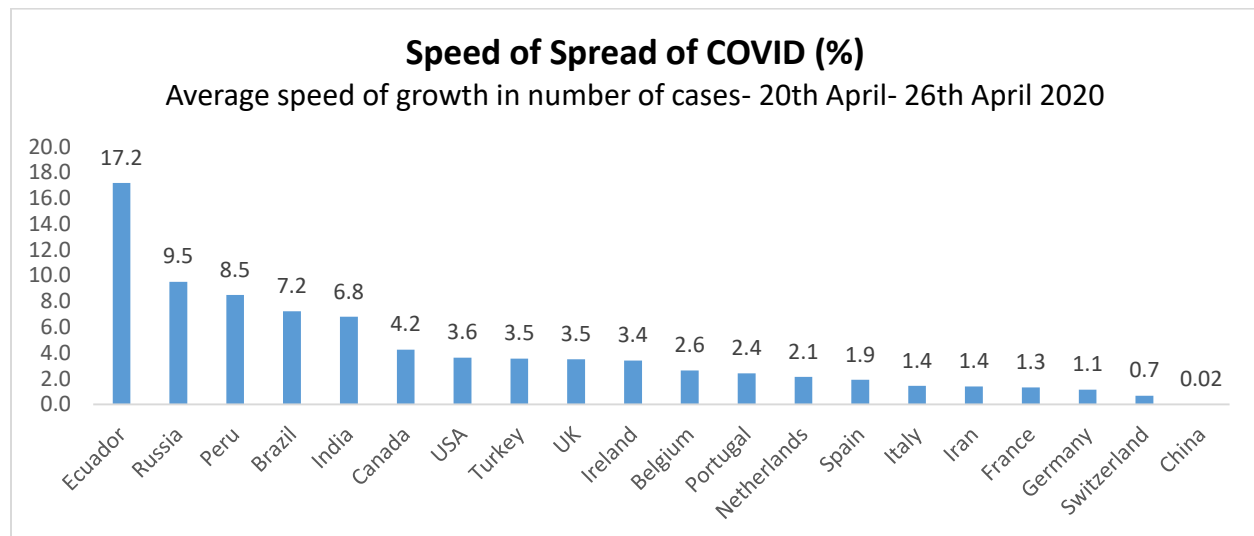
## Table of Contents

S.No.	Content	Page No.
1	International Analysis of COVID Impacted Countries- Speed of spread, COVID-mortality rate and recovery rate	4
2	Analysis of COVID Impacted States in India- Speed of spread, COVID mortality rate and recovery rate	6
3	Conclusions	8

## 1. International Analysis of COVID Impacted Countries- Speed of spread, COVID-mortality rate and recovery

The severity of pandemic COVID 19 is increasing each day. Around 210 countries including USA, Spain, Italy, France, Germany, among others have been severely impacted. The whole mankind in the world is in huge problem and uncertainty continues to persist about the severity and spread of pandemic COVID. Around 30 lakh cases have been confirmed globally since the outbreak started and the death toll has reached more than 2 lakhs, taking the mortality rate to the level of 7%.

