

### 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.<sup>1</sup> 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.

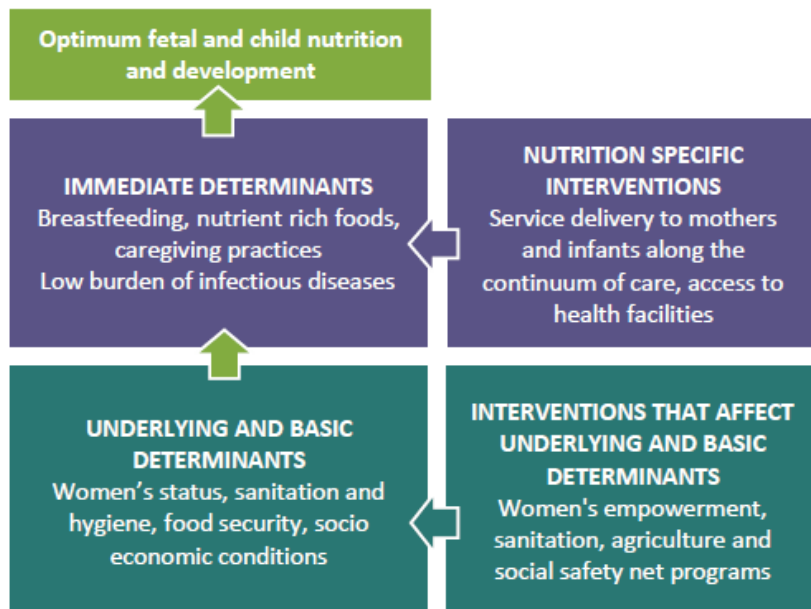
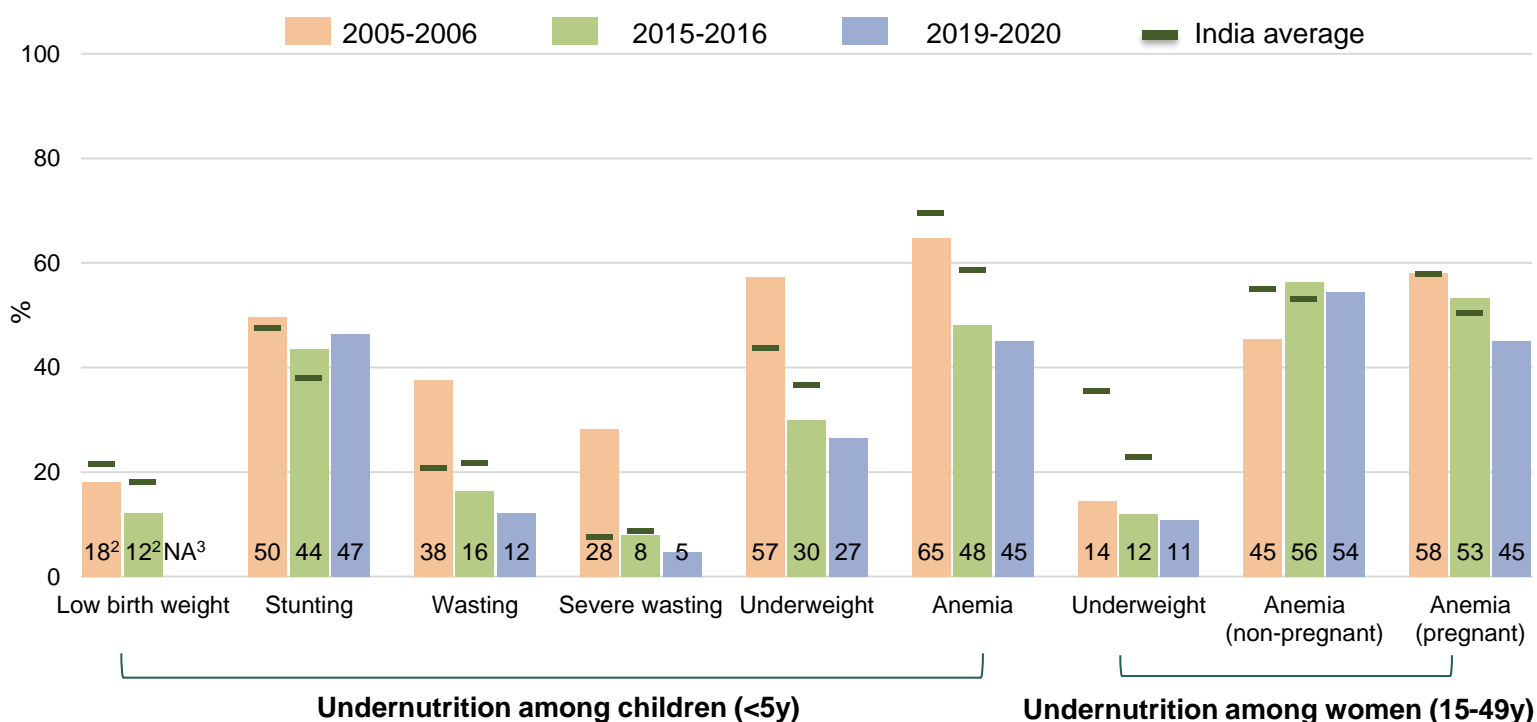


Figure 1. Trends in undernutrition outcomes 2005-2006, 2015-2016, 2019-2020



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.

<sup>1</sup>WHO. Nutrition Landscape Information System (NLI). Help Topic: Malnutrition in children.

(<https://apps.who.int/nutrition/landscape/help.aspx?menu=0&helpid=391&lang=EN>).

