

## Data Note

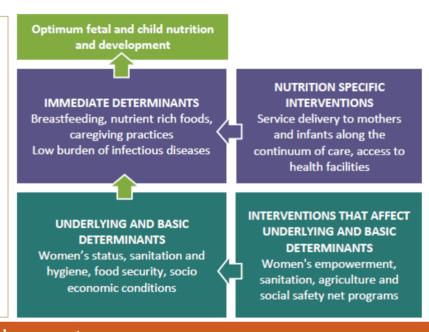
SEPTEMBER 2021

**MANIPUR** 

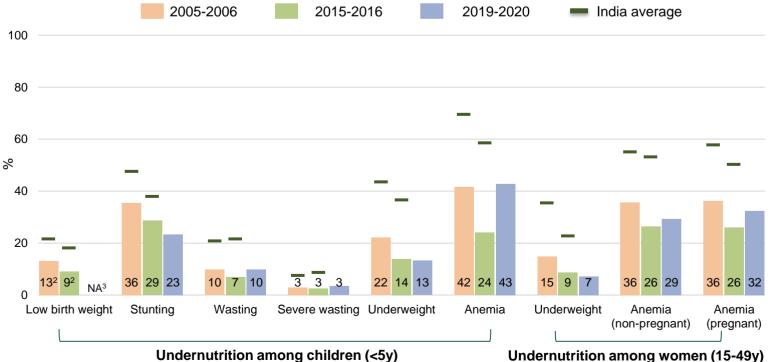
### **State Nutrition Profile: Manipur**

#### **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 women (15-49y)** 

Source: NFHS-3 (2005-2006), NFHS-4 (2015-2016), & 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. Stunting, wasting, overweight, and underweight. (https://apps.who.int/nutrition/landscape/help.aspx?menu=0&helpid=391&lang=EN).

<sup>2</sup>In NFHS-3, 51.9% of data was missing, while 32.7% of data was missing in NFHS-4.

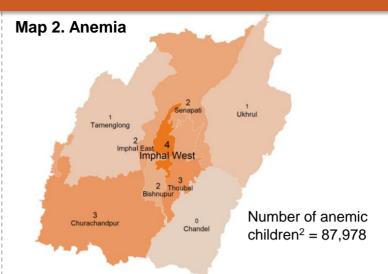
<sup>3</sup>NA refers to the unavailability of data for a particular indicator in the specified NFHS round.

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



11010.	Trote. Trainber in 6000 in the above figure			
	Highest burden districts			
1	Thoubal	11,438		
2	Senapati	10,135		
3	Imphal East	6,767		
4	Imphal West	5,965		
5	Churachandpur	5,765		
No. of districts with public health concern <sup>1</sup> : 6 of 9				

Note: Number in '000s in the above figure



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Highest burden districts			
1	Imphal East	16,617	
2	Senapati	16,175	
3	Imphal West	14,358	
4	Thoubal	12,949	
5_	Churachandpur	8,479	

No. of districts with public health concern<sup>1</sup>: 7 of 9

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



	Highest burden districts				
1	Imphal East	4,303			
2	Senapati	3,972			
3	Imphal West	3,556			
4	Thoubal	3,014			
5	Churachandpur	2,779			

No. of districts with public health concern<sup>1</sup>: 5 of 9

Map 4. Severe Wasting

Senapati

Tamenglong

Imphal East 1 West

O Thoubal Bishnupur

Churachandpur

Number of severely wasted children<sup>2</sup> = 8,360

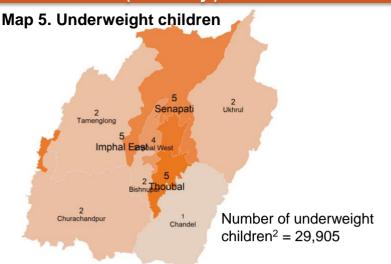
Note: Number in '000s in the above figure

Highest burden districts			
1	Senapati	2,042	
2	Churachandpur	1,332	
3	Imphal West	1,185	
4	Thoubal	1,053	
5	Imphal East	883	

No. of districts with public health concern<sup>1</sup>: 9 of 9

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. ¹Public health concern is defined as ≥20% for stunting, ≥40% for anemia, ≥10% for wasting, and ≥2% for severe wasting (WHO 2011). ²The total number of children <5 years is 226,519.

