

Partnerships and Opportunities to Strengthen and Harmonize Actions for Nutrition in India

Data Note

No. 50 | SEPTEMBER 2021

State Nutrition Profile: Meghalaya

ABOUT THIS DATA NOTE

This Data Note describes the trends for a set of key nutrition and health outcomes, determinants, and coverage of interventions. The findings here are based on data from the National Family Health Survey (NFHS) 3 (2005-2006), 4 (2015-2016), and 5 (2019-2020). In addition to standard prevalence-based analyses, this Data Note includes headcount-based analyses aligned to the POSHAN Abhiyaan monitoring framework and uses data from NFHS-5 to provide evidence that helps identify priority districts and number of districts in the state with public health concern as per the WHO guidelines.¹ The Data Note includes a color-coded dashboard to compare the coverage of nutrition interventions across all the districts in the state. It concludes with key takeaways for children, women, and men and identifies areas where the state has potential to improve.

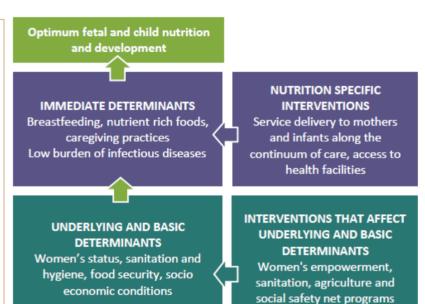
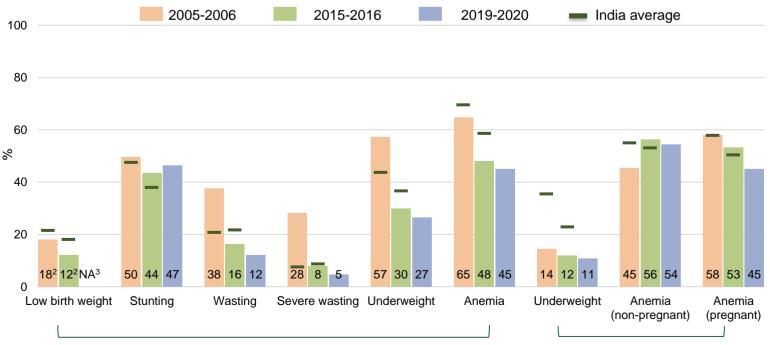


Figure 1. Trends in undernutrition outcomes 2005-2006, 2015-2016, 2019-2020



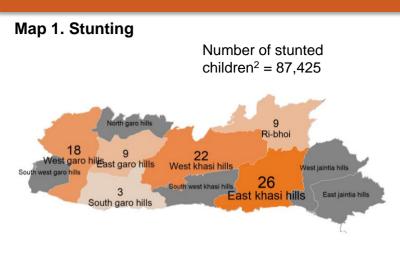
Undernutrition among children (<5y)

Undernutrition among women (15-49y)

Source: NFHS-3 (2005-2006), NFHS-4 (2015-2016), and NFHS-5 state factsheets (2019-2020). Note: Adult nutrition outcomes are based on the woman dataset, while child nutrition outcomes are based on all child data. ¹WHO. Nutrition Landscape Information System (NLiS). Help Topic: Malnutrition in children. (<u>https://apps.who.int/nutrition/landscape/help.aspx?menu=0&helpid=391&lang=EN</u>). ²In NFHS-3, 59.7% of data was missing, while 35.1% of data was missing in NFHS-4. ³NA refers to the unavailability of data for a particular indicator in the specified NFHS round.

MEGHALAYA

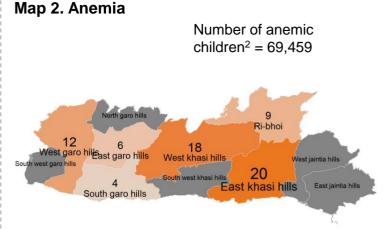
Map 1 & 2. Number of stunted & anemic children <5y, 2019-2020



Note: Number in '000s in the above figure

Highest burden districts			
1	East Khasi Hills	25,673	
2	West Khasi Hills	21,612	
3	West Garo Hills	18,036	
4	East Garo Hills	9,336	
5	Ri Bhoi	9,303	
of districts with public health concorn ¹ : 11 of 11			

No. of districts with public health concern¹: 11 of 11



Note: Number in '000s in the above figure

	Highest burden districts				
1	East Khasi Hills	20,167			
2	West Khasi Hills	18,493			
3	West Garo Hills	12,387			
4	Ri Bhoi	8,987			
5	East Garo Hills	5,915			
of districts with public health concern1. 5 of 11					

No. of districts with public health concern¹: 5 of 11

Map 3 & 4. Number of wasted children <5y, 2019-2020

Map 3. Wasting

Number of wasted children² = 26,953



Note: Number in '000s in the above figure

Highest burden districts			
1	East Khasi Hills	25,673	
2	West Khasi Hills	21,612	
3	West Garo Hills	18,036	
4	East Garo Hills	9,336	
5	Ri Bhoi	9,303	

No. of districts with public health concern¹: 8 of 11

Map 4. Severe Wasting

Number of severely wasted children² = 10,079



Note: Number in '000s in the above figure

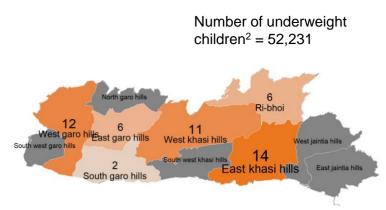
Highest burden districts			
1	East Khasi Hills	2,821	
2	West Garo Hills	2,146	
3	Ri Bhoi	1,642	
4	East Garo Hills	1,458	
5	South Garo Hills	1,023	

No. of districts with public health concern¹: 11 of 11

Source: IFPRI estimates - The headcount was calculated as the product of the undernutrition prevalence and the total eligible projected population for each district in 2019. Prevalence estimates were obtained from NFHS-5 (2019-2020; all child data) and projected population for 2019 was estimated using Census 2011. Note: Gray area in Maps 1-4 indicates districts for which data are not available.¹Public health concern is defined as \geq 20% for stunting, \geq 40% for anemia , \geq 10% for wasting, and \geq 2% for severe wasting (WHO 2011). ²The total number of children <5 years is 235,352.