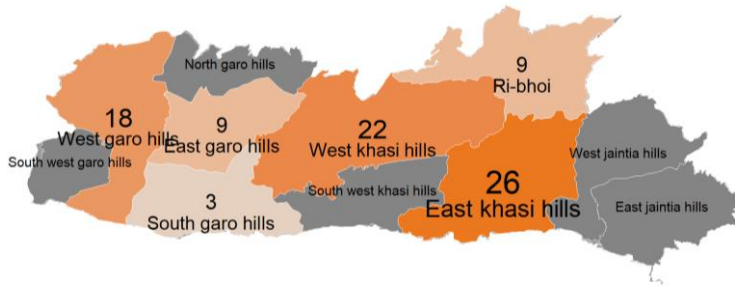
<sup>2</sup>In NFHS-3, 59.7% of data was missing, while 35.1% of data was missing in NFHS-4.

<sup>3</sup>NA refers to the unavailability of data for a particular indicator in the specified NFHS round.

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

## Map 1. Stunting

Number of stunted children<sup>2</sup> = 87,425



Note: Number in '000s in the above figure

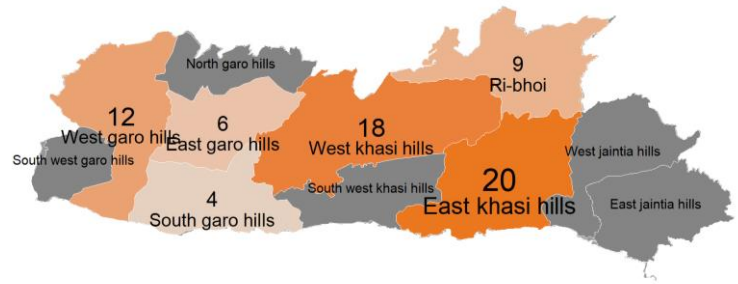
### Highest burden districts

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 concern<sup>1</sup>: 11 of 11

## Map 2. Anemia

Number of anemic children<sup>2</sup> = 69,459



Note: Number in '000s in the above figure

### Highest burden districts

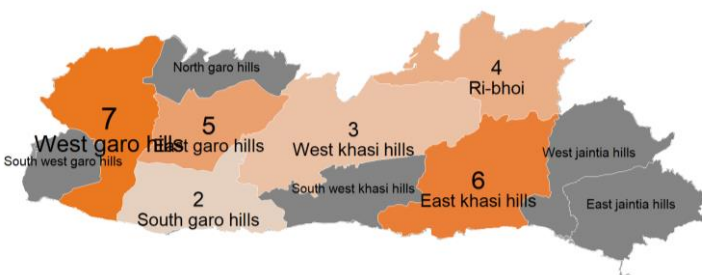
1	East Khasi Hills	20,167
2	West Khasi Hills	18,493
3	West Garo Hills	12,387
4	Ri Bhoi	8,987
5	East Garo Hills	5,915

No. of districts with public health concern<sup>1</sup>: 5 of 11

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

## Map 3. Wasting

Number of wasted children<sup>2</sup> = 26,953



Note: Number in '000s in the above figure

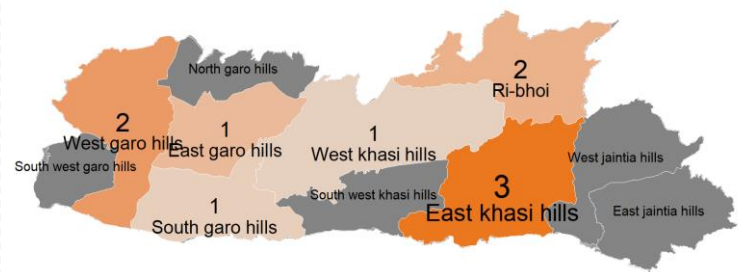
### Highest burden districts

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 concern<sup>1</sup>: 8 of 11

## Map 4. Severe Wasting

Number of severely wasted children<sup>2</sup> = 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

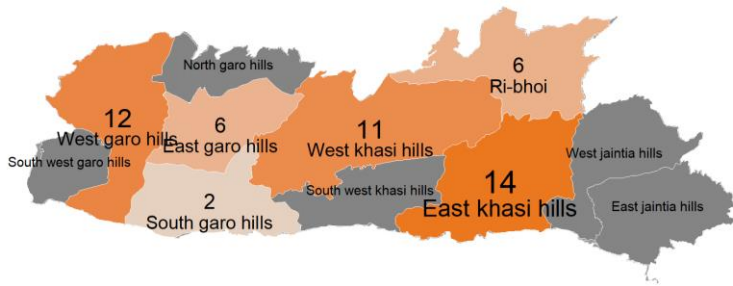
No. of districts with public health concern<sup>1</sup>: 11 of 11

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.<sup>1</sup>Public 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). <sup>2</sup>The 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

Number of underweight children<sup>2</sup> = 52,231



Note: Number in '000s in the above figure

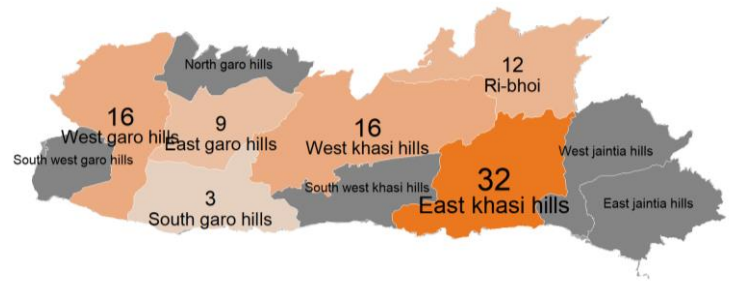
### Highest burden districts

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<sup>1</sup>: 10 of 11

## Map 6. Underweight women

Number of underweight women<sup>2</sup> = 87,377



Note: Number in '000s in the above figure

### Highest burden districts

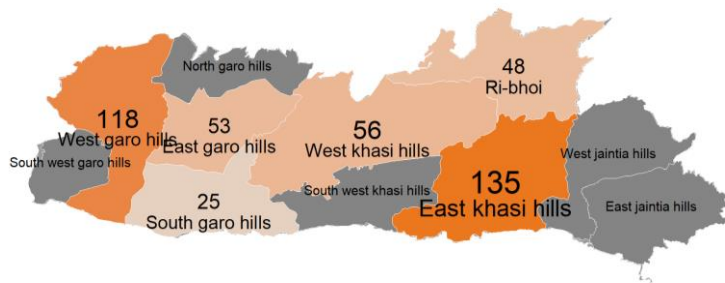
1	East Khasi Hills	32,196
2	West Garo Hills	15,869
3	West Khasi Hills	15,821
4	Ri Bhoi	11,995
5	East Garo Hills	8,664

