

Public Affairs Index

AT A GLANCE



Public Affairs Index - Governance in the States of India- 2020

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Public Affairs Centre (PAC) engages in action research focussing on Sustainable Development Goals (SDGs) in the context of India. PAC is a not for profit Think Tank established in 1994 with a mandate to improve the quality of governance in India. The Centre is also a pioneer in deploying innovative Social Accountability Tools (SAT) to measure the quality and adequacy of public services. Over the years, its scope of work has expanded to include the whole gamut of research-advocacy-action to lead evidence-based research on governance across sectors, geographies and populations in India. PAC ensures that gender is an over-arching theme in all its focus research areas.

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RESEARCH TEAM



Gurucharan Gollerkeri is Director, Public Affairs Centre (PAC), Bangalore. A civil servant from the Indian Administrative Service, in the higher echelons of Government for over 34 years, he retired as Secretary to the Government of India, in 2016. He served with distinction as the first director of the India Centre for Migration (ICM), a policy 'think-tank' on International Migration, during 2010-13. Based on his work at the ICM, he co-authored 'Migration Matters: Mobility in a Globalizing World' (OUP, 2016). In 2004-05, Mr. Gollerkeri was a Visiting Fellow at the Centre for Public Policy at the Indian Institute of Management, Bangalore. Mr. Gollerkeri spearheaded PAI 2020.



Aparna Sivaraman is a Programme Officer at the Public Affairs Centre, Bangalore. She is the Team Lead for PAI 2020 and a co-author of the PAI 2019 report. She has played a key role in developing the PAI 2020 model, data analysis and co-authoring the chapters. She was also responsible for managing the team and for ensuring veracity of the data. With a Bachelor's degree in Economics and a Master's degree in Public Policy, Aparna's research interests include qualitative and quantitative analyses in the areas of gender equality, migration, economic development and intellectual property.



Mrinalini Kabbur is a senior data analyst at the Centre for Open-Data Research (CODR), Public Affairs Centre (PAC). She provides data analysis and reporting support in various domains such as education, health, women & child development, food security and migration. She is adept with various statistical and machine learning algorithms for primary and secondary data like Exploratory and Confirmatory Factor Analysis, Structural Equation Modelling, Principal Component Analysis, Linear and Logistic Regression, Decision Trees, Random Forest and Cluster Analysis. She was responsible for the application of scientific techniques to arrive at the composite index - PAI 2020 and data analysis.



Samridhi Pandey is a Programme Officer at the Public Affairs Centre, Bengaluru. She has a Bachelors and Masters degree in Economics with a specialisation in development studies. She has worked on data analysis and co-authoring the chapters of PAI 2020. She is also part of the project on improving ICDS service delivery in the state of Karnataka. Her interest areas surround gender studies, education and economic development.



Aishwariya V is a former data analyst at the Centre for Open Data Research (CODR), Public Affairs Centre (PAC). Her research interest areas include Machine Learning, Predictive Modelling with R and Data Visualisation with Tableau. She was responsible for the application of scientific techniques to arrive at the composite index - PAI 2020.

EDITING AND DESIGN TEAM





Dr. Annapoorna Ravichander, Executive Director, Public Affairs Foundation and Head-Policy Engagement and Communication, PAC oversees all the activities related to branding, engaging with stakeholders and editing all documents.



Esha Daftari is a Graphic Designer. She oversees all design elements and brings in her experience of using graphics, photography and designing in maling complex information as an easy to read experience based on the audience.



The Public Affairs Index (PAI 2020) is a scientifically rigorous, data-based framework that measures the quality of governance at the subnational level and ranks the states and Union Territories (UTs) of India on a Composite Index (CI). States are classified into two categories- large and small- using population as the criteria.