Map 5 & 6. Number of underweight children (<5y) & women (15-49y), 2019-2020

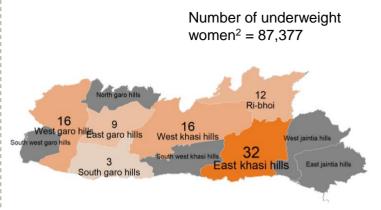
Map 5. Underweight children



Note: Number in '000s in the above figure

Highest burden districts				
1	East Khasi Hills	13,700		
2	West Garo Hills	12,008		
3	West Khasi Hills	11,392		
4	Ri Bhoi	6,480		
5 East Garo Hills 6,232				
No. of districts with public health concern ¹ : 10 of 11				

Map 6. Underweight women

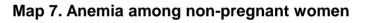


Note: Number in '000s in the above figure

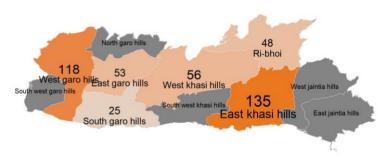
	Highest burden districts	;
1	East Khasi Hills	32,196
2	West Garo Hills	15,869
3	West Khasi Hills	15,821
4	Ri Bhoi	11,995
5	East Garo Hills	8,664

No. of districts with public health concern¹: 5 of 11

Map 7 & 8. Number of anemic women (15-49y), 2019-2020



Number of non-pregnant anemic women² = 434,947



Note: Number in '000s in the above figure

Highest burden districts				
1	East Khasi Hills	134,611		
2	West Garo Hills	117,882		
3	West Khasi Hills	56,458		
4	East Garo Hills	53,102		
5	Ri Bhoi	48,136		

No. of districts with public health concern¹:11 of 11

Map 8. Anemia among pregnant women

Number of pregnant anemic women² = 53,016



Note: Number in '000s in the above figure

Highest burden districts				
1	East Khasi Hills	26,368		
2	West Khasi Hills	6,713		
3	Ri Bhoi	5,641		
4	West Garo Hills	4,483		
5	South West Khasi Hills	2,563		

No. of districts with public health concern¹: 7 of 11

Source: IFPRI estimates - The headcount was calculated as the product of the undernutrition prevalence and the total eligible projected population for each district in 2019. Prevalence estimates were obtained from NFHS-5 (2019-2020; all child/woman data) and projected population for 2019 was estimated using Census 2011. Note: Gray area in Maps 5-8 indicates districts for which data are not available. ¹Public health concern is defined as \geq 20% for underweight (children), \geq 10% for underweight (women), \geq 40% for anemia among non-pregnant women, and \geq 40% for anemia among pregnant women (WHO 2011). ²The total number of children <5 years is 235,352, pregnant women 15-49 years is 142,416, and non-pregnant women 15-49 years is 787,359.

Figure 2. Trends in overweight/obesity & NCDs² 2005-2006, 2015-2016, 2019-2020

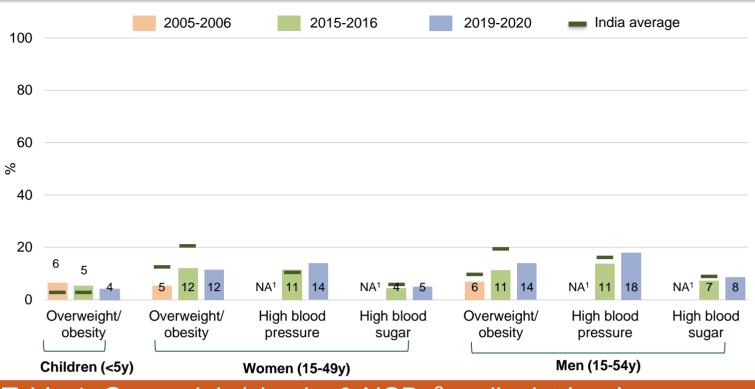


Table 1. Overweight/obesity & NCDs² at district-level2015-2016, 2019-2020

Category	Outcomes	Worst performing districts (pp) ⁴	Best performing districts (pp) ⁴	Highest burden districts (thousands)⁵	No of districts with public health concern ⁶ (total=11)
		Difference between (2019-2020) & (2015- 2016) ³	Difference between (2019-2020) & (2015- 2016) ³	2019-2020	2019-2020
Children <5 years	Overweight/ obesity	East Khasi ⁷ : 0.7	Ribhoi: -2.0 South Garo ¹⁰ : -0.7	East Khasi ⁷ : 2 West Garo ⁸ : 2	0
	Overweight/ obesity	Ribhoi: +1.9	South Garo ¹⁰ : -7.2 East Khasi ⁷ : -1.0	East Khasi ⁷ : 43 West Garo ⁸ : 14	0
Women (15-49 years)	High blood pressure	East Khasi ⁷ : +7.6 South Garo ¹⁰ : +1.6	Ribhoi: -1.0	East Khasi ⁷ : 46 West Garo ⁸ : 29	0
	High blood sugar	South Garo ¹⁰ : +5.4 Ribhoi: +1.1	East Khasi ⁷ : -2.9	West Garo ⁸ : 15 East Khasi ⁷ : 7	0
	Overweight /obesity	Data not available a	t district-level		
Men (15-54 years)	High blood pressure	South Garo ¹⁰ : +6.0 East Khasi ⁷ : +5.0	Not applicable ³	East Khasi ⁷ : 54 West Garo ⁸ : 44	3
	High blood sugar	South Garo ¹⁰ : +9.6 Ribhoi: +0.4	East Khasi ⁷ : -7.6	West Garo ⁸ : 34 East Garo ⁹ : 122	0

Source: NFHS-3 (2005-2006), NFHS-4 (2015-2016), and NFHS-5 state and district factsheets (2019-2020). pp: percentage points

Note: Adult nutrition outcomes are based on the woman/man dataset, while child nutrition outcomes are based on all child data.