No. of districts with public health concern<sup>1</sup>: 5 of 11

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

## Map 7. Anemia among non-pregnant women

Number of non-pregnant anemic women<sup>2</sup> = 434,947



Note: Number in '000s in the above figure

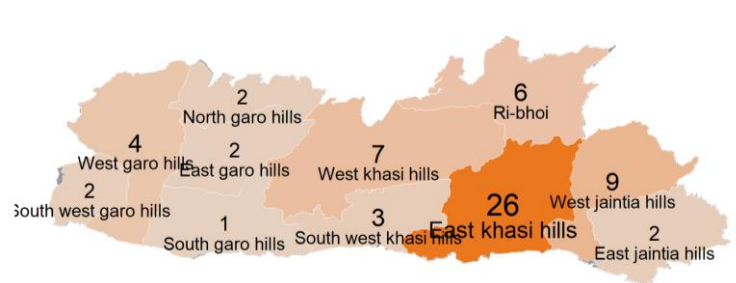
### Highest burden districts

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 concern<sup>1</sup>: 11 of 11

## Map 8. Anemia among pregnant women

Number of pregnant anemic women<sup>2</sup> = 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 concern<sup>1</sup>: 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. <sup>1</sup>Public 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). <sup>2</sup>The 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 & NCDs<sup>2</sup>  
2005-2006, 2015-2016, 2019-2020

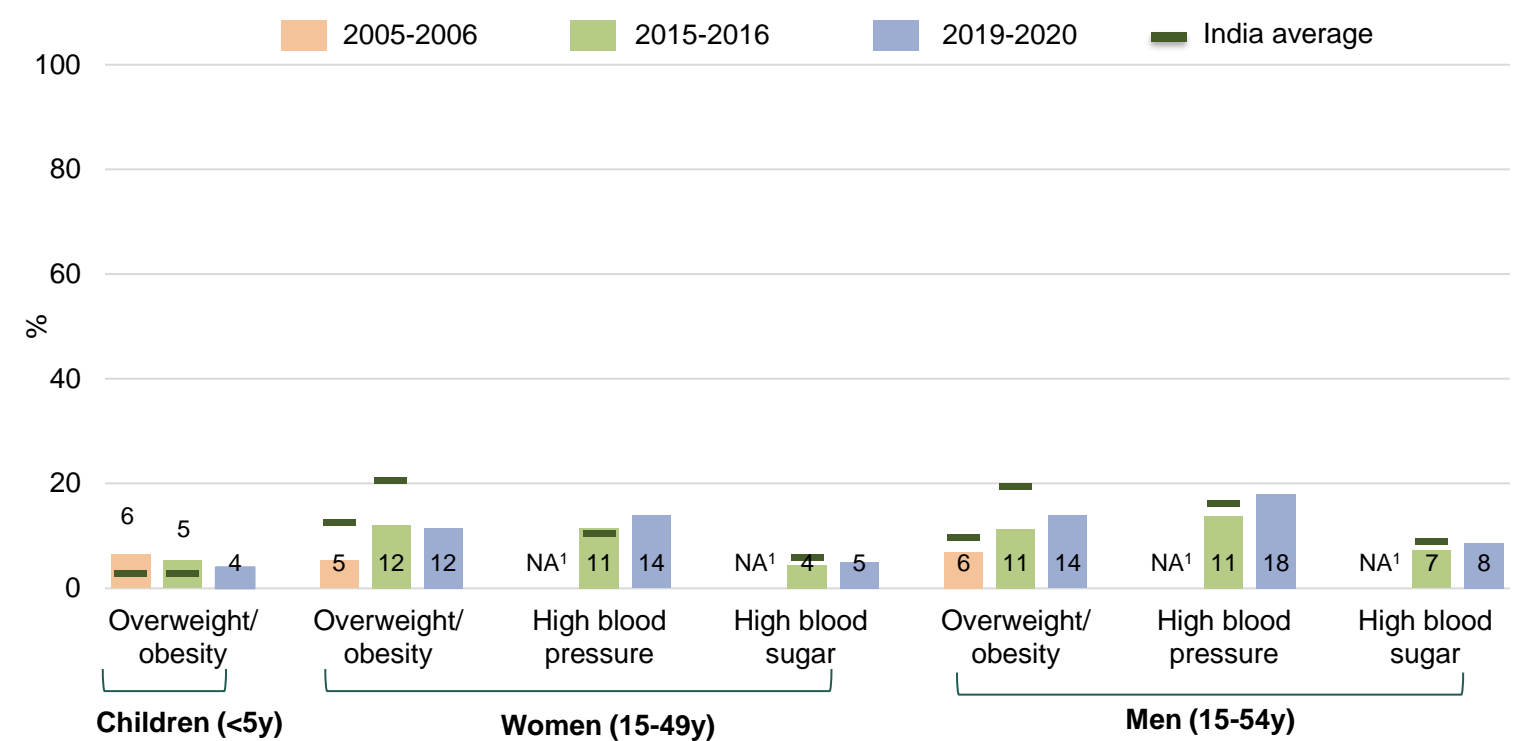


Table 1. Overweight/obesity & NCDs<sup>2</sup> at district-level  
2015-2016, 2019-2020

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

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

<sup>3</sup>Prevalence did not increase or decrease in any of the districts.