The three dimensions of sustainable development- Equity, Growth and Sustainability as the overarching goals of governance, constitute the bases in the approach to measuring the performance of the states. They are the three pillars on which the CI is constructed. Each of the three pillars is circumscribed by five governance praxis themes that influence the pace and direction of development outcomes, in substantive and context-specific ways, in small or great measure. The themes include- Voice and Accountability, Government Effectiveness, Rule of Law, Regulatory Quality and Control of Corruption. At the bottom of the pyramid, 50 component indicators are mapped to 13 Sustainable Development Goals (SDGs) that are relevant to the states and UTs. This forms the foundation of the conceptual framework of PAI 2020. The choice of the 50 indicators that go into the calculation of the CI were dictated by the objective of uncovering the complexity and multidimensional character of development governance.



Public Affairs Index 2020







*PCA- Principal Component Analysis

THE EQUITY PRINCIPLE



The pillar of Equity examines the political economy of exclusion from the perspective of the states and UTs. The pillar subsumes all the five themes of PAI 2020 and uses 23 component indicators to assess performance on equity along three dimensions-economic, social and gender.

Key Findings

- There exists varying degrees of equity amongst states and UTs
- Performance in equity parameters has increased positively across all states and UTs in India
- Contrary to PAI 2019, the overall performance of the large states is significantly influenced by their performance in the Equity pillar
- In the case of small states, equity scores are not a driving factor in influencing the overall ranking. This is a marked shift from the findings in PAI 2019. In the Union Territories as well, overall performance is not influenced by equity parameters
- In the large states, SDGs 3, 10 and 16 show a strong positive correlation in influencing performance in the Equity pillar. While SDG 16 covers indicators on crimes against women, children and social minorities, proportion of under trials, SDG 3 covers Infant Mortality Rates and female worker population ratio
- For the small states, the SDGs that significantly influence equity include SDGs 11, 16 and 10. Interestingly, the indicators of crimes (SDG 16) and female worker population (SDG 10) that were significant in the case of large states appear to be significant in the case of small states as well with the addition of populations living in urban slums under SDG 11
- For Union Territories, gender parity in elementary education, covered under SDG 5 and disposal of cases of corruption, under SDG 16 significantly influence performance in the Equity pillar





Heat Map - Large states

Andhra Pradesh ranks first among the large states (0.651), closely followed by Kerala (0.628). It is interesting to note the gap between Kerala (ranked 2nd) and Chhattisgarh (ranked 3rd with a score of 0.259), is considerably large. Tamil Nadu which is second in terms of the overall PAI ranking features 5th. Andhra Pradesh, which ranks 1st in 2020, was 9th in the previous year, a sharp improvement. Similar to 2019, Bihar, Madhya Pradesh, Odisha and Haryana find themselves at the bottom of the rankings.



Rank		Large States	Index
•	1	Andhra Pradesh	0.652
•	2	Kerala	0.629
•	3	Chhattisgarh	0.26
•	4	West Bengal	0.134
•	5	Tamil Nadu	0.118
•	6	Maharashtra	0.004
۲	7	Punjab	-0.052
	8	Gujarat	-0.059
	9	Rajasthan	-0.226
	10	Assam	-0.279
۲	11	Telangana	-0.569
•	12	Karnataka	-0.609
•	13	Jharkhand	-0.64
•	14	Bihar	-0.891
•	15	Odisha	-1.155
•	16	Madhya Pradesh	-1.232
•	17	Haryana	-1.273
•	18	Uttar Pradesh	-1.844

Highest Index Value

Lowest Index Value

THE EQUITY PRINCIPLE



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Heat Map - Small States

The rankings in the Equity pillar for 2020 are similar to those in 2019. However, Meghalaya and Himachal Pradesh swapped places with each other, in 2020, with Meghalaya moving to first place with a score of 2.169 followed closely by Himachal Pradesh (2.020). Similar to the large states, there is a large gap in the scores of Himachal Pradesh at 2nd place and Manipur (1.504) at 3rd place. An interesting finding in the case of small states is the fact that almost all states have shown an improvement in the scores from the previous year. Delhi finds its place in the bottom of the ranking with a score of -1.600. There is also a considerable gap in the scores of Delhi (-1.600) and Mizoram (-0.237) indicating considerable inequity.