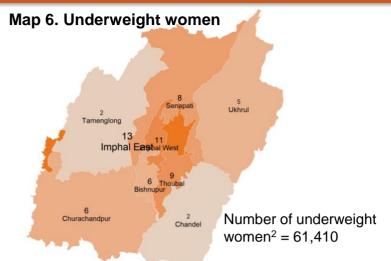
### Map 5 & 6. Number of underweight children (<5y) & women (15-49y), 2019-2020



Note: Number in '000s in the above figure

Highest burden districts			
Thoubal	5,410		
Imphal East	5,296		
Senapati	4,789		
Imphal West	3,900		
Ukhrul	2,348		
	Thoubal Imphal East Senapati Imphal West		

No. of districts with public health concern<sup>1</sup>: 0 of 9.



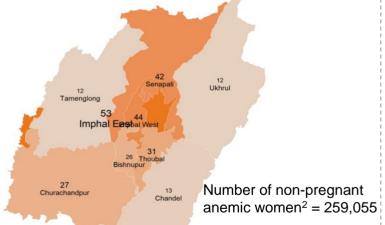
Note: Number in '000s in the above figure

	Highest burden districts			
	1	Imphal East	12,704	
2	2	Imphal West	10,596	
;	3	Thoubal	9,364	
4	4	Senapati	7,990	
	5	Churachandpur	6,098	

No. of districts with public health concern<sup>1</sup>: 0 of 9

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

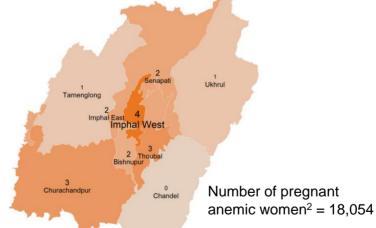
Map 7. Anemia among non-pregnant women



Note: Number in '000s in the above figure

Highest burden districts			
1	Imphal East	53,005	
2	Imphal West	44,400	
3	Senapati	42,059	
4	Thoubal	30,528	
5	Churachandpur	26,624	
No. of districts with public health concern <sup>1</sup> : 0 of 9			

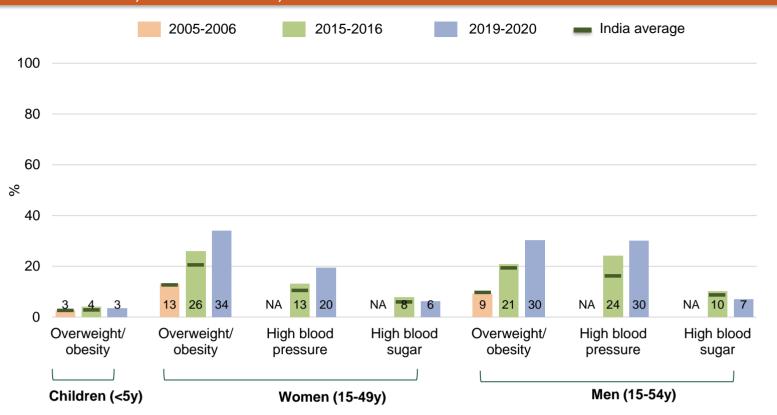
Map 8. Anemia among pregnant women



Note: Number in '000s in the above figure						
Highest burden districts						
1	1 Imphal West 4,025					
2	Thoubal	2,971				
3	Churachandpur	2,788				
4	Senapati	2,185				
5	Imphal East	2,098				
No. of districts with public health concern <sup>1</sup> : 2 of 9						

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. ¹Public health concern is defined as ≥20% for underweight (children), ≥10% for underweight (women), ≥40% for anemia among non-pregnant women, and ≥40% for anemia among pregnant women (WHO 2011). <sup>2</sup>The total number of children <5 years is 226,519, pregnant women 15-49 years is 57,412, and nonpregnant women 15-49 years is 839,588.