<sup>4</sup>The 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.

<sup>5</sup>Burden: 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.

<sup>6</sup>Public health concern is defined as prevalence  $\geq 15\%$  for overweight/obesity (children),  $\geq 20\%$  for overweight/obesity (women and men),  $\geq 20\%$  high blood pressure (women and men), and  $\geq 20\%$  high sugar (women and men). Source: WHO (2011).

District codes: East Khasi<sup>7</sup>: East Khasi Hills; West Garo<sup>8</sup>: West Garo Hills; East Garo<sup>9</sup>: East Garo Hills; South Garo<sup>10</sup>: East Garo Hills.

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

Category	Immediate determinants	2005-2006	2015-2016	2019-2020
IYCF practices	Early initiation of breastfeeding	59	63	79
	Exclusive breastfeeding	26	36	43
	Timely introduction of complementary foods <sup>0</sup>	46	72	67
	Continued breastfeeding at 2 years	100	78	
	Adequate diet <sup>0</sup>	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 determinants	Women with body mass index <18.5 kg/m <sup>20</sup>	14	14	11
	Consumed IFA 100+ days	6	38	43
Diseases	Diarrhea in the last two weeks <sup>0</sup>	6	12	10
	ARI in the last two weeks <sup>0</sup>	2	7	5

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

Category	Immediate determinants	Worst performing districts (pp) <sup>2</sup>	Best performing districts (pp) <sup>2</sup>	Top coverage districts (%) <sup>1</sup>
		<i>Difference between (2019-2020) &amp; (2015-2016)</i>	<i>Difference between (2019-2020) &amp; (2015-2016)</i>	<i>2019-2020</i>
IYCF practices	Early initiation of breastfeeding	Not applicable <sup>3</sup>	East Khasi Hills: +32.2 South Garo Hills: +21.4	West Jaintia <sup>4</sup> : 88.5 East Khasi Hills: 86.3
	Exclusive breastfeeding	East Khasi Hills: -9.3	Ribhoi: +2.7	SW Khasi <sup>5</sup> : 54.4 East Jaintia Hills: 50.5
	Timely introduction of complementary foods <sup>0</sup>	Ribhoi: -3.7	Not applicable <sup>3</sup>	West Jaintia <sup>4</sup> : 77.7 SW Khasi <sup>5</sup> : 65.6
	Adequate diet <sup>0</sup>	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/m <sup>20</sup>	South Garo Hills: +3.7	East Khasi Hills: -2.5 Ribhoi: -2.1	North Garo Hills: 7.7 West Garo Hills: 7.7
	Consumed IFA 100+ days	East Khasi Hills: -20.4	South Garo Hills: +21.4 Ribhoi: +3.9	SW Khasi <sup>5</sup> : 53.8 South Garo Hills: 51.6
Diseases	Diarrhea in the last two weeks <sup>0</sup>	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 <sup>0</sup>	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

<sup>0</sup>Indicator definition differs slightly between NFHS-4 and NFHS-5. <sup>1</sup>For 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/m<sup>2</sup>, 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. <sup>2</sup>The 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.

<sup>3</sup>Prevalence did not increase or decrease in any of the districts.

District codes: West Jaintia<sup>4</sup>: West Jaintia Hills; SW Khasi<sup>5</sup>: South West Khasi Hills.

