Beti Bachao Beti Padhao

Insights from Ranking of Key Performance Indicators, NFHS 2015–16 and NFHS 2019–21

INDIA POLICY insights

If you can see a problem, you can solve it.

Introduction

The Beti Bachao Beti Padhao (BBBP) initiative, launched in 2015, addresses gender inequality and women's empowerment. The 'Save the Girl Child, Educate the Girl Child' initiative seeks to educate residents about gender prejudice and enhance the effectiveness of social programmes for girls. Following continued reductions in the Child-Sex Ratio (CSR) in various Indian districts, the necessity for action became clear. CSR is the number of females per 1,000 boys in the 0–6-year age group. Gender inequality, women's disempowerment, and the neglect of girls' nutritional and educational requirements in India are all reflected in these dropping numbers.

The BBBP programme also seeks to eliminate gender disparities in child survival by ensuring comprehensive and meaningful participation of girls in the community. This initiative's primary goals are to avoid gender-based sex-selective elimination, ensure girls' survival and safety, and ensure their education and involvement in society. A variety of quantitative criteria are used to track the BBBP. Sex ratio at birth, gender differences in under-five mortality, early pregnancy registration, institutional births, and birth registration are some of the primary metrics under Beti Bachao. The Beti Padhao component focuses on female school enrolment, dropout prevention, and the Samagra Shiksha plan to provide proper and high-quality education from pre-school to senior secondary.

Objective

"Once a problem can be seen, it can be solved." With this motivation, this policy brief aims to present an overview of key performance indicators (KPIs) in the Beti Bachao Beti Padhao programme. For this purpose, we offer a KPI Index of state and district rankings to facilitate a rapid review of the BBBP to date and promote awareness of the programme across states and districts. This effort is part of the broader objective of the India Policy Insights (IPI) team to promote evidence-based policy deliberation, formulation and action using its comprehensive online geo-visual data platform.

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Data and Method

This analysis uses data from the National Family Health Survey (NFHS 2019–21 and NFHS 2015–16), which provides a diverse range of salient indicators for reviewing the performance of India's developmental policies and programmes. The following method was used to calculate the Key Performance Indicators (KPI) for the BBBP. The first step was reviewing and selecting the indicators most relevant for the BBBP. Second, we identified which indicators were available for both NFHS 2015–16 and NFHS 2019–21 and determined whether they were available for most districts. Indicators that met both criteria were then selected and are listed as follows:

- Sex ratio at birth for children born in the last five years (females per 1,000 males)
- Mothers who had an antenatal check-up in the first trimester (%)
- Institutional Births (%)
- Female School Attendance (Female population age six years and above who attended school (%))
- 10 or more years of schooling (Women with ten or more years of schooling) (%)

These selections reflect the core challenges in BBBP with a focus on women and girls. All indicators are transformed in the same direction (either positive or negative). To develop the KPI index, these indicators were then normalised to enable the comparison of districts across multiple indicators: states and districts were given a value between 0 and 1, with 0 being allotted to the lowest-performing district/state and 1 to the highest-performing district/state. Each indicator was normalised using the standard min-max method. After repeating this process for every indicator, the KPI for a district/state was calculated by taking a simple average of the normalised values for each indicator.

To review the district-level distribution of prevalence for each indicator, we also present a box plot based on NFHS 2019-21. To identify which indicators were *slow-moving*, the difference between the median for each indicator's values can be compared in the box plot. The indicators with the lowest median values are among the *slow-moving* indicators.