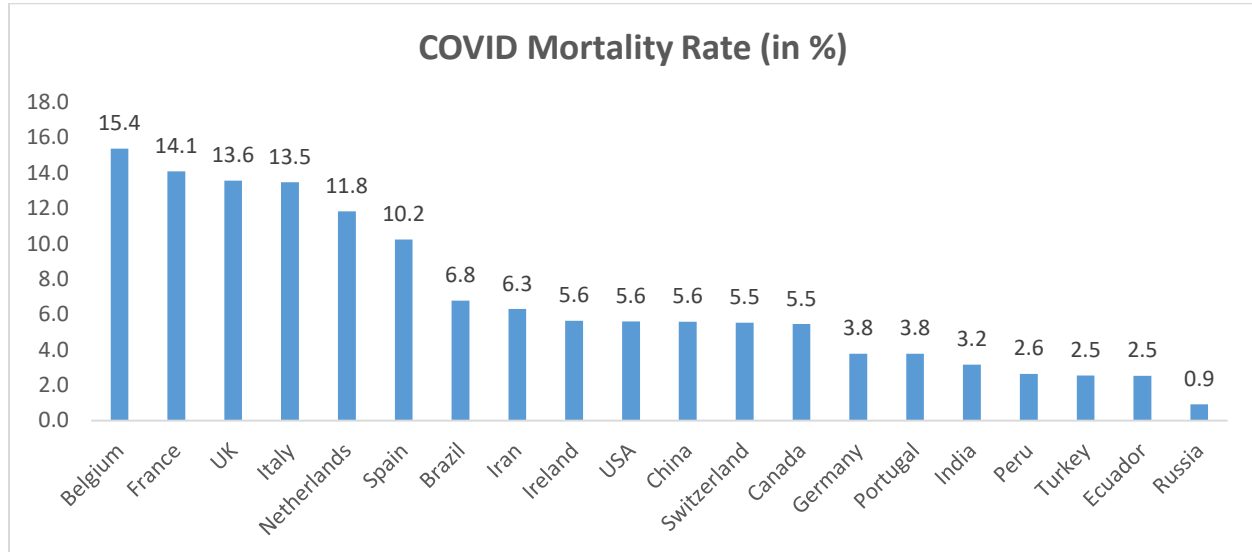
Across the top 20 countries registered the highest number of COVID cases, the average speed of spread of COVID cases during the last week, ie. from 20<sup>th</sup> April 2020 to 26<sup>th</sup> April 2020, stands highest in Ecuador at 17%, followed by Russia at around 10%, Peru at around 9%, Brazil at 7%, India at around 7%, Canada at 4%, USA at around 4%, among others.



Source: PHD Research Bureau, PHDCCI, calculations; data compiled from worldometer. (Note: Data pertains to as on 27<sup>th</sup> April 2020)

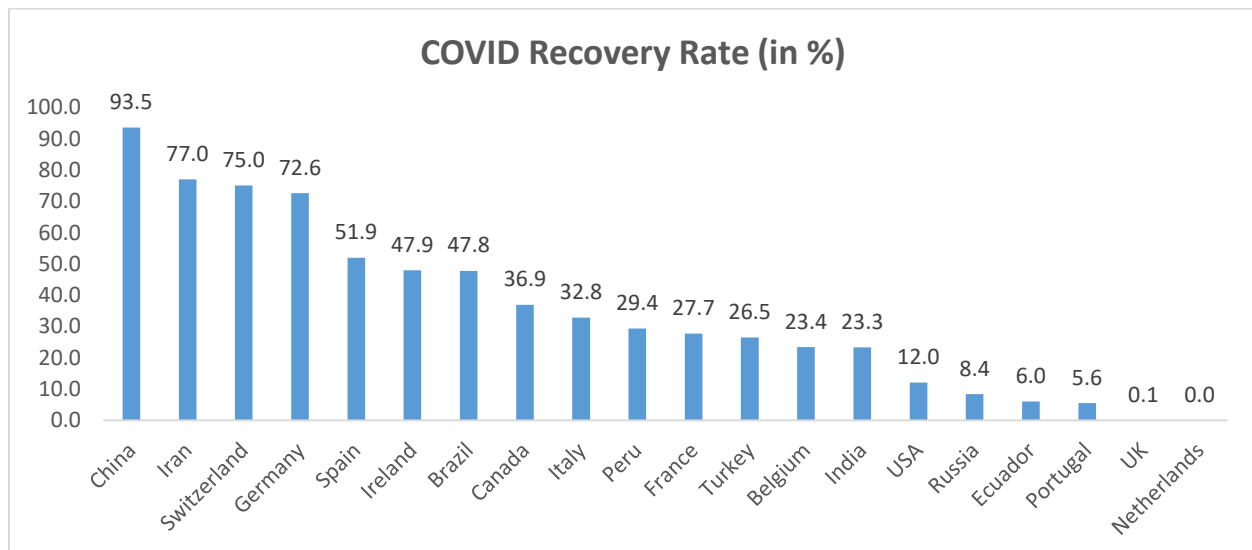
Across the top 20 countries registered the highest number of COVID cases, the COVID mortality rate stands highest in Belgium at 15%, followed by France, UK and Italy at around 14% each, Netherlands at around 12%, among others. COVID

Mortality rate in USA and China stands at around 6% each, while in India it stands at 3%.