¹NA refers to the unavailability of data for a particular indicator in the specified NFHS round. ²NCDs : non-communicable diseases.

³Prevalence did not increase or decrease in any of the districts.

⁴The difference is calculated only between districts that are comparable between 2015-2016 and 2019-2020. Only the South Garo Hills, Ribhoi, and East Khasi Hills districts in Meghalaya are comparable between the two time periods.

⁵Burden: The headcount was calculated as the product of the overweight/obesity and NCDs prevalence and the total eligible projected population for each district in 2019. Prevalence estimates were obtained from NFHS-5 (2019-2020) and projected population for 2019 was estimated using Census 2011. ⁶Public health concern is defined as prevalence ≥15% for overweight/obesity (children), ≥20% for overweight/obesity (women and men), ≥ 20% high blood

pressure (women and men), and ≥20% high sugar (women and men). Source: WHO (2011).

District codes: East Khasi⁷: East Khasi Hills; West Garo⁸: West Garo⁹: East Garo Hills; South Garo¹⁰: East Garo Hills.

Figure 3. Trends in immediate determinants (%) 2005-2006, 2015-2016, 2019-2020

Category	Immediate determinants	2005-2006	2015-2016	2019-2020
	Early initiation of breastfeeding	59	63	79
	Exclusive breastfeeding	26	36	43
	Timely introduction of complementary foods ^o	46	72	67
IVCE prestings	Continued breastfeeding at 2 years	100	78	
IYCF practices	Adequate diet ^o	— 10	23	30
	Eggs and/or flesh foods consumption, 6-23m	32	53	
	Sweet beverage consumption, 6-23m	6	41	
	Bottle feeding of infants, 6-23m	18	29	
Maternal	Women with body mass index <18.5 kg/m2º	— 14	— 14	— 11
determinants	Consumed IFA 100+ days	6	38	43
Diseases	Diarrhea in the last two weeks ^o	6	12	1 0
DISEASES	ARI in the last two weeks ^o	2	• 7	5

Table 2. Immediate determinants at district-level 2015-2016, 2019-2020

Category	Immediate determinants	Worst performing districts (pp)2Best performing districts (pp)2		Top coverage districts (%) ¹
		Difference between (2019-2020) & (2015- 2016)	Difference between (2019-2020) & (2015-2016)	2019-2020
	Early initiation of breastfeeding	Not applicable ³	East Khasi Hills: +32.2 South Garo Hills: +21.4	West Jaintia⁴: 88.5 East Khasi Hills: 86.3
IYCF	Exclusive breastfeeding	East Khasi Hills: -9.3	Ribhoi: +2.7	SW Khasi⁵: 54.4 East Jaintia Hills: 50.5
practices	Timely introduction of complementary foods ⁰	Ribhoi: -3.7	Not applicable ³	West Jaintia⁴: 77.7 SW Khasi⁵: 65.6
	Adequate diet ^o	South Garo Hills: -12.7	Ribhoi: +8.2 East Khasi Hills: +7.1	East Garo Hills: 43.9 Ribhoi: 37.3
Maternal determinants	Women with BMI<18.5 kg/m2⁰	South Garo Hills: +3.7	East Khasi Hills: -2.5 Ribhoi: -2.1	North Garo Hills: 7.7 West Garo Hills: 7.7
Geterminants	Consumed IFA 100+ days	East Khasi Hills: -20.4	South Garo Hills: +21.4 Ribhoi: +3.9	SW Khasi⁵: 53.8 South Garo Hills: 51.6
Diseases	Diarrhea in the last two weeks ⁰	East Khasi Hills: +2.2	South Garo Hills: -21.5 Ribhoi: -6.2	South Garo Hills: 5.4 North Garo Hills: 6.6
	ARI in the last two weeks ⁰	East Khasi Hills: +2.3	South Garo Hills: -12.1 Ribhoi: -2.2	North Garo Hills: 0.9 East Garo Hills: 1.6

pp: percentage points. Source: NFHS-3 (2005-2006), NFHS-4 (2015-2016), and NFHS-5 state and district factsheets and state reports (2019-2020). Note: : Immediate determinants are based on the last child data; data on continued breastfeeding at 2 years, egg and/or flesh foods consumption, sweet beverage consumption, and bottle feeding of infants not available in NFHS-5 factsheets (2019-20)/state report Indicator definition differs slightly between NFHS-4 and NFHS-5. ¹For all indicators, top coverage districts refer to the districts with the highest prevalence in

^oIndicator definition differs slightly between NFHS-4 and NFHS-5. ¹For all indicators, top coverage districts refer to the districts with the highest prevalence in immediate determinants, except for women with a BMI of 18.5 kg/m2, diarrhea in the last two weeks, and ARI in the last two weeks, for which it refers to the districts with the lowest prevalence in coverage. ²The difference is calculated only between districts that are comparable between 2015-2016 and 2019-2020. Only the South Garo Hills, Ribhoi, and East Khasi Hills districts in Meghalaya are comparable between the two time periods.

³Prevalence did not increase or decrease in any of the districts.

District codes: West Jaintia⁴: West Jaintia Hills; SW Khasi⁵: South West Khasi Hills.

Figure 4. Trends in underlying determinants (%) 2005-2006, 2015-2016, 2019-2020

Category	Underlying determinants	2005-2006	2015-2016	2019-2020
	Women who are literate ^o	59	80	88
Maternal	Women with ≥10 years education⁰	— 14	24	35
determinants	Girls 20-24 years married before age of 18 years ^o	51	41	17
	Women 15-19 years with child or pregnant		9	7
	HHs with improved drinking water source ^o	58	69	79
	HHs with improved sanitation facility ^o	32	57	83
	HHs with hand washing facility		89	
Household determinants	Open defecation ^o	39	— 11	4
	Safe disposal of feces	32	36	
	HHs with BPL card ^o	9	20	56
	HHs with electricity ^o	62	88	92