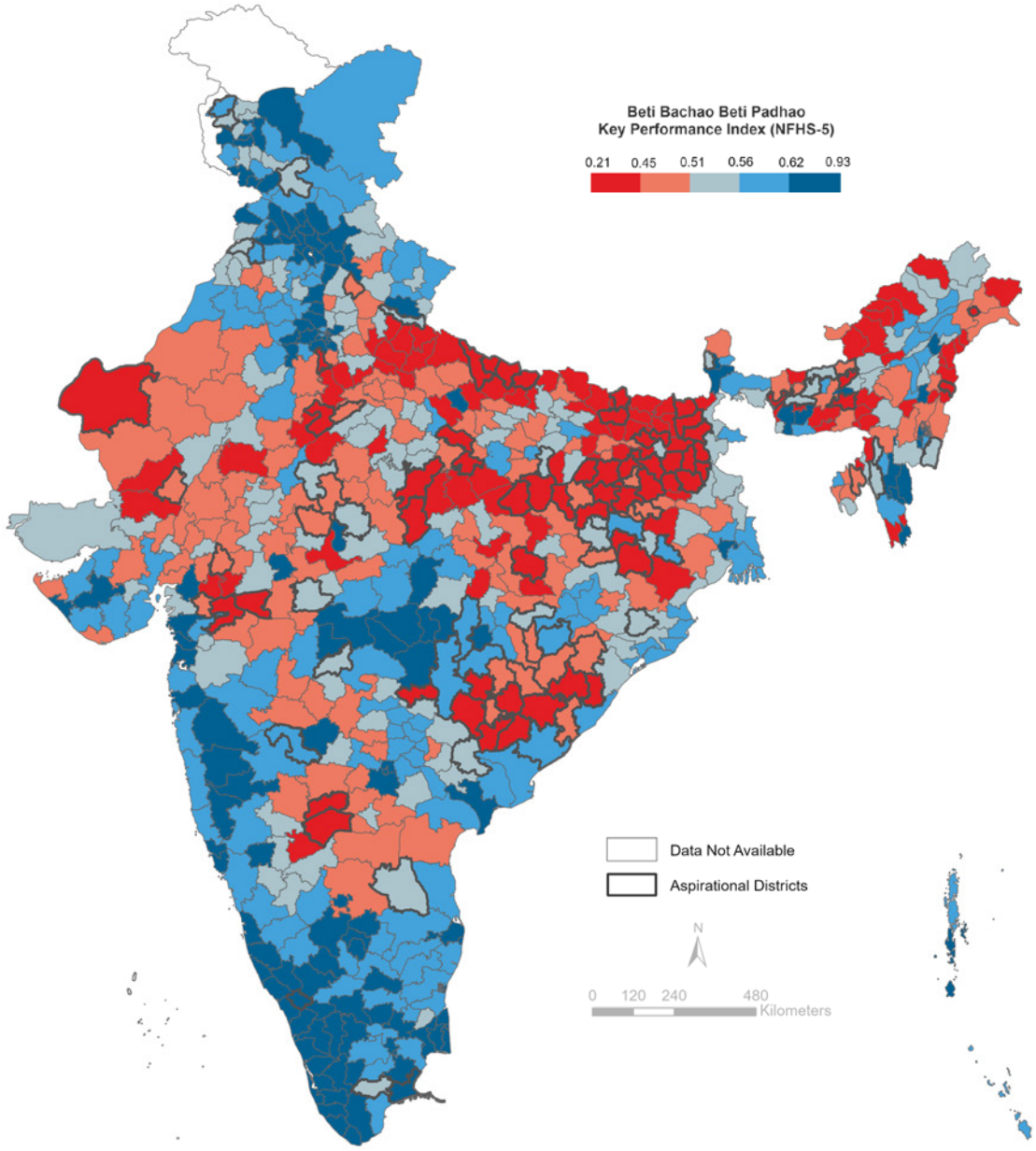
Table 1: BBBP KPI Index Values and Rankings for the Indian States, NFHS 2019–21.