Source: PHD Research Bureau, PHDCCI, calculations; data compiled from worldometer. (Note: Data pertains to as on 27<sup>th</sup> April 2020)

Across the top 20 countries registered the highest number of COVID cases, China records the highest recovery rate of around 94%, followed by Iran at 77%, Switzerland at 75%, Germany at 73%, Spain at 52%, among others. While, India's COVID recovery rate stands at 23% so far.



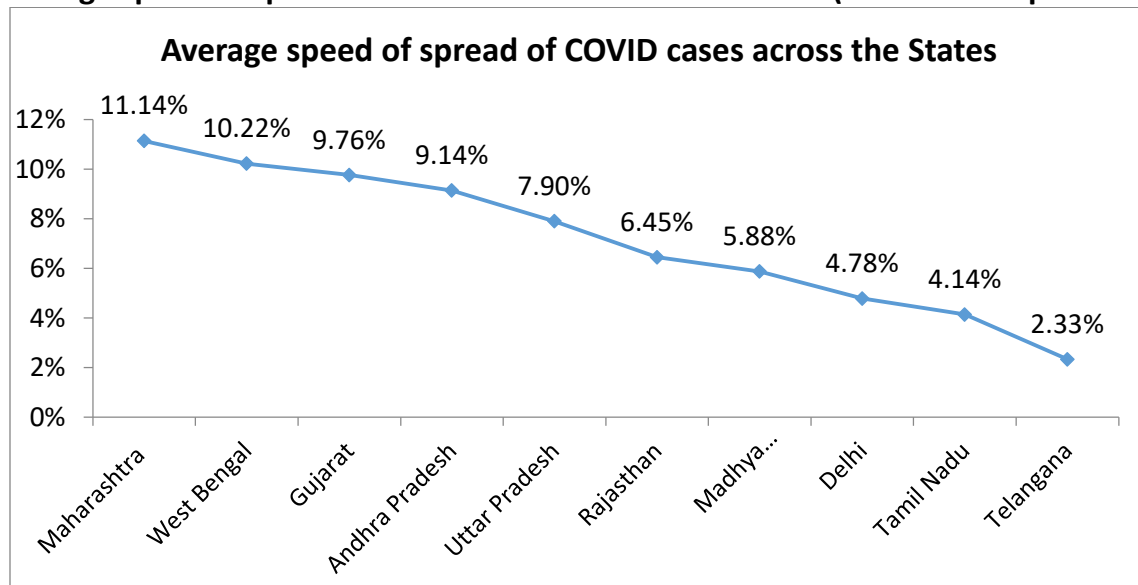
Source: PHD Research Bureau, PHDCCI, calculations; data compiled from various sources (Note: Data pertains to as on 27<sup>th</sup> April 2020)

## 2. Analysis of COVID Impacted States in India- Speed of spread, COVID mortality rate and recovery rate

The growing severity of the impact caused by the widespread pandemic, COVID – 19, on our economy, its people and the Nation as a whole is a matter of deep concern. In India, the total number of COVID cases has reached to 27,892 as of 27th April 2020 with a COVID mortality rate of 3.2%. The proactive and combative measures undertaken by the Central and States Government are highly appreciable to curtail the spread of daunting COVID-19.