## Figure 2. Trends in overweight/obesity & NCDs<sup>1</sup> 2005-2006, 2015-2016, 2019-2020



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

Category	Outcomes	Worst performing districts (pp) <sup>5</sup>	Best performing districts (pp) <sup>5</sup>	Highest burden districts (thousands) <sup>2</sup>	No of districts with public health concern <sup>3</sup> (total=38)
		Difference between (2019-2020) & (2015- 2016)	Difference between (2019-2020) & (2015- 2016)	2019-2020	2019-2020
Children <5 years	Overweight/ obesity	Chandel: +3.5 Thoubal: +1.4	Tamenglong: -4.2 Ukhrul: -3	Senapati: 2 Thoubal: 2	0
	Overweight/ obesity	Bishnupur: +16.4 Tamenglong: +12	Not applicable	Imphal W <sup>4</sup> .:62 Imphal E <sup>4</sup> .: 58	8
Women (15-49 years)	High blood pressure	Thoubal: +8.9 Tamenglong: +8.4	Not applicable	Imphal W <sup>4</sup> : 37 Senapati: 27	5
	High blood sugar	Tamenglong: +1.3	Chura'pur <sup>4</sup> : -4 Ukhrul: -2.7	Imphal W. <sup>4</sup> :13 Imphal E <sup>4</sup> .: 11	0
	Overweight /obesity	Data not available a	t district level		
Men (15-54 years)	High blood pressure	Chandel: +12.6 Imphal W. 4: +9.6	Not applicable	Imphal W <sup>4</sup> .: 59 Imphal E <sup>4</sup> .:47	9
	High blood sugar	Tamenglong: +1.9	Chura'pur <sup>4</sup> : -14.8 Bishnupur: -6.7	Imphal W <sup>4</sup> .:15 Imphal E <sup>4</sup> .: 12	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>&</sup>lt;sup>1</sup>NCDs: non-communicable diseases

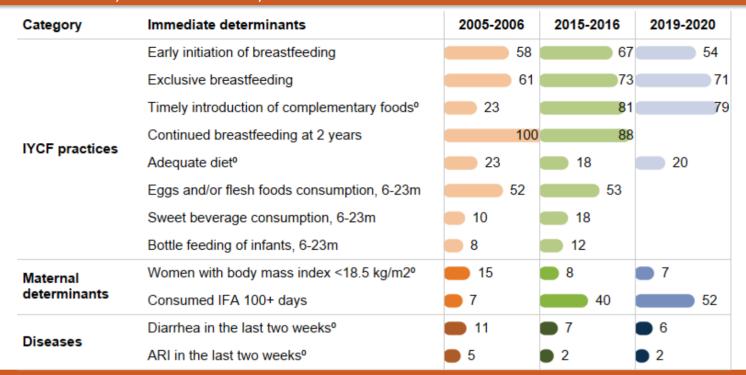
<sup>&</sup>lt;sup>2</sup>Burden: The headcount was calculated as the product of the prevalence and the total eligible projected population for each district in 2019. Prevalence estimates were obtained from NFHS-5 (2019-2020) and projected population for 2019 was estimated using Census 2011.

³Public 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) (WHO 2011).

<sup>&</sup>lt;sup>4</sup>District codes: Chura'pur: Churachandpur; Imphal W: Imphal West; Imphal E: Imphal East.

<sup>&</sup>lt;sup>5</sup>The difference is calculated only between districts that are comparable between 2015-2016 and 2019-2020. All districts in Manipur are comparable across periods.

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



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

Category	Immediate determinants	Worst performing districts (pp) <sup>3</sup>	Best performing districts (pp) <sup>3</sup>	Top coverage districts (%)¹	
		Difference between (2019-2020) & (2015-2016)	Difference between (2019-2020) & (2015-2016)	2019-2020	
	Early initiation of breastfeeding	Imphal E. <sup>2</sup> : -24.4 Bishnupur: -24.2	Imphal W <sup>2.</sup> : +0.9	Ukhrul: 63.6 Tamenglong: 62.9	
IYCF	Exclusive breastfeeding	Chandel: -13.8 Bishnupur: -8.7			
practices	Timely introduction of complementary foods <sup>0</sup>	Data not available at district level			
	Adequate diet <sup>o</sup>	Imphal W. <sup>2</sup> : -13.6 Ukhrul: -3	Chura'pur <sup>2</sup> : +11.4 Thoubal: +6.2	Tamenglong: 26.5 Chura'pur <sup>2</sup> : 23.6	
Maternal determinants	Women with BMI<18.5 kg/m20	Ukhrul: +1.9 Imphal W <sup>2</sup> .: +0.1	Chandel: -1.9 Bishnupur: -1.8	Chandel: 3.7 Tamenglong.: 4.6	
determinants	Consumed IFA 100+ days	Not applicable	Thoubal: +19.5 Chandel: +17.8	Ukhrul: 68.5 Imphal W. <sup>2</sup> : 60.9	
Diseases	Diarrhea in the last two weeks <sup>0</sup>	Imphal E. <sup>2</sup> : +7.9 Bishnupur: +3.2	Imphal W <sup>2</sup> .: -7.7 Thoubal: -4.5	Ukhrul: 2.1 Imphal W <sup>2</sup> : 2.3	
	ARI in the last two weeks <sup>0</sup>	Bishnupur: +1.1 Chura'pur <sup>2</sup> : +0.7	Thoubal: -1 Imphal W. <sup>2</sup> : -0.3	Thoubal: 1.1 Chandel: 1.2	