Heat Map - Union Territories

Chandigarh tops the ranking with a score of 1.348. This is followed by Puducherry where a considerable gap in score is observed between Jammu & Kashmir (0.593) and Puducherry (0.098). At the bottom of the rankings is Lakshadweep with a score of -1.717.



Rank	Union Territory	Index
• 1	Chandigarh	1.349
2	Daman & Diu	0.594
03	Jammu & Kashmir	0.56
04	Puducherry	0.099
5	Dadra & Nagar Haveli	-0.152
6	A & N Islands	-0.731
• 7	Lakshadweep	-1.718

Highest Index Value

Lowest Index Value

THE GROWTH IMPERATIVE



The Growth pillar dwells on India's growth challenge and the concerns that need attention for sustainable development. The pillar subsumes two themes and uses 20 component indicators to rank the performance of states and UTs on growth.

Key Findings

- The states that have performed well on the economic growth pillar are characterised by two features – firstly, they are technologically more advanced and secondly, their economic productivity is dispersed across a greater number of growth centres and a wider spectrum of activities
- The lesson that PAI 2020 points to is that, the rise in cumulative inequity is adversely affecting human capital accumulation in the backward states and especially in the disadvantaged populations
- All the states in the top 5 positions in the Growth index are South Indian states
- In the large states, the performance in growth contributes significantly towards the performance in the overall Index, even greater than PAI 2019
- Contrary to PAI 2019, in the small states too, growth is a significant contributor to overall performance with a strong positive correlation
- Among the Union Territories as well, the growth pillar has emerged as a strong influencing factor in the overall performance
- In the case of large states, strong positive correlations have emerged in 5 of the theme level SDGs covering SDGs including 3 (Good Health and Well Being), 4 (Quality Education), 6 (Clean Water and Sanitation), 7 (Clean and Affordable Energy) and 11 (Sustainable Cities and Communities). The strongest correlation is observed in the case of SDG 7
- Amongst the small states, a strong positive correlation is observed in the case of four theme level SDGs, namely SDG 6 Government Effectiveness and SDGs 8, 9 and 11 under the theme of Regulatory Quality. The strongest correlation coefficient was observed in the case of SDG 8 (Decent Work and Economic Growth) (0.799)
- In the case of Union Territories, only two SDGs appear strongly correlated which are SDG 6 and 7 under Government Effectiveness.

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Heat Map - Large states

In the case of the large states, Kerala continues to lead the way in terms of growth rankings. Closely following Kerala is Karnataka with a score of 1.219 which has moved up from third place in 2019. What is interesting is the fall of Haryana which was 2nd in the rankings in 2019 to 7th in PAI 2020 with a score of 0.562. Tamil Nadu, which featured 8th in 2019 has moved to 2nd place this year with a score of 1.159, closely trailing Karnataka. The bottom rankings are similar to 2019, with the states of Assam, Odisha, Bihar and Uttar Pradesh forming the bottom of the list, albeit with a shuffle in the positions as compared to the previous year.



THE GROWTH IMPERATIVE



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Heat Map - Small States

Goa retains the first ranking with a score of 1.933 which is a drop from the score of 2.154 in 2019. Following Goa is Himachal Pradesh (0.491) and what is worth noting is the gap between the scores of these two states, indicating an inequality in growth patterns. Delhi, which was 3rd in the 2019 rankings has now slipped to 4th place with Sikkim climbing up from 6th to 3rd in the rankings. Meghalaya which ranks 3rd in the overall rankings finds its place in the 9th position of 11 with a score of -0.419. The bottom positions remain occupied by Nagaland and Mizoram, similar to 2019.







Heat Map - Union Territories

Puducherry occupies the first rank with a score of 1.218 followed by Lakshadweep with a score of 1.064. A large gap can be observed between the scores of Lakshadweep at 2nd rank with 1.064 and Daman & Diu (0.363). Towards the bottom are the UTs of Andaman & Nicobar Islands, Dadra & Nagar Haveli and Jammu & Kashmir with scores in the negatives.