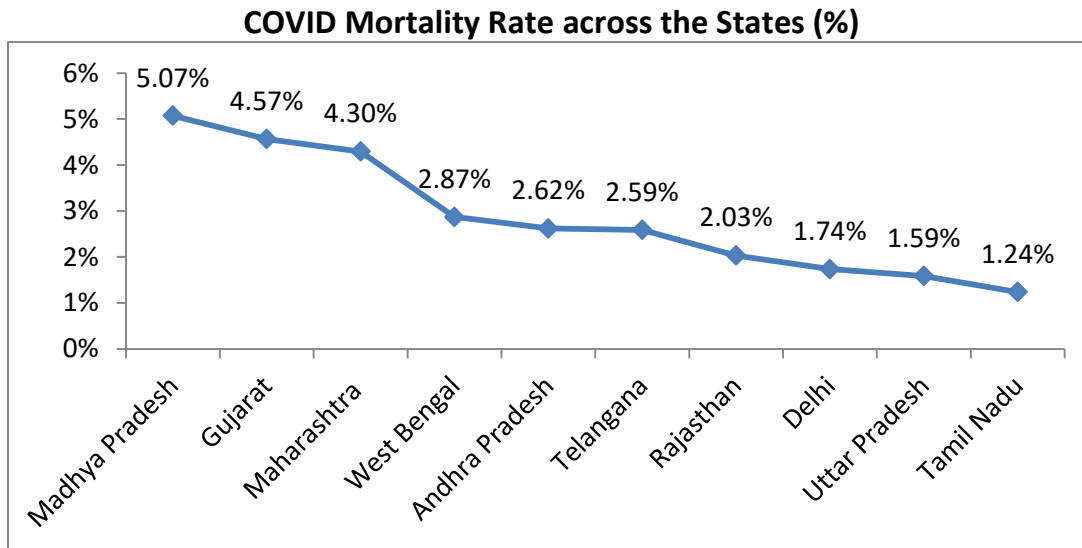
Across the top 10 mostly affected states due to pandemic COVID-19 with highest number of cases, the average speed of spread of COVID cases during the last week (20th to 26th April 2020) stands highest for the state of Maharashtra at 11%, followed by West Bengal (10%), Gujarat (9.7%), Andhra Pradesh (9.1%), Uttar Pradesh (8%), among others.

### Average speed of spread of COVID cases across the States (20<sup>th</sup> to 26<sup>th</sup> April 2020)



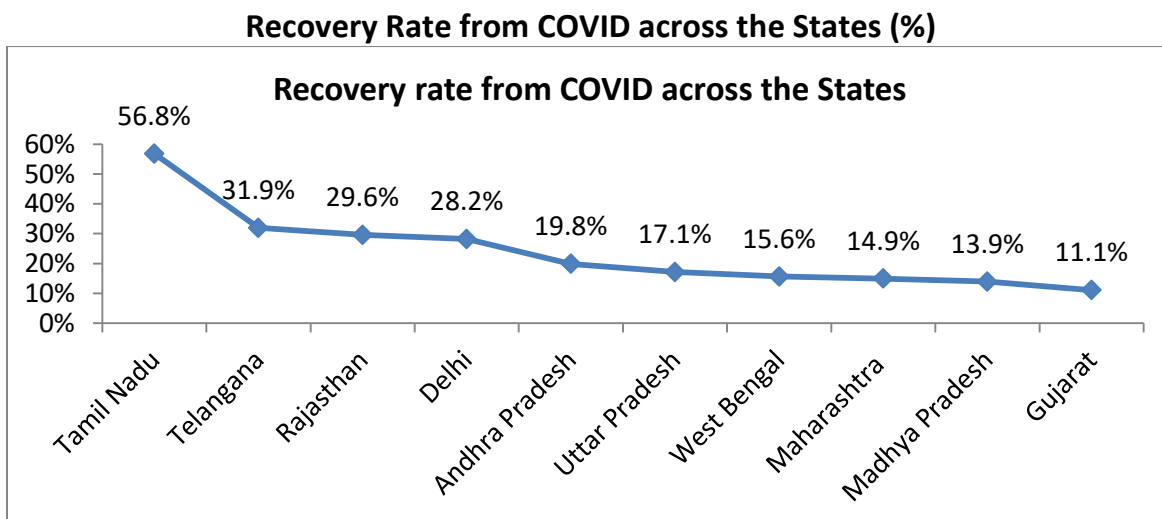
Source: PHD Research Bureau, compiled from various sources. Note: Data pertains to as on 27<sup>th</sup> April 2020

Across the top 10 mostly affected states, the mortality rate due to pandemic COVID-19 stands highest for Madhya Pradesh at 5.1%, followed by Gujarat at 4.5%, Maharashtra (4.3%), West Bengal (2.8%), Andhra Pradesh (2.6%), among others during the last week.