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

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>&</sup>lt;sup>0</sup>Indicator definition differs slightly between NFHS-4 and NFHS-5.

<sup>&</sup>lt;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/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.

<sup>2</sup>District codes: Chura'pur: Churachandpur; Imphal E.: Imphal East; Imphal Wst.

<sup>&</sup>lt;sup>3</sup>The difference is calculated only between districts that are comparable between 2015-2016 and 2019-2020. All districts in Manipur are comparable across periods.

# 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 <sup>o</sup>	72	86	88
Maternal	Women with ≥10 years education <sup>o</sup>	32	45	48
determinants	Girls 20-24 years married before age of 18 years <sup>o</sup>	35	33	16
	Women 15-19 years with child or pregnant		<b>7</b>	9
	HHs with improved drinking water sourceo	49	39	77
	HHs with improved sanitation facility <sup>o</sup>	27	49	65
	HHs with hand washing facility		73	
Household determinants	Open defecation <sup>o</sup>	<b>5</b>	1	<ul><li>1</li></ul>
	Safe disposal of feces	40	52	
	HHs with BPL card⁰	<b>1</b> 2	20	43
	HHs with electricity <sup>o</sup>	85	92	98

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

Category	Underlying determinants	Worst performing districts (pp) 4	Best performing districts (pp) <sup>4</sup>	Top coverage districts (%)1
		Difference between (2019-2020) & (2015-2016)	Difference between (2019-2020) & (2015- 2016)	2019-2020
	Women who are literate <sup>0</sup>	Imphal W.³: -1.8 Bishnupur: -1.4	Tamenglong: +11.1 Chandel: +4.6	Imphal W <sup>3</sup> .: 92.5 Imphal E <sup>3</sup> .: 90
Maternal	Women with ≥10 years education <sup>0</sup>	Chandel: -1.9 Thoubal: -0.5	Ukhrul: +10.7 Tamenglong: +6.4	Imphal W <sup>3</sup> .: 61.9 Imphal E <sup>3</sup> .: 49.9
determinants	Girls 20-24 years married before age of 18 years <sup>0</sup>	Not applicable <sup>2</sup>	Ukhrul: -27.6 Imphal E <sup>3</sup> .: -23	Chura'pur <sup>3</sup> : 10.5 Ukhrul: 11.1
	Women 15-19 years with child or pregnant	Imphal W.³: +6.5 Ukhrul: +5.9	Bishnupur: -4 Thoubal: -1.6	Bishnupur: 5.1 Senapati: 6.3
	HHs with improved drinking water source <sup>0</sup>	Not applicable <sup>2</sup>	Imphal E <sup>3</sup> .: +58.2 Thoubal: +41.3	Imphal E. <sup>3</sup> : 90.2 Imphal W. <sup>3</sup> : 89.1
Household determinants	HHs with improved sanitation facility <sup>0</sup>	Not applicable <sup>2</sup>	Chandel: +27.1 Ukhrul: +22.3	Chandel: 85.2 Senapati: 84.4
	HHs with electricity <sup>0</sup>	Not applicable <sup>2</sup>	Ukhrul: +25 Thoubal: +11.7	Chandel: 99.9 Imphal W. <sup>3</sup> : 99.4