Table 3. Underlying determinants at district-level2015-2016, 2019-2020

Category	Underlying determinants	Worst performing districts (pp) ²	Best performing districts (pp) ²	Top coverage districts (%) ¹
		Difference between (2019-2020) & (2015- 2016)	Difference between (2019-2020) & (2015-2016)	2019-2020
	Women who are literate ⁰	Not applicable ³	Ribhoi: +15.7 South Garo Hills: +3	East Khasi Hills: 93.7 Ribhoi: 89.5
Maternal	Women with ≥10 years education⁰	South Garo Hills: -8.9	East Khasi Hills: +13.5 Ribhoi: +12.8	West Garo Hills: 45.1 East Khasi Hills: 43.5
determinants	Girls 20-24 years married before age of 18 years ^o	Not applicable ³	South Garo Hills: -28.2 Ribhoi: -23.5	South Garo Hills: 10.2 West Garo Hills: 10.4
	Women 15-19 years with child or pregnant	East Khasi Hills: +2.2	Ribhoi: -4.1 South Garo Hills: -4.0	West Garo Hills: 1.0 South Garo Hills: 1.1
	HHs with improved drinking water source ⁰	South Garo Hills: -16.4	Ribhoi: +13.6 East Khasi Hills: +7.3	East Khasi Hills: 90.0 Ribhoi: 86.2
Household determinants	HHs with improved sanitation facility ⁰	South Garo Hills: -0.1	Ribhoi: +27.6 East Khasi Hills: +20.3	South West Khasi Hills: 89.6 South Garo Hills: 88.4
	HHs with electricity ⁰	Not applicable ³	Ribhoi: +8.6 East Khasi Hills: +3.5	South Garo Hills: 98.6 East Garo Hills: 96.6

pp: percentage points Source: NFHS-3 (2005-2006), NFHS-4 (2015-2016), and NFHS-5 state and district factsheets and state reports (2019-2020). Note: Underlying determinants are based on the last child data; safe disposal of feces not available in NFHS-5 factsheets (2019-20)/state report and data on HHs with hand washing facility not available in NFHS-3 (2005-06) and NFHS-5 factsheets (2019-20)/state report. Data on open defecation and HHs with BPL card for 2019-2020 are taken from NFHS-5 state reports.

⁰Indicator definition differs slightly between NFHS-4 and NFHS-5.¹For all indicators, top coverage districts refer to the districts with the highest prevalence in underlying determinants, except for girls 20-24 years married before age of 18 years and women 15-19 years with child or pregnant for which it refers to the districts with the lowest prevalence in coverage. ²The difference is calculated only between districts that are comparable between 2015-2016 and 2019-2020. Only the South Garo Hills, Ribhoi and East Khasi Hills districts in Meghalaya are comparable between the two time periods.

³Prevalence did not increase or decrease in any of the districts.

Figure 5. Trends in coverage of interventions across the first 1,000 days (%), 2005-2006, 2015-2016, 2019-2020

	Intervention	2005-2006	2015-2016	2019-2020
	Demand for FP satisfied	32	49	41
	lodized salt ^o	97	99	91
сy	Any ANC visits	68	85	
าลท	ANC first trimester	33	54	54
egi	≥ 4ANC	43	50	52
рг	Received MCP card	32	78	93
ing	Received IFA tab/syrup	55	81	85
dur	Tetanus injection	54	75	82
p	Deworming	3	• 4	8
an	Weighing	55	81	98
ъ С	Birth preparedness counselling	0	• 1	
Pre-pregnancy and during pregnancy	Breastfeeding counselling	— 12	41	88
6a.	Counselling on keeping baby warm		85	89
p	Cord care counselling		32	72
Pre	Food supplementation ^o	— 14	53	54
	Health & nutrition education ^o	— 1 0	30	39
	Malaria prevention- use of bed nets		87	
	Institutional birth ^o	32	55	58
오_	Financial assistance (JSY)		— 15	23
' ar ata	Skilled birth attendant ^o	34	57	64
elivery and oost-natal	Postnatal care for mothers	27	47	44
eliv Sos	Postnatal care for babies	• 1	9	45
De De	Food supplementation ^o	— 14	49	50
	Health & nutrition education ^o	— 11	29	3 6
	Full immunization ^o	32	62	64
	Vitamin A ^o	— 16	5 3	61
	Pediatric IFA ^e	6	32	33
ро	Deworming ^o	— 17	28	2 7
Childhood	Care seeking for ARI ^o	54	7 5	7 3
ild	ORS during diarrhea ^o	63	77	7 3
บี	Zinc during diarrhea ^o	0	5 9	41
	Food supplementation (6-35 months)	23	5 7	
	Weighing	— 11	39	4 9
	Counselling on child growth	9	2 1	61

Source: NFHS-3 (2005-2006), NFHS-4 (2015-2016) & NFHS-5 state factsheets and state reports (2019-2020).

⁰Indicator comparable between NFHS-3 and NFHS-4 but differs slightly from NFHS-5.

Note 1 : Interventions' coverage is based on the last child data.

Note 2: The following information is not available in the NFHS-5 factsheets and state reports (2019-20): receipt of at least one ANC visit, birth preparedness counselling, malaria prevention and food supplementation (6-35m). Information on use of bed nets during pregnancy is not available in NFHS-3 data (2006). Note 3: Data on food supplementation and health and nutrition education during pregnancy and post-natal care, and weight measurement during childhood and counselling on child growth for 2019-2020 are taken from NFHS-5 state reports.

Note 4: Refer to district dashboard for the inter-district variability in the coverage of interventions.