Source: PHD Research Bureau, compiled from various sources. Note: Data pertains to as on 27th April 2020

Across the top 10 mostly impacted states with highest number of COVID cases, Tamil Nadu records the highest recovery rate of around 57%, followed by Telangana (32%), Rajasthan (30%), Delhi (28%), Andhra Pradesh (20%), among others.



Source: PHD Research Bureau, compiled from various sources. Note: Data pertains to as on 27<sup>th</sup> April 2020



### 3. Conclusions

The pandemic COVID-19 has emerged as a major global health crisis of the 21st century and the greatest global humanitarian challenge that the world is facing since World War II. The deadly virus has spread widely and the number of cases are rising daily as Governments across the globe are working tirelessly to slow its spread. In this regard, India has moved quickly by implementing a proactive nationwide 21-day lockdown with the goal of flattening the curve and using its limited resources efficiently. PHD Chamber fully supports the extended lockdown period till 3rd May 2020 and appreciates the seven-point precautionary guidelines announced by Hon'ble Prime Minister, Shri Narendra Modi.

At this juncture, a calibrated approach should be adopted by the Government that brings about a fine balance between normalizing economic and social activity and containing the spread of pandemic COVID-19 in India. This would enable the country to witness a V-shaped recovery in the economic growth trajectory rather than a U-shaped recovery. PHD Chamber of Commerce and Industry urges the Government to provide an increased stimulus relief package of Rs 16 lakh crore which is around 7% of GDP sooner than later to mitigate the impact of pandemic COVID-19 on economy, trade and Industry through various relief measures and benefits. A significant stimulus of 7% of GDP would help the economy to grow at more than 4% in the current financial year 2020-21, rejuvenate the businesses and refuel the economic growth trajectory of the country.

Thus, the reform measures would significantly help trade and industry to resume business activity in these extremely difficult times. It is highly appreciable that Government has allowed opening up of all kinds of shops in green areas with 50% strength of work force to revive economic and business activities. It is suggested that 50% strength of workforce may be allowed in all activities of area including government, economic, business, trade and industry, among others expect public gatherings with strict adherence to social distancing and precautionary measures.

Accordingly special guidelines should be made to the each State so that no body is harassed for doing such economic activities. As economic activity is going to be opened sooner than later, we suggest that the Government should make transportation provision to call back all the migrant workers in the factories to resume the work activities. We are optimistic that India will emerge victorious in the fight against pandemic COVID- 19 by safeguarding both lives and livelihoods of its countrymen.



## PROJECT TEAM

**Dr S P Sharma**  
Chief Economist

**Ms Surbhi Sharma**  
Associate Economist

**Ms Kritika Bhasin**  
Research Officer

**Ms Shivani Mehrotra**  
Research Associate

## Disclaimer

“Analysis of COVID at international and sub-national level-spread, mortality and recovery rate” is prepared by PHD Chamber of Commerce and Industry and Department of Commerce. This research report may not be reproduced, wholly or partly in any material form, or modified, without prior approval from PHD Chamber of Commerce and Industry.

It may please be noted that this research report is for guidance and information purposes only. Though due care has been taken to ensure accuracy of the information to the best of the PHD Chamber's knowledge and belief, it is strongly recommended that readers should seek specific professional advice before making any decisions.