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

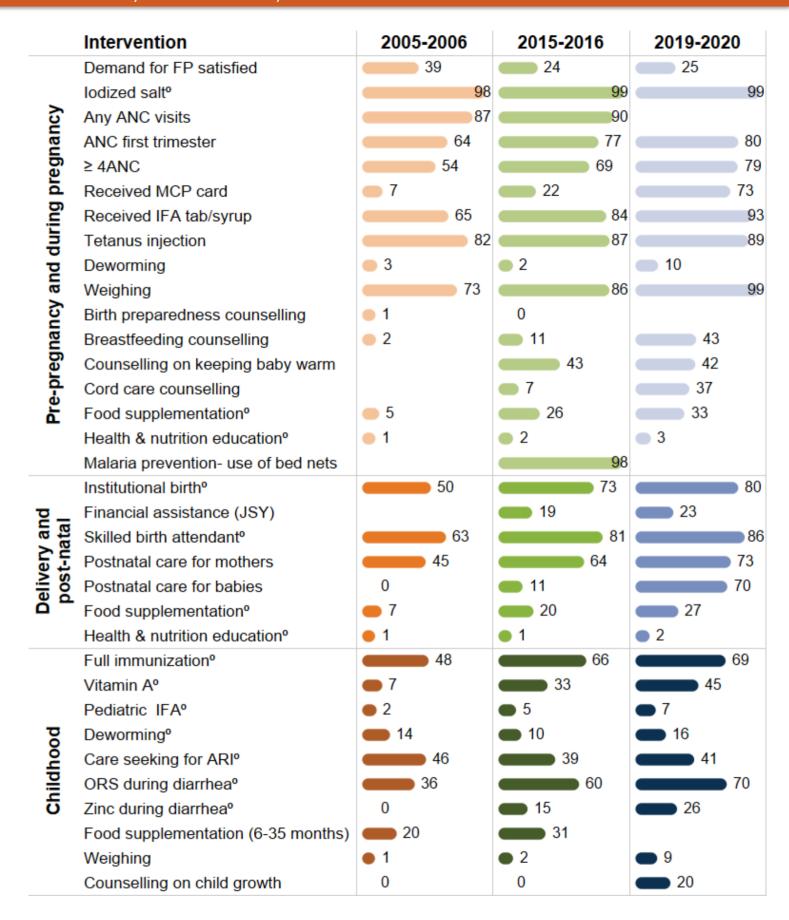
<sup>&</sup>lt;sup>o</sup>Indicator definition differs slightly between NFHS-4 and NFHS-5.

<sup>&</sup>lt;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>&</sup>lt;sup>2</sup>Prevalence did not increase or decrease in any of the districts. <sup>3</sup>District codes: Imphal E.: Imphal East; Imphal W.: Imphal West; Chura'pur: Churachandpur.

<sup>&</sup>lt;sup>4</sup>The difference is calculated only between districts that are comparable between 2015-2016 and 2019-2020. All districts in Manipur are comparable across periods.

## Figure 5. Trends in 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). 
Olndicator 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	lancy								Delivery & postnatal	& postr	ıatal					ä	Early childhood	poor			
	94 Tof bnsmad beitsites	tlas bəsibol stisiv DNA ynA	nətsəmint triif DNA	54 ∀NC	Received MCP card	AAI bəviəsəЯ qurys/def	Tetanus injection	Brimrowed	Weighing Birth preparedness	Brinssrings Brieastfeeding gaillesauoo	Counselling on keeping baby warm	Cord care counselling	noitethementation Health & nutrition education	Malaria prevention- use of bed nets	Institutional birth	Financial assistance (YSI)	Skilled birth attendant	Postnatal care for subdrada ca	Postnatal care for babies Food	noitetnemelqqus Health & nutrition	education Full immunization	A nimstiV	A3I sirisib969	Deworming	IAA 101 griyəəs ə162	ORS during diarrhea	boo-1 -6) noitetnemelqqus	gningieW	Counselling on child from the strong from the
MANIPUR	66	9.3	79.9	79.4	72.9	92.5	88.9	9.5							79.9	22.9	85.6	73.4 7	70.3		68.8	3 44.9			41.2 69.	9.8 26.	1		
Bishnupur	66	9.4	84.2	77.4	93.5	96.4	88.8	10.5							89.5	26.2	97.6	9 0.62	65.3		9.99	5 59.6			49.8 5:	51.0 16.	1		
Chandel	66	9.4	77.6	9.99	6.62	93.5	94.5	13.5							55.5	23.8	74.0	55.0 5	51.1		55.5	5 42.8			44.8				
Churachandpur	66	1.1	0.69	61.3	78.1	77.0	79.5	10.0							72.9	22.2	80.0	58.2   5	56.8		64.9	37.8			41.5				
Imphal East	66	1.1	78.6	87.1	53.8	96.3	89.1	11.2							91.7	17.1	93.0	85.4 8	81.0		76.2	43.0			44.2 82	.9 22	9.		
Imphal West	66	0.0	83.2	93.4	50.0	96.1	92.7	6.9							95.7	25.2	98.0	8.06	91.7		74.1	54.2							
Senapati	86	3.8	73.9	64.9	77.1	85.3	85.2	7.9							45.8	20.7	65.0	37.0 3	36.0		65.0	37.8			39.6				
Tamenglong	66	9.5	69.4	56.4	78.3	9.78	81.0	11.1							57.7	31.7	6.69	52.7 4	49.2		67.4	1 41.5			19.8				
Thoubal	66	8.6	9.06	89.9	91.4	97.2	92.9	9.5							87.8	24.9	91.1	75.6 7	73.0		74.2	43.5			28.6				
Ukhrul	66	9.4	58.3	38.8	78.3	9.92	81.6	0.9							44.6	18.2	54.5	44.9 4	44.8		39.4	1 34.9			27.9				