Intervention coverage at district level, 2019-2020

1 1	District name	Pre- pregnancy						ā	Pregnancy						5	Delivery & postnatal	& postr	natal				ш	Early childhood	pooq			
		Demand for FP satisfied lodized salt				Received IFA		Deworming		guillesnuoo	gnillesnuoo To gnillesnuoD	 noitetnemelqquz boo7					mothers	səided	 noiteoube		A-II Diatric IFA	Deworming	גופ seeking for ARI	oRS during diarrhea	Zinc during diarrhea Food supplementation	(sdfnom 25-8) Weighing	Counselling on child growth
	MEGHALAYA	90.6	<u>n</u>	б	2		7 82							ц.	0	0	б			8 61.0			72.9 7	73.2 40	0.5		
	East Garo Hills	69.0	2	2	5									∞	∞.	∞.	6.		72	4 56.6			64.1	79.1 63.	3.3		
	East Jaintia Hills	97.2	2	S	6 94.	6 89.	87.							4	∞.	7	-		74	4 70.0			72.0 7	72.8 42	2.2		
	East Khasi Hills	93.3	2	7	.5 87		80							4	∞.	2	9	1.6	49	1 54.4			72.7 7	74.3 31	1.2		
	North Garo Hills	84.1	4	e	e	_									7	2	S			5 42.6			56.6				
83.6 68.7 33.3 98.9 85.3 80.0 18.3 1	Ribhoi	96.6	2	1	97	84.								6	4	∞	ŝ	9.3	74	8 66.6			68.7 6	69.6 42.	2.1		
74.5 57.0 28.5 99.0 8.3.7 13.6 9 9 13.6 9 83.7 15.5 88.3 60.6 55.1 85.3 60.6 55.1 85.3 60.6 55.1 85.3 60.6 55.1 85.3 60.6 55.1 85.3 60.6 55.1 85.3 60.6 55.1 85.3 60.6 55.1 85.3 60.6 55.1 85.3 60.6 55.1 85.3 60.6 55.1 78.3 <td>South Garo Hills</td> <td>83.6</td> <td>9</td> <td>7</td> <td>3 98</td> <td>6</td> <td>-</td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td>e</td> <td>_</td> <td>2</td> <td>6</td> <td>1.7</td> <td>86</td> <td>8 57.2</td> <td></td> <td></td> <td>72.2</td> <td></td> <td></td> <td></td> <td></td>	South Garo Hills	83.6	9	7	3 98	6	-							e	_	2	6	1.7	86	8 57.2			72.2				
99.7 48.5 63.4 97.0 92.1 85.6 3.2 9 41.7 31.0 49.3 42.9 38.7 78.8 88.5 65.1 48.0 97.6 87.3 91.3 207 9 7	South West Garo Hills	74.5	2											7		e	9	5.1		4 53.0			70.7	89.5 46	46.4		
88.5 65.1 48.0 97.6 87.3 91.3 20.7 14.0 87.5 70.9 67.2 77.1 97.3 94.0 43.1 88.1 82.6 79.2 1.6 14.0 42.1 13.0 50.7 28.6 30.8 59.7	South West Khasi Hills	99.7	4	5	4	-								7	o.	m	6	8.7	78.	8 64.0			67.7 7	73.1 31.	1.1		
97.3 44.0 43.1 88.1 82.6 79.2 16 42.2 19.0 50.7 28.6 30.8	West Garo Hills	88.5	9		0	87	91							9	2	Ŀ.	6	7.2	77	1 68.2			78.2				
	West Jaintia Hills	97.3	4	0			79.							2	0	7	9		59	7 63.2			79.1 7	71.3 41	1.9		
West Khasi Hills 97.3 45.3 64.0 97.3 87.4 81.6 2.9 62.5 62.5 64.0 97.3 87.4 81.6 2.9 62.5 62.5 65.5 65.5 65.5 65.5 65.5 65.5	West Khasi Hills		4	m	0 97	87.	81							2	9	m	0	1.4		5 63.4			75.3 7	75.1 48	48.8		

Source: NFHS-5 district factsheets and state reports (2019-20).

receipt of at least one ANC visit, weighing, birth preparedness and breastfeeding counselling, counselling on keeping baby warm, cord care counselling, food supplementation, health and nutrition education and Note 1: The following information is not available in the NFHS-5 factsheets and state reports (2019-20): (1) Information on preconception and pregnancy-related indicators including demand for FP satisfied, malaria prevention; (2) Lactation-related indicators including, food supplementation and health and nutrition education; and (3) early childhood-related indicators including pediatric IFA, deworming, food supplementation (6-35m), weighing and counselling on child growth. Information on use of bed nets during pregnancy not available in NFHS-3 data (2005-2006). Note 2: Food supplementation during early childhood is for children aged 6-35 months; counselling on child growth during early childhood is conducted after taking weight measurement

Table 4. Intervention coverage at district-level 2015-2016, 2019-2020

Category	Interventions	Worst performing districts (pp) ¹	Best performing districts (pp) ¹	Top coverage districts (%)
		Difference between (2019-2020) & (2015-2016)	Difference between (2019-2020) & (2015- 2016)	2019-2020
	ANC first trimester	East Khasi Hills: -15.8	South Garo Hills: +12.1 Ribhoi: 12.1	South Garo Hills: 68.7 West Garo Hills: 65.1
	≥4 ANC visits	South Garo Hills: -18.4 East Khasi Hills: -15.2	Ribhoi: 20.2	West Khasi Hills: 64 SW Khasi ² : 63.4
Pregnancy	Received MCP Card	Not applicable ²	Ribhoi: +16 East Khasi Hills: +9.7	SW Garo ³ : 99.0 South Garo Hills:98.9
	Tetanus injection	South Garo Hills: -7.3	Ribhoi: +14.2 East Khasi Hills: +0.5	West Garo Hills: 91.3 East Jaintia Hills: 87.7
	Institutional birth°	East Khasi Hills: -7.3 South Garo Hills: -0.8	Ribhoi: +8.1	West Garo Hills: 89.6 South Garo Hills: 88.3
Delivery and	Skilled birth attendant°	East Khasi Hills: -4.9	Ribhoi: +16.1 South Garo Hills: +1.5	South Garo Hills: 91.2 West Garo Hills: 88.3
post-natal	Postnatal care for mothers	East Khasi Hills: -31.6 South Garo Hills: -19.2	Not applicable ²	West Garo Hills: 70.9 South Garo Hills: 65.9
	Postnatal care for babies°	Not applicable ²	Ribhoi: +28.8 East Khasi Hills: +27.8	West Garo Hills: 67.2 South Garo Hills: 61.7
	Full immunization	East Khasi Hills: -20.1	Ribhoi: +18.4 South Garo Hills: +3.8	South Garo Hills: 86.8 SW Garo ³ : 85.4
	Vitamin A supplementation°	South Garo Hills: -17.9 East Khasi Hills: -6.4	Ribhoi: +9.3	East Jaintia Hills: 70.0 West Garo Hills: 68.2
Early childhood	Care seeking for ARI°	East Khasi Hills: -17.1 Ribhoi: -14.5	Not applicable ²	West Jaintia Hills: 79.1 West Garo Hills: 78.2
	ORS treatment during diarrhea°	East Khasi Hills: -10.5 Ribhoi: -10.5	Not applicable ²	SW Garo ³ : 89.5 East Garo Hills: 79.1
	Zinc treatment during diarrhea°	East Khasi Hills: -28 Ribhoi: -4.9	Not applicable ²	East Garo Hills: 63.3 West Khasi Hills: 48.8