Please note that the PHD Chamber of Commerce and Industry do not take any responsibility for outcome of decisions taken as a result of relying on the content of this research report. PHD Chamber of Commerce and Industry shall in no way, be liable for any direct or indirect damages that may arise due to any act or omission on the part of the reader or user due to any reliance placed or guidance taken from any portion of this publication.

Copyright 2020  
PHD Chamber of Commerce and Industry  
ISBN No.  
ALL RIGHTS RESERVED.

No part of this publication including the cover, shall be reproduced, stored in a retrieval system, or transmitted by any means, electronic, mechanical, photocopying, recording, or otherwise, without the prior written permission of, and acknowledgement of the publisher (PHD Chamber of Commerce and Industry).

## PHD Research Bureau

PHD Research Bureau; the research arm of the PHD Chamber of Commerce and Industry was constituted in 2010 with the objective to review the economic situation and policy developments at sub-national, national and international levels and comment on them in order to update the members from time to time, to present suitable memoranda to the government as and when required, to prepare State Profiles and to conduct thematic research studies on various socio-economic and business developments.

The Research Bureau has been instrumental in forecasting various lead economic indicators national and sub-national. Many of its research reports have been widely covered by media and leading newspapers. The Research Bureau has undertaken various policy studies for Government of India and State Governments.

Research Activities	Comments on Economic Developments	Newsletters	Consultancy
<ul style="list-style-type: none"> <li>Research Studies</li> </ul>	<ul style="list-style-type: none"> <li>Global Economic Developments</li> </ul>	<ul style="list-style-type: none"> <li>Economic Affairs Newsletter (EAC)</li> </ul>	<ul style="list-style-type: none"> <li>Trade and Investment Facilitation Services (TIFS)</li> </ul>
<ul style="list-style-type: none"> <li>State Profiles</li> </ul>	<ul style="list-style-type: none"> <li>India's Economic Developments</li> </ul>	<ul style="list-style-type: none"> <li>Forex and FEMA Newsletter</li> </ul>	<ul style="list-style-type: none"> <li>Business Research and Consultancy: Innovative and customised research solutions for growth of Industry and businesses</li> </ul>
<ul style="list-style-type: none"> <li>Impact Assessments</li> </ul>	<ul style="list-style-type: none"> <li>States' Economic Developments</li> </ul>	<ul style="list-style-type: none"> <li>Global Economic Monitor (GEM)</li> </ul>	
<ul style="list-style-type: none"> <li>Thematic Research Reports</li> </ul>	<ul style="list-style-type: none"> <li>International Developments</li> </ul>	<ul style="list-style-type: none"> <li>Trade &amp; Investment Facilitation Services (TIFS) Newsletter</li> </ul>	
<ul style="list-style-type: none"> <li>Releases on Economic Developments</li> </ul>	<ul style="list-style-type: none"> <li>Financial Markets</li> </ul>	<ul style="list-style-type: none"> <li>State Development Monitor (SDM)</li> </ul>	
	<ul style="list-style-type: none"> <li>Foreign exchange market</li> </ul>		
	<ul style="list-style-type: none"> <li>Developments in International Trade</li> </ul>		