State	2015–16		2019–21		Rank Change
	KPI	Rank	KPI	Rank	
Kerala	1.000	1	0.863	1	= 0
Goa	0.782	2	0.638	2	= 0
Mizoram	0.621	5	0.626	3	▲ 2
Tamil Nadu	0.650	3	0.587	4	▼ -1
Manipur	0.608	6	0.571	5	▲ 1
Sikkim	0.522	11	0.564	6	▲ 5
Himachal Pradesh	0.630	4	0.561	7	▼ -3
Karnataka	0.548	9	0.550	8	▲ 1
Haryana	0.437	19	0.546	9	▲ 10
Maharashtra	0.574	8	0.538	10	▼ -2
Punjab	0.590	7	0.528	11	▼ -4
Uttarakhand	0.426	20	0.508	12	▲ 8
Gujarat	0.507	13	0.496	13	= 0
West Bengal	0.443	18	0.492	14	▲ 4
Andhra Pradesh	0.500	14	0.480	15	▼ -1
Telangana	0.508	12	0.478	16	▼ -4
Tripura	0.525	10	0.473	17	▼ -7
Odisha	0.444	17	0.429	18	▼ -1
Madhya Pradesh	0.361	22	0.420	19	▲ 3
Assam	0.408	21	0.418	20	▲ 1
Chhattisgarh	0.455	16	0.404	21	▼ -5
Rajasthan	0.338	23	0.389	22	▲ 1
Uttar Pradesh	0.316	24	0.369	23	▲ 1
Meghalaya	0.484	15	0.363	24	▼ -9
Arunachal Pradesh	0.277	27	0.362	25	▲ 2
Nagaland	0.289	26	0.302	26	= 0
Jharkhand	0.303	25	0.296	27	▼ -2
Bihar	0.226	28	0.207	28	= 0
Union Territories (UTs)					
Lakshadweep	0.781	1	0.902	1	= 0
Puducherry	0.666	3	0.717	2	▲ 1
Ladakh	0.458	8	0.668	3	▲ 5
Chandigarh	0.728	2	0.618	4	▼ -2
NCT of Delhi	0.517	6	0.614	5	▲ 1
A & N Islands	0.606	4	0.609	6	▼ -2
Jammu & Kashmir	0.504	7	0.581	7	= 0
DNH & DD	0.587	5	0.425	8	▼ -3

Table 2a: 10 Highest Ranking Districts (as per NFHS 2019–21)	2015–16		2019–21	
	KPI	Rank	KPI	Rank
Alappuzha, Kerala	0.861	4	0.932	1
Mahe, Puducherry	0.823	12	0.919	2
Kollam, Kerala	0.817	13	0.870	3
Kozhikode, Kerala	0.825	11	0.867	4
Ernakulam, Kerala	0.916	1	0.854	5
Pathanamthitta, Kerala	0.859	6	0.830	6
Thiruvananthapuram, Kerala	0.845	9	0.821	7
Kannur, Kerala	0.847	8	0.797	8
Thrissur, Kerala	0.875	3	0.793	9
Kasaragod, Kerala	0.780	16	0.792	10

Table 2b: 10 Lowest Ranking Districts (as per NFHS 2019–21)	2015–16		2019–21	
	KPI	Rank	KPI	Rank
Saharsa, Bihar	0.316	663	0.277	695
Katihar, Bihar	0.274	686	0.274	696
Purba Champaran, Bihar	0.235	696	0.265	697
Tuensang, Nagaland	0.314	665	0.262	698
Araria, Bihar	0.303	673	0.249	699
Kishanganj, Bihar	0.258	693	0.246	700
Mon, Nagaland	0.187	702	0.234	701
Purnia, Bihar	0.332	654	0.234	702
Kiphire, Nagaland	0.312	668	0.230	703
Bahraich, Uttar Pradesh	0.214	700	0.215	704

Map 1: Beti Bachao Beti Padhao Abhiyaan KPI Index Values and Rankings for Indian Districts, NFHS 2019-21