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

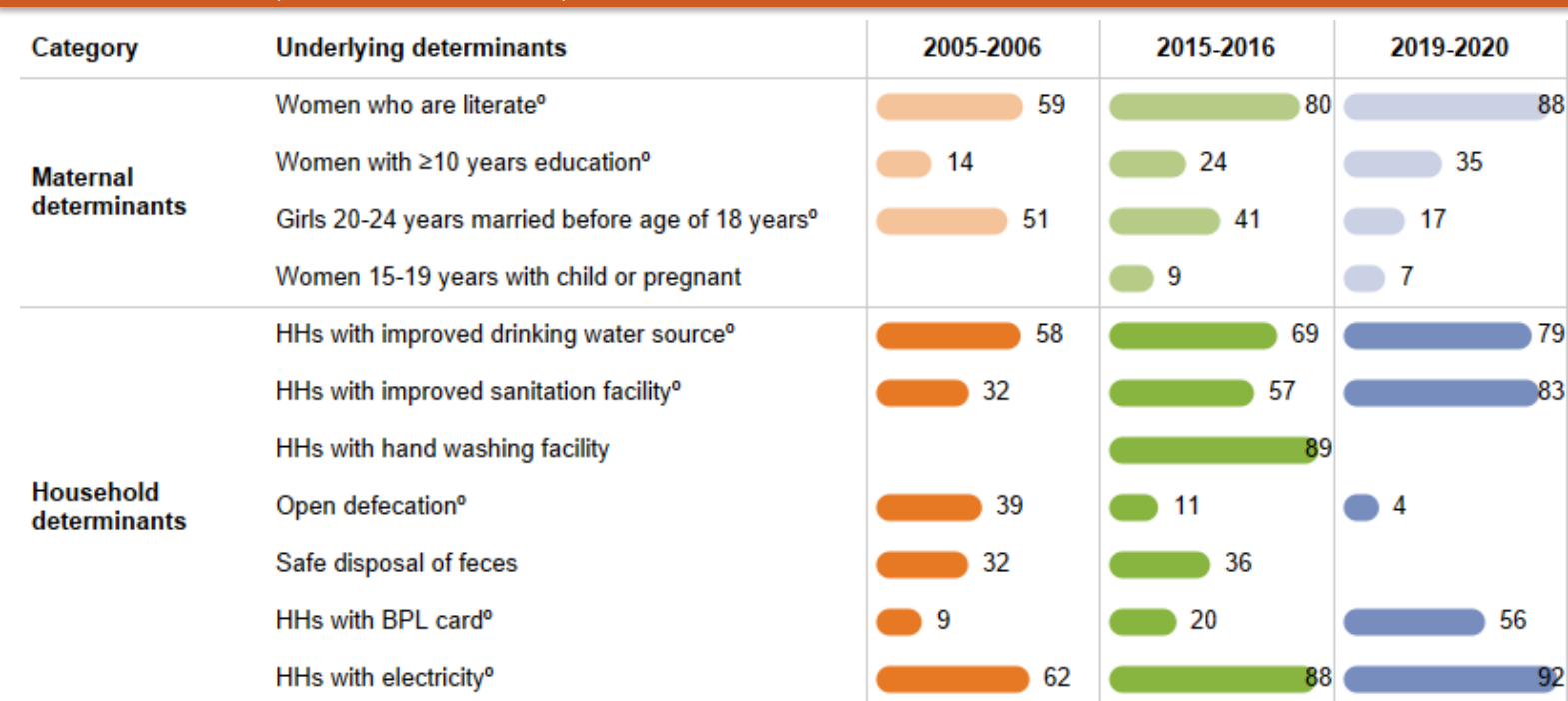
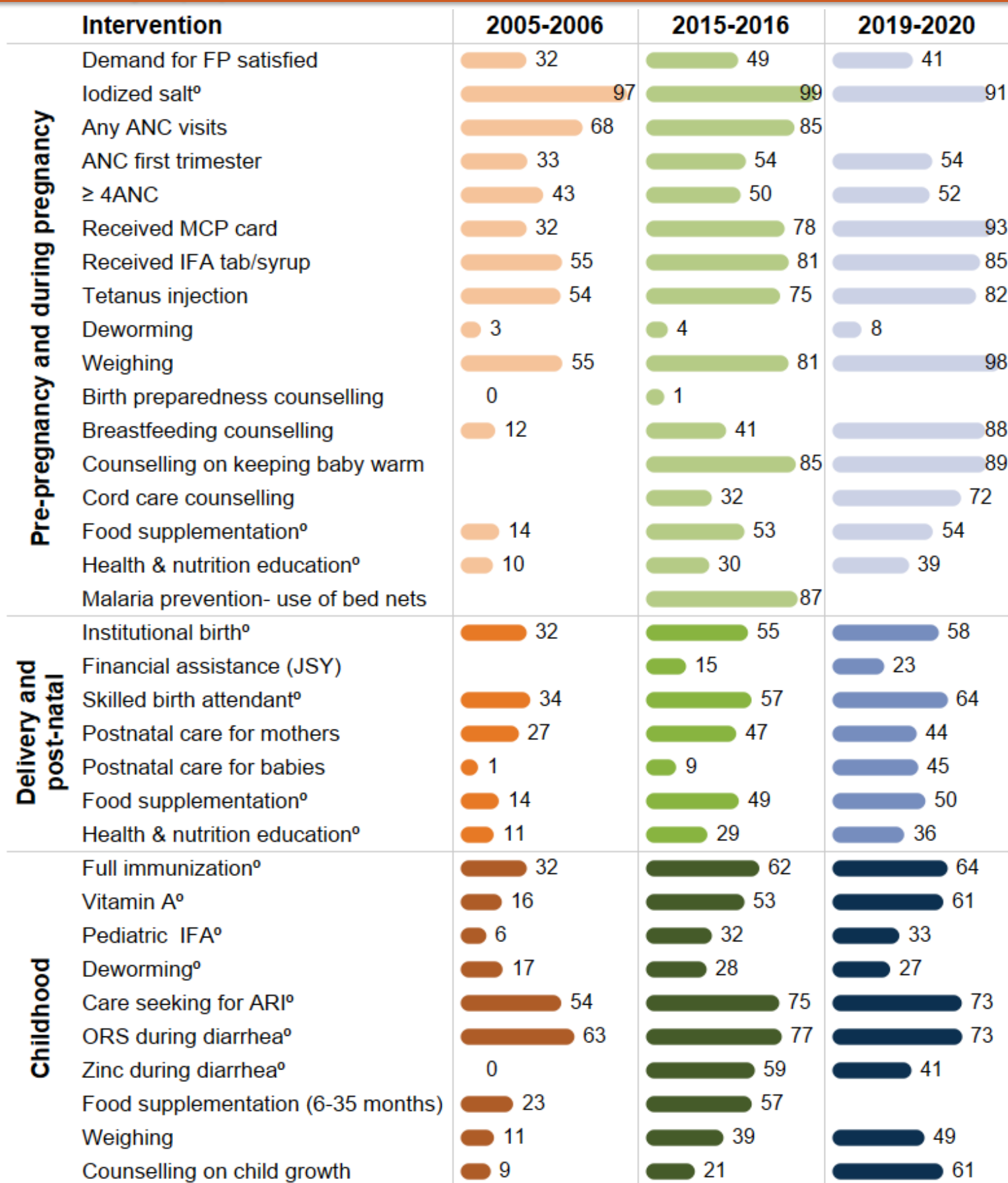