## Studies Undertaken by PHD Research Bureau

### A: Thematic research reports

1. Comparative study on power situation in Northern and Central states of India (September 2011)
2. Economic Analysis of State (October 2011)
3. Growth Prospects of the Indian Economy, Vision 2021 (December 2011)
4. Budget 2012-13: Move Towards Consolidation (March 2012)
5. Emerging Trends in Exchange Rate Volatility (Apr 2012)
6. The Indian Direct Selling Industry Annual Survey 2010-11 (May 2012)
7. Global Economic Challenges: Implications for India (May 2012)
8. India Agronomics: An Agriculture Economy Update (August 2012)
9. Reforms to Push Growth on High Road (September 2012)
10. The Indian Direct Selling Industry Annual Survey 2011-12: Beating Slowdown (March 2013)
11. Budget 2013-14: Moving on reforms (March 2013)
12. India- Africa Promise Diverse Opportunities (November 2013)
13. India- Africa Promise Diverse Opportunities: Suggestions Report (November 2013)
14. Annual survey of Indian Direct Selling Industry-2012-13 (December 2013)
15. Imperatives for Double Digit Growth (December 2013)
16. Women Safety in Delhi: Issues and Challenges to Employment (March 2014)
17. Emerging Contours in the MSME sector of Uttarakhand (April 2014)
18. Roadmap for New Government (May 2014)
19. Youth Economics (May 2014)
20. Economy on the Eve of Union Budget 2014-15 (July 2014)
21. Budget 2014-15: Promise of Progress (July 2014)
22. Agronomics 2014: Impact on economic growth and inflation (August 2014)
23. 100 Days of new Government (September 2014)
24. Make in India: Bolstering Manufacturing Sector (October 2014)
25. The Indian Direct Selling Industry Annual Survey 2013-14 (November 2014)
26. Participated in a survey to audit SEZs in India with CAG Office of India (November 2014)
27. Role of MSMEs in Make in India with reference to Ease of Doing Business in Ghaziabad (Nov 2014)
28. Exploring Prospects for Make in India and Made in India: A Study (January 2015)
29. SEZs in India: Criss-Cross Concerns (February 2015)
30. Socio-Economic Impact of Check Dams in Sikar District of Rajasthan (February 2015)
31. India - USA Economic Relations (February 2015)
32. Economy on the Eve of Union Budget 2015-16 (February 2015)
33. Budget Analysis (2015-16)
34. Druzhba-Dosti: India's Trade Opportunities with Russia (April 2015)
35. Impact of Labour Reforms on Industry in Rajasthan: A survey study (July 2015)
36. Progress of Make in India (September 2015)
37. Grown Diamonds, A Sunrise Industry in India: Prospects for Economic Growth (November 2015)
38. Annual survey of Indian Direct Selling Industry 2014-15 (December 2015)
39. India's Foreign Trade Policy Environment Past, Present and Future (December 2015)
40. Revisiting the emerging economic powers as drivers in promoting global economic growth (February 2016)
41. Bolstering MSMEs for Make in India with special focus on CSR (March 2016)
42. BREXIT impact on Indian Economy (July 2016)

43. India's Exports Outlook (August 2016)
44. Ease of Doing Business : Suggestive Measures for States (October 2016)
45. Transforming India through Make in India, Skill India and Digital India (November 2016)
46. Impact of Demonetization on Economy, Businesses and People (January 2017)
47. Economy on the eve of Budget 2017-18 (January 2017)
48. Union Budget 2017-18: A budget for all-inclusive development (January 2017)
49. Annual Survey of Indian Direct Selling Industry 2015-16 (February 2017)
50. Worklife Balance and Health Concerns of Women: A Survey (March 2017)
51. Special Economic Zones: Performance, Problems and Opportunities (April 2017)
52. Feasibility Study (socio-Economic Survey) of Ambala and Rohtak Districts in Haryana (March 2017)
53. Goods and Services (GST): So far (July 2017)
54. Reshaping India-Africa Trade: Dynamics and Export Potentiality of Indian Products in Africa (July 2017)
55. Industry Perspective on Bitcoins (July 2017)
56. Senior Housing: A sunrise sector in India (August 2017)
57. Current state of the economy (October 2017)
58. Equitable finance to fulfill funding requirements of Indian Economy (October 2017)
59. The Wall of Protectionism: : Rise and Rise of Protectionist Policies in the Global Arena, (November 2017)
60. India-Israel Relations: Building Bridges of Dynamic Trade(October 2017)
61. Role of Trade Infrastructure for Export Scheme (TIES) in Improving Export Competitiveness (November 2017)
62. India - China Trade Relationship: The Trade Giants of Past, Present and Future (January 2018)
63. Analysis of Trade Pattern between India and ASEAN(January 2018)
64. Union Budget 2018-19 – (February 2018)
65. Ease of Doing Work for Women: A survey of Delhi NCR (February 2018)
66. Restraining Wilful Defaults: Need of the hour for Indian Banking System (March 2018)
67. Impact of GST on Business, Industry and Exporters (April 2018)
68. India – Sri Lanka Bilateral Relations: Reinforcing trade and investment prospects (May 2018)
69. Growth Prospects of the Indian Economy: Road to US \$5 Trillion Economy(May 2018)
70. India's Free Trade Agreements Dynamics and Diagnostics of Trade Prospects(May 2018)
71. India – UK Trade Relations and Societal Links: Way Forward (June 2018)
72. Rural Economy: Road to US \$5 Trillion Economy(September 2018)
73. Indian Economy on the Eve of Union Budget 2019-20 (Interim): Steady...strong...fastest moving economy (January 2019)
74. Interim Budget 2019-2020: A Dynamic, Inclusive & Pragmatic Budget (February 2019)
75. Women Entrepreneurship: Transforming from Domestic Households to Financial Independence (March 2019)
76. Prospects for Exports from India: Five Pronged Strategy to Achieve USD700 Billion Merchandise Exports by 2025 (March 2019)
77. India Towards Shared Prosperity: Economic Agenda for the Next five Years (March 2019)
78. Job Creation: A Pan India Survey of Households (March 2019)
79. India Inc. Speaks Live: Wish List for the Next Five Years (May 2019)
80. Suggestive Roadmap for Revitalizing Economic Growth (June 2019)
81. Indian Economy on the Eve of Union Budget 2019-20 (July 2019)
82. Union Budget 2019-20: Road to US\$ 5 trillion economy (July 2019)