Rank	Union Territory	Index
• 1	Puducherry	1.219
2	Lakshadweep	1.065
03	Daman & Diu	0.364
• 4	Chandigarh	0.327
95	A & N Islands	-0.725
6	Dadra & Nagar Haveli	-0.909
• 7	Jammu & Kashmir	-1.34

Highest Index Value

Lowest Index Value

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SUSTAINABILITY AS AN ORGANISING PRINCIPLE



The Sustainability pillar analyses the access to and usage of resources that has an impact on environment, economy and humankind. The pillar subsumes two themes and uses 7 indicators to measure the effectiveness of government efforts with regards to sustainability.

Key Findings

- Contrary to PAI 2019, the top 5 ranks in the sustainability pillar are not from South India
- The parameters of sustainability significantly influence overall performance in large and small states and Union Territories
- In the case of large states, the indicators under SDG 11(0.862) focus on solid waste generation and waste management and pollution in cities. Closely following SDG 11 are the indicators under SDG 7 (0.605), which cover the consumption of renewable energy and usage of clean cooking fuel in households
- In the case of Union Territories, all the three SDGs have high correlation with the highest being with SDG 7 (0.859), followed by SDG 15 (0.700) which includes the indicators on forest and tree cover and the land degradation
- In the case of small states, only one SDG exhibits a high degree of correlation which is SDG 15 which has a correlation coefficient of 0.704, indicating that parameters on forest and tree cover and land usage are drivers of sustainability in the small states.





Heat Map - Large states

Karnataka which was 1st in the 2019 rankings has slipped to 5th this year with a significant drop in the scores from 1.45 in 2019 to 0.793 currently. Another similar drop is Andhra Pradesh which went from 4th in 2019 (0.471) to 7th (0.212) now. Kerala has jumped up a rank along with a significant increase in score (from 1.367 to 2.117). Tamil Nadu which was 3rd in 2019, has moved to 2nd this year with a score of 1.457. Chhattisgarh has moved up the ranking from 10th (-0.543) in 2019 to 4th position (0.840) this year. On the other hand, Bihar, which was 7th in last year's rankings has moved down to 14th this year with a score of -1.244, finding itself at the bottom of the rankings. At the bottom are the states of Bihar, Haryana, Odisha, Jharkhand and West Bengal.



R	ank	Large States	Index
•	1	Kerala	2.118
•	2	Tamil Nadu	1.458
•	3	Telangana	0.948
•	4	Chhattisgarh	0.841
•	5	Karnataka	0.793
•	6	Madhya Pradesh	0.23
•	7	Andhra Pradesh	0.231
	8	Maharashtra	0.16
	9	Gujarat	-0.294
	10	Punjab	-0.4
•	11	Rajasthan	-0.679
•	12	Assam	-0.708
•	13	Uttar Pradesh	-1.155
•	14	Bihar	-1.245
•	15	Haryana	-1.393
•	16	Odisha	-1.396
•	17	Jharkhand	-1.398
•	18	West Bengal	-1.641

Lowest Index Value

SUSTAINABILITY AS AN ORGANISING PRINCIPLE



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Heat Map - Small States

Goa, which was 5th in 2019, tops the rankings in 2020 with a score of 2.18 followed by Meghalaya which ranks 2nd. Manipur which ranked 2nd in 2019 finds itself in 8th position this year with a score of 0.053. Continuing the trend, Arunachal Pradesh which topped the rankings in 2019 finds itself at 9th in 2020 with a score of 0.018. Only 2 small states (Himachal Pradesh and Uttarakhand) have scores that are negative. One of the states that has made an improvement is Delhi which has moved from the bottom in 2019 to 5th in PAI 2020.







Heat Map - Union Territories

Chandigarh leads the rankings with a score of 1.498, Lakshadweep ranks 2nd with a score of 0.664. At the bottom of the rankings are the UTs of Dadra & Nagar Haveli and Daman & Diu with scores of -1.01 and -1.186 respectively.