Not Available

%08>-09

40-<60%

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) <sup>3</sup>	Best performing districts (pp) <sup>3</sup>	Top coverage districts (%)
		Difference between (2019-2020) & (2015-2016)	Difference between (2019-2020) & (2015-2016)	2019-2020
	ANC first trimester	Imphal E. <sup>2</sup> : -5.4 Bishnupur: -3.7	Tamenglong: +17 Ukhrul: +9.8	Thoubal: 90.6 Bishnupur: 84.2
	≥4 ANC visits	Bishnupur: -9.6	Tamenglong: +23.8 Chandel: +23.7	Imphal W. <sup>2</sup> : 93.4 Thoubal: 89.9
Pregnancy	Received MCP Card	Not applicable <sup>1</sup>	Thoubal: +67.7 Ukhrul: +64.4	Bishnupur: 93.5 Thoubal: 91.4
	Tetanus injection	Bishnupur: -3.9 Imphal E. <sup>2</sup> : -3.4	Ukhrul: +8.8 Chandel: +8.6	Chandel: 94.5 Thoubal: 92.9
	Institutional birth°	Not applicable <sup>1</sup>	Tamenglong: +21.7 Chandel: +12.9	Imphal W. <sup>2</sup> : 95.7 Imphal E. <sup>2</sup> : 91.7
Delivery and	Skilled birth attendant°	Bishnupur: -0.9	Tamenglong: +23.8 Chura'pur <sup>2</sup> : +9.5	Imphal W. <sup>2</sup> : 98 Imphal E. <sup>2</sup> : 93
post-natal	Postnatal care for mothers	Bishnupur: -4.8	Tamenglong: +20.4 Chandel: +15.6	Imphal W. <sup>2</sup> : 90.8 Imphal E. <sup>2</sup> : 85
	Postnatal care for babies°	Not applicable <sup>1</sup>	Imphal W. <sup>2</sup> : +82.9 Imphal E. <sup>2</sup> : +67.8	Imphal W. <sup>2</sup> : 91.7 Imphal E. <sup>2</sup> : 81
	Full immunization	Bishnupur: -10.4 Imphal W. <sup>2</sup> : -8.4	Tamenglong: +23.8 Chura'pur <sup>2</sup> : +11.9	Imphal E. <sup>2</sup> : 76.2 Thoubal: 74.2
	Vitamin A supplementation°	Imphal W. <sup>2</sup> : -0.6	Bishnupur: +31 Chandel: +28.5	Bishnupur: 59.6 Imphal W. <sup>2</sup> : 54.2
Early childhood	Care seeking for ARI°	Thoubal: -13.9 Chandel: -2.6	Bishnupur: +15.6 Ukhrul: +7.1	Bishnupur: 49.8 Chandel: 44.8
	ORS treatment during diarrhea°	Bishnupur: -7.8	Imphal E. <sup>2</sup> : +29	Imphal E. <sup>2</sup> : 82.9 Bishnupur 51
	Zinc treatment during diarrhea°	Not applicable <sup>1</sup>	Imphal E. <sup>2</sup> : +11.1 Bishnupur: +0.1	Imphal E. <sup>2</sup> : 22.6 Bishnupur: 16.1

### Key takeaways

**Children:** Stunting and underweight prevalence declined by 7 percentage points (pp) and 8pp, respectively, from 2006 to 2016; stunting continued to decline by 6pp from 2016 to 2020 while underweight remained stable. Wasting declined by 3pp from 2006 to 2016 but increased by 3pp from 2016 to 2020. Anemia declined by 18pp from 2006 to 2016 but increased by 19pp from 2016 to 2020. Overweight/obesity was low (3-4%) and remained stable from 2006 to 2020.