83. Ease of Doing Business for MSMEs (September 2019)
84. Report Emerging contours in the defence and homeland security
85. Framework of University-Industry Linkages in Research DSIR
86. India's Trade and Investment opportunities with ASEAN Economies (November 2019)
87. Indian Economy on the Eve of Union Budget 2020-21 (February 2020)
88. Union Budget 2020-21: Aspirational, Caring and Developmental Budget (February 2020)

## **B: State profiles**

89. Rajasthan: The State Profile (April 2011)
90. Uttarakhand: The State Profile (June 2011)
91. Punjab: The State Profile (November 2011)
92. J&K: The State Profile (December 2011)
93. Uttar Pradesh: The State Profile (December 2011)
94. Bihar: The State Profile (June 2012)
95. Himachal Pradesh: The State Profile (June 2012)
96. Madhya Pradesh: The State Profile (August 2012)
97. Resurgent Bihar (April 2013)
98. Life ahead for Uttarakhand (August 2013)
99. Punjab: The State Profile (February 2014)
100. Haryana: Bolstering Industrialization (May 2015)
101. Progressive Uttar Pradesh: Building Uttar Pradesh of Tomorrow (August 2015),
102. Suggestions for Progressive Uttar Pradesh (August 2015)
103. State profile of Telangana- The dynamic state of India (April 2016)
104. Smart Infrastructure Summit 2016- Transforming Uttar Pradesh (August 2016)
105. Smart Infrastructure Summit 2016-Transforming Uttar Pradesh : Suggestions for the State Government (August 2016)
106. Rising Jharkhand: An Emerging Investment Hub (February 2017)
107. Punjab: Roadmap for the New Government Suggestions for the Industrial and Socio-Economic Development – Focus MSMEs ease of doing business (May 2017)
108. Prospering Himachal Pradesh: A Mountain of Opportunities (August 2017)
109. Kashmir: The way forward (February 2018)
110. Analysis of State Budgets for 2018-19: Select States (March 2018)
111. Rising Uttar Pradesh One District One Product Summit (August 2018)
112. Rajasthan: Steady Strides into the Future- Emerging Growth Dynamics and the Way Forward (September 2018)
113. Rising Jharkhand: Economic Profile (January 2019)
114. Rising Jharkhand: Skill Development to Spur Socio-Economic Growth (January 2019)
115. Progressive Haryana: Economic Profile (February 2019)
116. Progressive Haryana: The Agricultural Hub of India (February 2019)