Key takeaways

Children: Stunting and wasting prevalence declined by 6 percentage points (pp) and 22pp respectively, between 2006 and 2016; stunting increased by 3pp while wasting continued to decline by 4pp between 2016 and 2020. Underweight declined by 27pp between 2006 and 2016 and continued to decline by 3pp between 2016 and 2020. Anemia declined by 17pp between 2006 and 2016 but increased by 3pp between 2016 and 2020.

Women: Underweight declined by 2pp between 2006 and 2016 and continued to decline by 1pp between 2016 and 2020. Anemia increased by 11pp among non-pregnant women and decreased by 5pp among pregnant women, from 2006 to 2016, but decreased by 2pp and 7pp, respectively between 2016 and 2020. Overweight/obesity increased by 7pp between 2006 and 2016 and was constant at 12 percentage between 2016 and 2020

Men: Overweight/obesity increased by 5pp between 2006 to 2016 and continued to increase by 3pp from 2016 to 2020. Attention is needed to improve (%s in 2020):

- **Outcomes:** Stunting (47%) and anemia in children (45%); anemia in non-pregnant (54%) and pregnant (45%) women
- Immediate determinants: Exclusive breastfeeding (43%); adequate diet (30%); 100+ IFA (43%)
- Underlying determinants: Women with \geq 10 years education (35%)
- **Coverage of interventions:** Health and nutrition education for women (36-39%); postnatal care for mothers and children (44-45%); Zinc during diarrhea (41%); growth monitoring of children (49%)

Source: NFHS-3 (2005-2006), NFHS-4 (2015-2016), and NFHS-5 state and district factsheets (2019-2020). pp: percentage points. Note: Interventions' coverage are based on the last child data. ⁰Indicator definition differs slightly between NFHS-4 and NFHS-5. ¹The difference is calculated only between districts that are comparable between 2015-2016 and 2019-2020. Only the South Garo Hills, Ribhoi, and East Khasi Hills districts in Meghalaya are comparable between the two time periods. ²Prevalence did not increase or decrease in any of the districts. District codes: SW Khasi²: South West Khasi Hills; SW Garo³: South West Garo Hills.

Indicator definition

Nutrition outcomes	Definition
_ow birth weight	Percentage of live births in the five years preceding the survey with a reported birth weight less than 2.5 kg, based or either a written record or the mother's recall
Stunting among children	Percentage of children aged 0-59 months who are stunted i.e., height-for-age z score < -2SD
Vasting among children	Percentage of children aged 0-59 months who are wasted i.e., weight-for-height z score < -2SD
Severe wasting among children	Percentage of children aged 0-59 months who are wasted i.e., weight-for-height z score < -3SD
Jnderweight children	Percentage of children aged 0-59 months who are underweight i.e., weight-for-age z score < -2SD
Anemia among children	Percentage of children aged 6-59 months who are anemic i.e., (Hb <11.0 g/dl)
Jnderweight women	Percentage of women aged 15-49 whose Body Mass Index (BMI) is below normal (BMI <18.5 kg/m2)
Anemia among non-pregnant vomen	Percentage of non-pregnant women aged 15-49 who are anemic (<12.0 g/dl)
Anemia among pregnant women	Percentage of pregnant women aged 15-49 who are anemic (<11.0 g/dl)
Overweight/obesity - children	Percentage of children aged 0-59 months who are overweight i.e., weight-for-height z score > 2SD
Overweight/obesity - women	Percentage of men aged 15-54 who are overweight or obese (BMI ≥25.0 kg/m2)
Overweight/obesity - men	Percentage of men aged 15-54 who are overweight or obese (BMI ≥25.0 kg/m2)
High blood pressure among women^	Percentage of women aged 15-49 with elevated blood pressure (Systolic >140 mm Hg or diastolic >90 mm Hg)
High blood pressure among men^	Percentage of men aged 15-54 with elevated blood pressure (Systolic >140 mm Hg or diastolic >90 mm Hg)
High sugar level among women^	Percentage of women aged 15-49 with elevated blood pressure (Systolic >140 mm Hg or diastolic >90 mm Hg)
High sugar level among men^	Percentage of men aged 15-54 with high blood sugar levels (141-160 mg/dl)
mmediate determinants	
Early initiation of breastfeeding	Percentage of children under aged 3 years breastfed within one hour of birth for the last child born in the 3 years before the survey
Exclusive breastfeeding	Percentage of youngest children under age 6 months living with mother who were exclusively breastfed
Timely introduction of complementary foods ⁰	¹ Percentage of youngest children aged 6-8 months living with mother who received solid or semi-solid food during the previous day; ² Percentage of youngest children aged 6-8 months living with mother who received solid or semi-solid food and breastmilk
Continued breastfeeding at 2 years ^{\$}	Percentage of youngest children 12-23 months of age who were fed breast milk during the previous day
Adequate diet	Percentage of youngest children 6–23 months of age who consumed a minimum acceptable diet during the previous day
Eggs and/or flesh foods consumption ^{\$}	Percentage of youngest children 6-23 months of age who consumed egg and/or flesh food during the previous day
Sweet beverage ^{\$} Bottle feeding for infants ^{\$}	Percentage of youngest children 6–23 months of age who consumed a sweet beverage during the previous day Percentage of youngest children 0–23 months of age who were fed from a bottle with a nipple during the previous d
Vomen with body mass index <18.5 kg/m ²⁰	¹ Percentage of women aged 15-49 with a youngest child < 5 years who have BMI below normal (BMI <18.5 kg/m2) ² Percentage of women aged 15-49 whose BMI is below normal (BMI <18.5 kg/m ²)
	Percentage of wohen aged 15-49 who consumed iron folic acid for 100 days or more during the last pregnancy in
Consumed IFA 100+ days	last five years preceding the survey ¹ Percentage of youngest children under age five who had diarrhea in the two weeks preceding the survey;
Diarrhea in the last two weeks ⁰	² Percentage of children under age 5 who had diarrhea in the 2 weeks preceding the survey
ARI in the last two weeks ⁰	¹ Percentage of youngest children under age five who had symptoms of acute respiratory infection (ARI) in the two weeks preceding the survey; ² Percentage of children under age five who had symptoms of acute respiratory infection (ARI) in the two weeks preceding the survey
Underlying determinants	
Women who are literate ⁰	¹ Percentage of women aged 15-49 with a birth in five years preceding the survey who are literate i.e., those who completed standard 6 or higher and can read a whole sentence; ² Percentage of women aged 15-49 who are literative i.e., those who completed standard 9 or higher and can read a whole sentence or part of a sentence.
Women with ≥10 years education ⁰	¹ Percentage of women aged 15-49 with a birth in five years preceding the survey with 10 or more years of schoolin ² Percentage of women aged 15-49 with 10 or more years of schooling
Girls 20-24 years married before age of 18 years ⁰	¹ Percentage of women aged 20-24 years with a birth in five years preceding the survey who were married before ag 18 years; ² Percentage of women aged 20-24 years who were married before age 18 years
Women 15-19 years with child or pregnant	Percentage of currently married women aged 15-49 who had their first birth before age 20 years and in the five year preceding the survey
HHs with improved drinking water source ⁰	¹ Percentage of youngest children under age 5 living in household that use an improved source of drinking water; ² Population living in households that use an improved sanitation facility
HHs with improved sanitation	¹ Percentage of youngest children under age 5 living in household that uses improved toilet facility; ² Population living
facility ⁰	in households that use an improved sanitation facility
HHs with hand washing facility ^{^\$}	Percentage of youngest children under age 5 living in household that had soap and water for washing hands
Open defecation [@] Safe disposal of feces ^{\$}	Percentage of youngest children under age 5 living in household that has no toilet facility/defecates in open Percentage of youngest children living with mother whose stools were disposed of safely
HHs with BPL card [®]	Percentage of youngest children under age 5 living in households with BPL card
	¹ Percentage of youngest children under age 5 living in household that has electricity; ² Population living in household
HHs with electricity ⁰	with electricity