Rank	Union Territory	Index
• 1	Chandigarh	1.498
2	Lakshadweep	0.665
93	A & N Islands	0.532
. 4	Puducherry	0.244
95	Jammu & Kashmir	-0.74
6	Dadra & Nagar Haveli	-1.011
• 7	Daman & Diu	-1.187

Highest Index Value	Lowest Index Value

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The Delta Analysis presents the results on state performance and ranking measured as the Delta value over the last five years from 2015-16 when the first PAI was released to 2019-20, covered by PAI 2020.

Key Findings

- In terms of Equity, Bihar followed by West Bengal, Odisha who feature towards the bottom of PAI 2020 are the top performers, while Kerala, Punjab and Maharashtra feature at the bottom amongst the large states
- In the case of small states, Mizoram is the top performer, while Goa is placed at the bottom
- In the Growth pillar, Bihar, Assam and Odisha showed the highest growth in delta, while Kerala and Karnataka and Uttar Pradesh featured among the bottom in the delta analysis with Tamil Nadu being at the bottom.
- Mizoram and Meghalaya have the highest growth with Manipur at the bottom. Himachal Pradesh ranks 2nd in PAI 2020, but has the least growth in Delta
- In terms of Sustainability, Odisha and Haryana, show the largest growth in delta. Tamil Nadu, Kerala and Karnataka have also shown consistent growth. Bihar, Gujarat, Maharashtra and Assam find places towards the bottom of the Delta rankings
- Goa is a consistent top performer followed by Delhi and Tripura. Meghalaya and Mizoram feature at the bottom.

THE STATE OF THE STATES

The State of the States measures inter-state disparities and shows that some of the states are not in a position to participate in competitive federalism, quite simply, because they are hobbled by resource constraints - capital and human resources - rooted in endemic poverty and chronic backwardness.

Key Findings

- Most of the North-eastern states like Meghalaya, Sikkim and Tripura are included in the high performing states classification
- Crimes against women (total number of rapes per 10 lakh population) has a negative relationship with growth
- The female worker population ratio has a negative relationship with growth, indicating that economies are growing at the cost of widening gender disparities in high performing states. This is also seen in poor performing states
- Agriculture distress is still persistent in high performing states as well as poor performing states
- Rural indebtedness is increasing with increase in sustainability with a positive correlation between rural indebtedness and farmer suicides
- Increase in the state's own tax revenue growth is affecting equity negatively.
- Reliance on agriculture is not reflected in the budgetary allocation towards agriculture and allied services by the government
- 1% increase in the rape cases in these states result in a 272% fall in the Growth index
- The high, middle and poor performing states are following a path of convergence. Female labour force participation is a driving force.



THE SENSE OF AN ENDING

Alluding to the need for development that results in economic progress while being inclusive and ecologically secure, PAI 2020 places equal importance on the three pillars of Equity, Growth and Sustainability. Taking into account the various facets of governance, the PAI 2020 rankings aim to hold up a mirror to the progress made by the states and UTs while providing direction on the potential areas of intervention.

To provide a Pan-India perspective, PAI 2020 presents a Cluster Analysis.



Cluster 1 includes the states of Kerala, Goa, Himachal Pradesh, Delhi, Maharashtra, Andhra Pradesh, Telangana, Gujarat, Rajasthan, Karnataka, Tamil Nadu, Punjab, Haryana, Uttarakhand, Madhya Pradesh, Sikkim and Chhattisgarh. This cluster has a mix of large states and small states where most of the large states are on the list of better performers in PAI 2020. Cluster 1 performs above average in 17 indicators under the growth pillar as compared to

the 11 indicators under equity, which shows that this cluster is highly growth driven. These states have also seen a moderately better performance in the 4 out of 5 indicators under sustainability. As compared to the results in PAI 2019, additions in this cluster include states like Madhya Pradesh which have moved from the third cluster.