Table 3. Underlying determinants at district-level  
2015-2016, 2019-2020

Category	Underlying determinants	Worst performing districts (pp) <sup>2</sup>	Best performing districts (pp) <sup>2</sup>	Top coverage districts (%) <sup>1</sup>
		<i>Difference between (2019-2020) &amp; (2015-2016)</i>	<i>Difference between (2019-2020) &amp; (2015-2016)</i>	<i>2019-2020</i>
Maternal determinants	Women who are literate <sup>0</sup>	Not applicable <sup>3</sup>	Ribhoi: +15.7 South Garo Hills: +3	East Khasi Hills: 93.7 Ribhoi: 89.5
	Women with ≥10 years education <sup>0</sup>	South Garo Hills: -8.9	East Khasi Hills: +13.5 Ribhoi: +12.8	West Garo Hills: 45.1 East Khasi Hills: 43.5
	Girls 20-24 years married before age of 18 years <sup>0</sup>	Not applicable <sup>3</sup>	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
Household determinants	HHs with improved drinking water source <sup>0</sup>	South Garo Hills: -16.4	Ribhoi: +13.6 East Khasi Hills: +7.3	East Khasi Hills: 90.0 Ribhoi: 86.2
	HHs with improved sanitation facility <sup>0</sup>	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 <sup>0</sup>	Not applicable <sup>3</sup>	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.  
<sup>0</sup>Indicator definition differs slightly between NFHS-4 and NFHS-5.<sup>1</sup>For 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. <sup>2</sup>The 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.  
<sup>3</sup>Prevalence 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



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

<sup>o</sup>Indicator 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



District name	Pre-pregnancy		Pregnancy													Delivery & postnatal								Early childhood										
	Demand for FP satisfied	Iodized salt	Any ANC visits	ANC first trimester	≥4 ANC	Received MCP card	Received IFA tab/syrup	Tetanus injection	Deworming	Weighting	Birth preparedness counselling	Breastfeeding counselling	Counseling on keeping baby warm	Cord care counselling	Food supplementation	Health & nutrition education	Malaria prevention-use of bed nets	Institutional birth	Financial assistance (ISY)	Skilled birth attendant	Postnatal care for mothers	Postnatal care for babies	Food supplementation	Health & nutrition education	Full immunization	Vitamin A	Paediatric IFA	Deworming	Care seeking for ARI	ORS during diarrhea	Zinc during diarrhea	Food supplementation (6-35 months)	Weighting	Counseling on child growth
<b>MEGHALAYA</b>		90.6	53.9	52.2	93.3	84.7	82.1	8.3										58.1	23.0	64.0	43.9	44.9			63.8	61.0				72.9	73.2	40.5		
East Garo Hills	69.0		59.2	25.5	92.1	86.0	74.5	11.8										73.8	14.8	80.8	59.9	57.5			72.4	56.6				64.1	79.1	63.3		
East Jaintia Hills	97.2		55.5	58.6	94.6	89.0	87.7	2.8										48.4	27.8	55.7	49.1	45.0			74.4	70.0				72.0	72.8	42.2		
East Khasi Hills	93.3		56.7	57.5	87.8	82.3	80.2	6.9										63.4	20.8	68.7	33.6	41.6			49.1	54.4				72.7	74.3	31.2		
North Garo Hills	84.1		40.3	24.3	85.8	69.1	55.5	6.3										61.5	9.7	63.2	40.5	41.8			47.5	42.6				56.6				
Ribhoi	96.6		56.1	61.0	97.5	84.9	86.2	13.3										56.9	37.4	65.8	39.5	39.3			74.8	66.6				68.7	69.6	42.1		
South Garo Hills	83.6		68.7	33.3	98.9	85.3	86.0	18.3										88.3	17.1	91.2	65.9	61.7			86.8	57.2				72.2				
South West Garo Hills	74.5		57.0	28.5	99.0	82.3	80.7	13.6										83.7	15.5	88.3	60.6	55.1			85.4	53.0				70.7	89.5	46.4		
South West Khasi Hills	99.7		48.5	63.4	97.0	92.1	85.6	3.2										41.7	31.0	49.3	42.9	38.7			78.8	64.0				67.7	73.1	31.1		
West Garo Hills	88.5		65.1	48.0	97.6	87.3	91.3	20.7										89.6	18.2	87.5	70.9	67.2			77.1	68.2				78.2				
West Jaintia Hills	97.3		44.0	43.1	88.1	82.6	79.2	1.6										42.2	19.0	50.7	28.6	30.8			59.7	63.2				79.1	71.3	41.9		
West Khasi Hills	97.3		45.3	64.0	97.3	87.4	81.6	2.9										41.7	33.6	49.3	42.0	41.4			62.5	63.4				75.3	75.1	48.8		

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

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, 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 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) <sup>1</sup>	Best performing districts (pp) <sup>1</sup>	Top coverage districts (%)
		<i>Difference between (2019-2020) &amp; (2015-2016)</i>	<i>Difference between (2019-2020) &amp; (2015-2016)</i>	<i>2019-2020</i>
<b>Pregnancy</b>	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 <sup>2</sup> : 63.4
	Received MCP Card	Not applicable <sup>2</sup>	Ribhoi: +16 East Khasi Hills: +9.7	SW Garo <sup>3</sup> : 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
<b>Delivery and post-natal</b>	Institutional birth <sup>o</sup>	East Khasi Hills: -7.3 South Garo Hills: -0.8	Ribhoi: +8.1	West Garo Hills: 89.6 South Garo Hills: 88.3
	Skilled birth attendant <sup>o</sup>	East Khasi Hills: -4.9	Ribhoi: +16.1 South Garo Hills: +1.5	South Garo Hills: 91.2 West Garo Hills: 88.3
	Postnatal care for mothers	East Khasi Hills: -31.6 South Garo Hills: -19.2	Not applicable <sup>2</sup>	West Garo Hills: 70.9 South Garo Hills: 65.9
	Postnatal care for babies <sup>o</sup>	Not applicable <sup>2</sup>	Ribhoi: +28.8 East Khasi Hills: +27.8	West Garo Hills: 67.2 South Garo Hills: 61.7
<b>Early childhood</b>	Full immunization	East Khasi Hills: -20.1	Ribhoi: +18.4 South Garo Hills: +3.8	South Garo Hills: 86.8 SW Garo <sup>3</sup> : 85.4
	Vitamin A supplementation <sup>o</sup>	South Garo Hills: -17.9 East Khasi Hills: -6.4	Ribhoi: +9.3	East Jaintia Hills: 70.0 West Garo Hills: 68.2
	Care seeking for ARI <sup>o</sup>	East Khasi Hills: -17.1 Ribhoi: -14.5	Not applicable <sup>2</sup>	West Jaintia Hills: 79.1 West Garo Hills: 78.2
	ORS treatment during diarrhea <sup>o</sup>	East Khasi Hills: -10.5 Ribhoi: -10.5	Not applicable <sup>2</sup>	SW Garo <sup>3</sup> : 89.5 East Garo Hills: 79.1
	Zinc treatment during diarrhea <sup>o</sup>	East Khasi Hills: -28 Ribhoi: -4.9	Not applicable <sup>2</sup>	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 ≥ 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%)