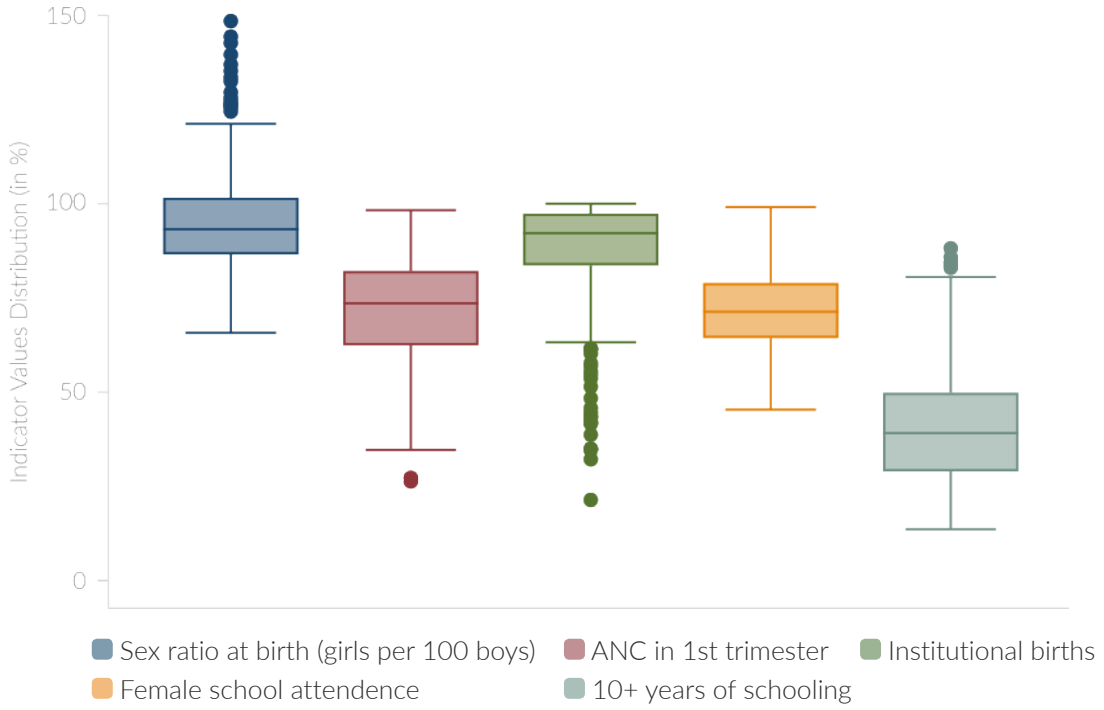
Key Findings

Kerala (KPI 0.863), Goa (0.638) and Mizoram (0.626) are among the best performing states in the BBBP KPI index for NFHS 2019–21 (Table 1). In contrast, Bihar (0.207), Jharkhand (0.296), and Nagaland (0.302) have relatively low KPI index values and are at the bottom of the state-level rankings. In NFHS 2015–16, Kerala and Bihar both held the same rank of highest and lowest performing states, respectively. For a change in KPI index rank, Haryana shows a gain of 10 places, followed by Uttarakhand and Sikkim, increasing eight and five places, respectively. Conversely, Meghalaya and Tripura slip in their rankings by nine and seven places, respectively. Among union territories, Lakshadweep (0.902) and Dadra and Nagar Haveli and Daman and Diu (0.425) were the highest and lowest performers in 2019–21.

The district-level KPI index rankings for NFHS 2019–21 are led by the Alappuzha district of Kerala (0.932), followed by the Mahe (0.919) district of Puducherry and the Kollam (0.870) district of Kerala (Table 2a). With a KPI index value of 0.215, the Bahraich district in Uttar Pradesh places at the bottom of the district level rankings (Table 2b). It is followed by the Kiphire district (0.230) from Nagaland and Purnia district (0.234) from Bihar as two other low performers. Except for Mahe, all of the top ten districts are from Kerala. Notably, four of the top ten districts are from Manipur. In contrast, six of the ten poorest-performing districts are from Bihar.

Finally, among the five KPIs reviewed here, the indicator *women with ten or more years of schooling* shows the highest disparities across districts (standard deviation of 14.2).

Figure 1: Box plot for distribution of prevalence of key indicators across districts, NFHS 2019–21



Note: The median value is denoted by the horizontal line in the box. The lower and upper end of the box represents 25th and 75th percentile, respectively. Whisker lengths are suggestive of distribution bias towards lower or upper end.

Conclusion and Recommendations

- Wide inter-state and inter-district variations of the BBBP program are notable features emerging from NFHS 2019–21. Progress under the program would entail eliminating these geographical differences in key indicators. While monitoring these indicators is predominantly under the purview of the state governments, the union government can also make a note of such variations and provide extra support to poor performing states and districts to bridge the gap in KPIs.
- Promoting and sustaining household commitments to female education is an unfinished agenda. Even among the best performing states, such as Kerala, almost one-fourth of females do not report enrolment matriculation (10+ years of schooling). Dropouts in female schooling are a matter of concern across several states and districts and should be a priority for policymaking under the BBBP program.
- Sex ratio imbalances at the state level have long been emphasised as a policy concern. However, intra-state variations are also an important area for policy interventions. Any identified imbalances should be reviewed carefully, especially at the block and village levels. For instance, the highly female-biased sex ratio at birth in the Alappuzha district (1485) of Kerala and the highly male-biased sex ratio at birth of Satna district (658) in Madhya Pradesh should be of equal concern in gender development. They should be examined at the sub-district level.

Contributions

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