Cluster 2 mostly includes small states, namely, Arunachal Pradesh, Manipur, Meghalaya, Nagaland, Tripura, Mizoram and Assam; all from the North East. This cluster is highly equity driven with the states performing above average in 16 of the 23 indicators as compared to only 5 indicators in the Growth pillar. However, in sustainability this cluster proves to be lagging with above average performance in only 2 out of 7 Sustainability pillar indicators. This is a stark shift from the results in PAI 2019 where this cluster was sustainability driven.

Cluster 3 consists of Uttar Pradesh, Bihar, Jharkhand, Odisha and West Bengal. These states are the same states which have ranked towards the end in PAI 2020. In this cluster, only 8 out of 23 indicators in the equity pillar, 6 out of 20 indicators in the growth pillar and 1 out of 7 indicators in the sustainability pillar are indicators where the states perform above average. Interestingly, most of the Aspirational districts that have been identified by the NITI Aayog fall within this particular cluster, similar to last year.

This raises a concern on the performance of these states over time.



Heat Map - Large States

Kerala tops the rankings yet again, followed closely by Tamil Nadu. While Kerala has improved performance in PAI 2020 with a score of 1.388 as compared to 1.011 in PAI 2019, Tamil Nadu's score has slipped from 0.823 in PAI 2019 to 0.912 in PAI 2020. Following Kerala and Tamil Nadu are Andhra Pradesh (0.531) and Karnataka (0.468) which are placed third and fourth respectively. Both Andhra Pradesh and Karnataka have shown an improvement in performance in PAI 2020. It is interesting to note that continuing with the trend established in PAI 2019, the top four states in PAI 2020 are South Indian states. Haryana, Jharkhand, Bihar, Odisha and Uttar Pradesh, which is similar to PAI 2019, feature at the bottom of the rankings.



Heat Map - Small States

Kerala tops the rankings yet again, followed closely by Tamil Nadu. While Kerala has improved performance in PAI 2020 with a score of 1.388 as compared to 1.011 in PAI 2019, Tamil Nadu's score has slipped from 0.823 in PAI 2019 to 0.912 in PAI 2020. Following Kerala and Tamil Nadu are Andhra Pradesh (0.531) and Karnataka (0.468) which are placed third and fourth respectively. Both Andhra Pradesh and Karnataka have shown an improvement in performance in PAI 2020. It is interesting to note that continuing with the trend established in PAI 2019, the top four states in PAI 2020 are South Indian states. Haryana, Jharkhand, Bihar, Odisha and Uttar Pradesh, which is similar to PAI 2019, feature at the bottom of the rankings.



PAI

Heat Map - Union Territories

Chandigarh emerges as the top performer with a score of 1.057. As seen in the large and the small states, there is a considerable gap in scores between Chandigarh and Puducherry (0.520), which is ranked second. At the bottom of the rankings is Jammu & Kashmir (-0.506) followed by Dadra & Nagar Haveli (-0.690).



Rank	Union Territory	Index
• 1	Chandigarh	1.058
2	Puducherry	0.521
. 3	Lakshadweep	0.004
. 4	Daman & Diu	-0.077
95	A & N Islands	-0.308
6	Jammu & Kashmir	-0.507
• 7	Dadra & Nagar Haveli	-0.691

Highest Index Value

Lowest Index Value

Measuring governance is a challenge. This issue becomes increasingly complex especially in a diverse country like India, where each state is socially, culturally, economically and politically different. PAC thus identified three broad pillars namely Growth, Equity and Sustainability that encapsulate governance. From a development perspective, it is axiomatic that there must be synergies between all the three pillars. It is impossible to believe that two of the three pillars are enough, growth and sustainability without equity; growth and equity without sustainability; equity and sustainability without growth. **PAI 2020** is an amalgamation of 3 Pillars, 5 Themes, 13 SDGs and 50 indicators.

PAI is a conscious effort to present a scientifically sound, methodologically rigorous, and practically useful data-based framework to measure the quality of governance in the states of India, and rank them.



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