# Indicator definition

Nutrition outcomes	Definition
Low birth weight	Percentage of live births in the five years preceding the survey with a reported birth weight less than 2.5 kg, based on 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
Wasting 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
Underweight 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)
Underweight women	Percentage of women aged 15-49 whose Body Mass Index (BMI) is below normal (BMI <18.5 kg/m <sup>2</sup> )
Anemia among non-pregnant women	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/m <sup>2</sup> )
Overweight/obesity - men	Percentage of men aged 15-54 who are overweight or obese (BMI ≥25.0 kg/m <sup>2</sup> )
High blood pressure among women <sup>^</sup>	Percentage of women aged 15-49 with elevated blood pressure (Systolic >140 mm Hg or diastolic >90 mm Hg)
High blood pressure among men <sup>^</sup>	Percentage of men aged 15-54 with elevated blood pressure (Systolic >140 mm Hg or diastolic >90 mm Hg)
High sugar level among women <sup>^</sup>	Percentage of women aged 15-49 with elevated blood pressure (Systolic >140 mm Hg or diastolic >90 mm Hg)
High sugar level among men <sup>^</sup>	Percentage of men aged 15-54 with high blood sugar levels (141-160 mg/dl)
<b>Immediate determinants</b>	
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 <sup>0</sup>	1Percentage of youngest children aged 6-8 months living with mother who received solid or semi-solid food during the previous day; 2Percentage of youngest children aged 6-8 months living with mother who received solid or semi-solid food and breastmilk
Continued breastfeeding at 2 years <sup>5</sup>	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 <sup>§</sup>	Percentage of youngest children 6–23 months of age who consumed egg and/or flesh food during the previous day
Sweet beverage <sup>§</sup>	Percentage of youngest children 6–23 months of age who consumed a sweet beverage during the previous day
Bottle feeding for infants <sup>§</sup>	Percentage of youngest children 0–23 months of age who were fed from a bottle with a nipple during the previous day
Women with body mass index <18.5 kg/m <sup>2</sup> <sup>0</sup>	1Percentage of women aged 15-49 with a youngest child < 5 years who have BMI below normal (BMI <18.5 kg/m <sup>2</sup> ) ; 2Percentage of women aged 15-49 whose BMI is below normal (BMI <18.5 kg/m <sup>2</sup> )
Consumed IFA 100+ days	Percentage of mothers aged 15-49 who consumed iron folic acid for 100 days or more during the last pregnancy in last five years preceding the survey
Diarrhea in the last two weeks <sup>0</sup>	1Percentage of youngest children under age five who had diarrhea in the two weeks preceding the survey; 2Percentage of children under age 5 who had diarrhea in the 2 weeks preceding the survey
ARI in the last two weeks <sup>0</sup>	1Percentage of youngest children under age five who had symptoms of acute respiratory infection (ARI) in the two weeks preceding the survey; 2Percentage of children under age five who had symptoms of acute respiratory infection (ARI) in the two weeks preceding the survey
<b>Underlying determinants</b>	
Women who are literate <sup>0</sup>	1Percentage 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; 2Percentage of women aged 15-49 who are literate 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 <sup>0</sup>	1Percentage of women aged 15-49 with a birth in five years preceding the survey with 10 or more years of schooling; 2Percentage of women aged 15-49 with 10 or more years of schooling
Girls 20-24 years married before age of 18 years <sup>0</sup>	1Percentage of women aged 20-24 years with a birth in five years preceding the survey who were married before age 18 years; 2Percentage 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 years preceding the survey
HHs with improved drinking water source <sup>0</sup>	1Percentage of youngest children under age 5 living in household that use an improved source of drinking water; 2Population living in households that use an improved sanitation facility
HHs with improved sanitation facility <sup>0</sup>	1Percentage of youngest children under age 5 living in household that uses improved toilet facility; 2Population living in households that use an improved sanitation facility
HHs with hand washing facility <sup>^</sup> §	Percentage of youngest children under age 5 living in household that had soap and water for washing hands
Open defecation <sup>@</sup>	Percentage of youngest children under age 5 living in household that has no toilet facility/defecates in open
Safe disposal of feces <sup>§</sup>	Percentage of youngest children living with mother whose stools were disposed of safely
HHs with BPL card <sup>@</sup>	Percentage of youngest children under age 5 living in households with BPL card
HHs with electricity <sup>0</sup>	1Percentage of youngest children under age 5 living in household that has electricity; 2Population living in households with electricity

<sup>^</sup> Indicator not available in NFHS-3. <sup>§</sup> Indicator not available in NFHS-5 factsheets/state reports <sup>0</sup>Indicator comparable between NFHS-3 and NFHS-4 but differs slightly from NFHS-5. <sup>@</sup> Indicator not available in NFHS-5 factsheets but available in NFHS-5 states reports.

<sup>1</sup> Definition per NFHS-3/NFHS-4. <sup>2</sup> Definition as per NFHS-5 factsheet.