[^] Indicator not available in NFHS-3. ^{\$} Indicator not available in NFHS-5 factsheets/state reports ⁰Indicator comparable between NFHS-3 and NFHS-4 but differs slightly from NFHS-5. [®] Indicator not available in NFHS-5 factsheets but available in NFHS-5 states reports. ¹ Definition per NFHS-3/NFHS-4. ² Definition as per NFHS-5 factsheet.

Indicator definition

Interventions	Definition
Demand for FP satisfied [®]	Percentage of currently married women aged 15-49 with demand for family planning satisfied by modern methods
lodized salt ⁰	¹ Percentage of women aged 15-49 living in HHs that use iodized salt; ² Percentage of households using iodized salt
Any ANC visits ^{\$}	Percentage of women aged 15-49 with a live birth in the five years who received at least one ANC for the last birth
ANC first trimester	Percentage of women (15-49 years of age) attended by any provider during the first trimester of pregnancy that led to
	the birth of the youngest child in the last 2 years
≥ 4ANC	Percentage of mothers aged 15-49 who had at least 4 antenatal care visits for last birth in the 5 years before the
Received MCP card	survey Percentage of mothers who registered last pregnancy in the 5 years preceding the survey for which she received a
Received MCF card	Mother and Child Protection (MCP) card
Received IFA tab/syrup@	Percentage of women who received IFA (given or purchased) tablets during the pregnancy for their most recent live
	birth in the 5 years preceding the survey
Tetanus injection	Percentage of women whose last birth was protected against neonatal tetanus (for last birth in the five years
	preceding the survey)
Deworming- pregnancy [@]	Percentage of women who took an intestinal parasite drug during the pregnancy for their most recent live birth in the
	5 years preceding the survey
Weighing- pregnancy [@]	Percentage of women aged 15-49 with a live birth in the five years preceding the survey who were weighed during
	ANC for the last birth
Birth preparedness counselling ^{\$}	Percentage of women who had at least one contact with a health worker in the three months preceding the survey
	and were counselled on birth preparedness; calculated among women aged 15-49 who gave birth in the five years
Proportfooding opuppolling@	preceding the survey
Breastfeeding counselling [@]	Percentage of women who met with a community health worker in the last three months of pregnancy and received advice on breastfeeding (for the last pregnancy in the five years preceding the survey)
Counselling on keeping baby	Percentage of women who met with a community health worker in the last three months of pregnancy and received
warm [@]	advice on keeping the baby warm for their most recent live birth in the five years preceding the survey
Cord care counselling ^{^@}	Percentage of women who met with a community health worker in the last three months of pregnancy and received
	advice on cord care for their most recent live birth in the five years preceding the survey
Food supplementation -	¹ Percentage of youngest children under age 5 whose mother received supplementary food from AWC during
pregnancy [@]	pregnancy; ³ Among children under 6 years, percentage whose mother received specific benefits from AWC during
	pregnancy: supplementary food
Health & nutrition education –	¹ Percentage of mothers who received health and nutrition education from an Anganwadi Centre (AWC) during last
pregnancy®	pregnancy in the five years preceding the survey; ³ Among children under 6 years, percentage whose mother received
	specific benefits from AWC during pregnancy: health and nutrition education
Malaria prevention- use of bed	Percentage of women who used mosquito net during the pregnancy for their most recent live birth in the 5 years
nets ^{^\$}	preceding the survey
Institutional birth ⁰	¹ Percentage of women aged 15-49 who gave birth in health/institutional facility for their most recent live birth in the 5
	years preceding the survey; ² Percentage of live births to women aged 15-49 in the five years preceding the survey that took place in a health/institutional facility
Financial assistance (JSY) [@]	Percentage of women who received financial assistance under JSY for their most recent live birth that took place in
	institutional facility in the 5 years preceding the survey
Skilled birth attendant ⁰	¹ Percentage of women whose last delivery was attended by a skilled health personnel for their most recent live birth
	in the 5 years preceding the survey; ² Percentage of births attended by skilled health personnel for births in the 5
	years before the survey
Postnatal care for mothers	Percentage of mothers who received postnatal care from a doctor/nurse/LHV/ANM/midwife/other health personnel
	within 2 days of delivery for their most recent live birth in the five years preceding the survey
Postnatal care for babies	Percentage of children who received postnatal care from a doctor /nurse /LHV /ANM /midwife /other health personnel
	within 2 days of delivery for last birth in the 5 years before the survey