# Indicator definition

Interventions	Definition
Demand for FP satisfied <sup>®</sup> Iodized salt <sup>0</sup> Any ANC visits <sup>§</sup> ANC first trimester	Percentage of currently married women aged 15-49 with demand for family planning satisfied by modern methods <sup>1</sup> Percentage of women aged 15-49 living in HHs that use iodized salt; <sup>2</sup> Percentage of households using iodized salt Percentage of women aged 15-49 with a live birth in the five years who received at least one ANC for the last birth 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 survey
Received MCP card	Percentage of mothers who registered last pregnancy in the 5 years preceding the survey for which she received a Mother and Child Protection (MCP) card
Received IFA tab/syrup <sup>®</sup>	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 <sup>®</sup>	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 <sup>®</sup>	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 <sup>§</sup>	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 preceding the survey
Breastfeeding counselling <sup>®</sup>	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 warm <sup>®</sup>	Percentage of women who met with a community health worker in the last three months of pregnancy and received advice on keeping the baby warm for their most recent live birth in the five years preceding the survey
Cord care counselling <sup>®</sup>	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 - pregnancy <sup>®</sup>	<sup>1</sup> Percentage of youngest children under age 5 whose mother received supplementary food from AWC during pregnancy; <sup>3</sup> Among children under 6 years, percentage whose mother received specific benefits from AWC during pregnancy: supplementary food
Health & nutrition education – pregnancy <sup>®</sup>	<sup>1</sup> Percentage of mothers who received health and nutrition education from an Anganwadi Centre (AWC) during last pregnancy in the five years preceding the survey; <sup>3</sup> Among children under 6 years, percentage whose mother received specific benefits from AWC during pregnancy: health and nutrition education
Malaria prevention- use of bed nets <sup>§</sup>	Percentage of women who used mosquito net during the pregnancy for their most recent live birth in the 5 years preceding the survey
Institutional birth <sup>0</sup>	<sup>1</sup> 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; <sup>2</sup> 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) <sup>®</sup>	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 <sup>0</sup>	<sup>1</sup> 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; <sup>2</sup> 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 <sup>®</sup>	<sup>1</sup> Percentage of youngest children under age 5 whose mother received supplementary food from AWC while breastfeeding; <sup>3</sup> Among children under 6 years, percentage whose mother received specific benefits from AWC while breastfeeding: supplementary food
Health & nutrition education – postnatal <sup>®</sup>	<sup>1</sup> Percentage of youngest children under age 5 whose mother received health check-ups from AWC while breastfeeding; <sup>3</sup> Among children under 6 years, percentage whose mother received specific benefits from AWC while breastfeeding: health and nutrition education
Full immunization <sup>0</sup>	<sup>1</sup> Percentage of youngest living children aged 12-23 months fully vaccinated based on information from either vaccination card or mother's recall; <sup>2</sup> Percentage of children aged 12-23 months fully vaccinated based on information from either vaccination card or mother's recall
Vitamin A – early childhood <sup>0</sup>	<sup>1</sup> Percentage of youngest children aged 6-59 months who received Vitamin A supplementation in the last 6 months preceding the survey; <sup>2</sup> Percentage of children aged 9-35 months who received a vitamin A dose in the last 6 months preceding the survey
Pediatric IFA <sup>0®</sup>	Percentage of youngest children aged 6-59 months who received iron supplements in the past 7 days preceding the survey
Deworming – early childhood <sup>0®</sup>	Percentage of youngest children aged 6-59 months who received deworming tablets in the last 6 months preceding the survey
Care seeking for ARI <sup>0</sup>	<sup>1</sup> 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; <sup>2</sup> 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 <sup>0</sup>	<sup>1</sup> Percentage of youngest children under age 5 years with diarrhea in the 2 weeks preceding the survey who received oral rehydration salts (ORS); <sup>2</sup> Percentage of children under age 5 years with diarrhea in the 2 weeks preceding the survey who ORS
Zinc during diarrhea <sup>0</sup>	<sup>1</sup> Percentage of youngest children under age 5 years with diarrhea in the 2 weeks preceding the survey who received zinc; <sup>2</sup> Percentage of children under age 5 years with diarrhea in the 2 weeks preceding the survey who received zinc
Food supplementation (children 6-35 months) <sup>§</sup>	Percentage of youngest children aged 6-35 months who received food supplements from AWC in the 12 months preceding the survey
Weighing – early childhood <sup>®</sup>	Percentage of youngest children under age 5 who were weighed at AWC in the 12 months preceding the survey
Counselling on child growth <sup>®</sup>	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

<sup>^</sup> Indicator not available in NFHS-3. <sup>§</sup> Indicator not available in NFHS-5 factsheets/state reports. <sup>®</sup> Indicator not available in NFHS-5 factsheets but available in NFHS-5 states reports. <sup>0</sup> Indicator comparable between NFHS-3 and NFHS-4 but differs slightly from NFHS-5.

<sup>1</sup> Definition per NFHS-3/NFHS-4. <sup>2</sup> Definition as per NFHS-5 factsheet. <sup>3</sup> Definition as per NFHS-5 state reports.

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## SUGGESTED CITATION

Christopher, A., S. Scott, S.K. Singh, R. Sarwal, N. Bhatia, R. Johnston, W. Joe, P. Menon, and P.H. Nguyen. 2021. *State Nutrition Profile: Meghalaya*. POSHAN Data Note 50. New Delhi, India: International Food Policy Research Institute.

## ACKNOWLEDGEMENTS

Financial support for this Data Note was provided by the Bill & Melinda Gates Foundation through POSHAN, led by the International Food Policy Research Institute. The funder played no role in decisions about the scope of the analysis or the contents of the Note.

We thank Long Quynh Khuong (Independent Researcher) for creating the maps, Nishmeet Singh (IFPRI) and Anjali Pant (IFPRI) for working with the dataset and Julie Ghostlaw (IFPRI) & Abhilasha Vaid (Consultant) for editing and reviewing the Note.

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## 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.

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