Food supplementation – postnatal [®]	¹ Percentage of youngest children under age 5 whose mother received supplementary food from AWC while
	breastfeeding; ³ Among children under 6 years, percentage whose mother received specific benefits from AWC while
Legith 9 putrition advantion	breastfeeding: supplementary food
Health & nutrition education – postnatal [®]	¹ Percentage of youngest children under age 5 whose mother received health check-ups from AWC while breastfeeding; ³ Among children under 6 years, percentage whose mother received specific benefits from AWC while
postnatal	breastfeeding: health and nutrition education
Full immunization ⁰	¹ Percentage of youngest living children aged 12-23 months fully vaccinated based on information from either
	vaccination card or mother's recall; ² Percentage of children aged 12-23 months fully vaccinated based on information
	from either vaccination card or mother's recall
Vitamin A – early childhood ⁰	¹ Percentage of youngest children aged 6-59 months who received Vitamin A supplementation in the last 6 months
-	preceding the survey; 2 Percentage of children aged 9-35 months who received a vitamin A dose in the last 6 months
Pediatric IFA ^{0@}	Percentage of youngest children aged 6-59 months who received iron supplements in the past 7 days preceding the
	survey
Deworming – early childhood ^{0@}	Percentage of youngest children aged 6-59 months who received deworming tablets in the last 6 months preceding
	the survey
Care seeking for ARI ⁰	¹ Percentage of youngest children under age 5 years with fever or symptoms of ARI in the 2 weeks preceding the
	survey taken to a health facility or health provider; ² Percentage of children under age 5 years with fever or symptoms of ARI in the 2 weeks preceding the survey taken to a health facility or health provider
ORS during diarrhea ⁰	¹ Percentage of youngest children under age 5 years with diarrhea in the 2 weeks preceding the survey who received
	oral rehydration salts (ORS); 2Percentage of children under age 5 years with diarrhea in the 2 weeks preceding the
	survey who ORS
Zinc during diarrhea ⁰	¹ Percentage of youngest children under age 5 years with diarrhea in the 2 weeks preceding the survey who
U - ¹	received zinc; ² Percentage of children under age 5 years with diarrhea in the 2 weeks preceding the survey who
	received zinc
Food supplementation (children 6-	Percentage of youngest children aged 6-35 months who received food supplements from AWC in the 12 months
35 months) ^{\$}	preceding the survey
Weighing – early childhood®	Percentage of youngest children under age 5 who were weighed at AWC in the 12 months preceding the survey
Counselling on child growth [@]	Percentage of youngest children under age 5 whose mother received counselling from an AWC after child was
	weighed in the 12 months preceding the survey

[^] Indicator not available in NFHS-3. ^{\$}Indicator not available in NFHS-5 factsheets/state reports. [@]Indicator not available in NFHS-5 factsheets but available in NFHS-5 states reports. ⁰Indicator comparable between NFHS-3 and NFHS-4 but differs slightly from NFHS-5. ¹Definition per NFHS-4. ²Definition as per NFHS-5 factsheet. ³Definition as per NFHS-5 state reports.

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AUTHORS

Anita Christopher, Research Analyst, IFPRI
Samuel Scott, Research Fellow, IFPRI
S.K. Singh, Professor, IIPS
Rakesh Sarwal, Additional Secretary, NITI Aayog
Neena Bhatia, Senior Specialist, NITI Aayog
Robert Johnston, Nutrition Specialist UNICEF
William Joe, Assistant Professor, IEG
Purnima Menon, Senior Research Fellow, IFPRI
Phuong Hong Nguyen, Senior Research Fellow, IFPRI

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PARTNERS

Institute of Economic Growth (IEG) International Institute for Population Science (IIPS) NITI Aayog UNICEF









Disclaimer: The maps used in this Data Note are based on the districts in NFHS-5 factsheets/reports. The boundaries shown do not imply any official endorsement or acceptance by IFPRI.

ABOUT POSHAN

Partnerships and Opportunities to Strengthen and Harmonize Actions for Nutrition in India (POSHAN) is a multi-year initiative that aims to support the use of data and evidence in decision-making for nutrition in India. It is supported by the Bill & Melinda Gates Foundation and led by IFPRI in India. http://poshan.ifpri.info/

ABOUT DATA NOTES

POSHAN Data Notes focus on data visualization to highlight geographic and/or thematic issues related to nutrition in India. They draw on multiple sources of publically available data.

CONTACT US

Email: IFPRI-POSHAN@cgiar.org

IFPRI-NEW DELHI INTERNATIONAL FOOD POLICY RESEARCH INSTITUTE

NASC Complex, CG Block, Dev Prakash Shastri Road, Pusa, New Delhi 110012, India T+91.11.66166565 F+91.11.66781699

IFPRI-HEADQUARTERS INTERNATIONAL FOOD POLICY RESEARCH INSTITUTE

1201 Eye Street, NW, Washington, DC 20005 USA T. +1.202.862.5600 F. +1.202.467.4439 Skype: IFPRIhomeoffice ifpri@cgiar.org www.ifpri.org

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