**Women**: Underweight declined by 6pp from 2006 to 2016 and continued to decline by 2pp from 2016 to 2020. Anemia among non-pregnant and pregnant women declined by 10pp from 2006 to 2016 but increased by 3pp and 6pp, respectively, from 2016 to 2020. Overweight/obesity increased by 13pp from 2006 to 2016 and continued to increase by 8pp between 2016 and 2020.

**Men:** Overweight/obesity increased by 12pp from 2006 to 2016 and continued to increase by 9pp from 2016 to 2020. **Attention is needed to improve** (%s in 2020):

- Outcomes: Anemia in children (43%) and women (~30%); overweight in women (34%) and men (30%)
- Immediate determinants: Early initiation of breastfeeding (54%); adequate diet (20%); 100+ IFA (52%)
- *Underlying determinants:* Women with ≥10 years education (48%)
- Coverage of interventions: Food supplementation (27-33%); health and nutrition education for women (2-3%); careseeking for ARI (41%); zinc during diarrhea (26%); weighing (9%); counselling on child growth (20%)

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. <sup>0</sup>Indicator definition differs slightly between NFHS-4 and NFHS-5. <sup>1</sup>Prevalence did not increase in any of the districts. <sup>2</sup>District codes: Imphal W.: Imphal West; Imphal E.: Imphal East. <sup>3</sup>The difference is calculated only between districts that are comparable between 2015-2016 and 2019-2020. All districts in Manipur are comparable across periods.

## 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/m2)
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 Overweight/obesity - women	Percentage of children aged 0-59 months who are overweight i.e., weight-for-height z score > 2SD 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)
Immediate 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 <sup>0</sup>	<sup>1</sup> Percentage of youngest children aged 6-8 months living with mother who received solid or semi-solid food during the previous day; <sup>2</sup> 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 <sup>\$</sup>	Percentage of youngest children 12–23 months of age who were fed breast milk during the previous day  Percentage of youngest children 6–23 months of age who consumed a minimum acceptable diet during the previous
Adequate diet	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> Bottle feeding for infants <sup>\$</sup>	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 day
Women with body mass index <18.5 kg/m <sup>2</sup> °	<sup>1</sup> Percentage of women aged 15-49 with a youngest child < 5 years who have BMI below normal (BMI <18.5 kg/m²); <sup>2</sup> Percentage of women aged 15-49 whose BMI is below normal (BMI <18.5 kg/m²)
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>	<sup>1</sup> Percentage of youngest children under age five who had diarrhea in the two weeks preceding the survey; <sup>2</sup> Percentage of children under age 5 who had diarrhea in the 2 weeks preceding the survey
ARI in the last two weeks <sup>0</sup>	<sup>1</sup> Percentage of youngest children under age five who had symptoms of acute respiratory infection (ARI) in the two weeks preceding the survey; <sup>2</sup> 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 <sup>0</sup>	<sup>1</sup> 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; <sup>2</sup> Percentage 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>	<sup>1</sup> Percentage of women aged 15-49 with a birth in five years preceding the survey with 10 or more years of schooling; <sup>2</sup> Percentage 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>	<sup>1</sup> Percentage of women aged 20-24 years with a birth in five years preceding the survey who were married before age 18 years; <sup>2</sup> 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 years preceding the survey
HHs with improved drinking water source <sup>0</sup>	<sup>1</sup> Percentage of youngest children under age 5 living in household that use an improved source of drinking water; <sup>2</sup> Population living in households that use an improved sanitation facility
HHs with improved sanitation facility <sup>0</sup>	<sup>1</sup> Percentage of youngest children under age 5 living in household that uses improved toilet facility; <sup>2</sup> Population 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> Safe disposal of feces <sup>\$</sup>	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 <sup>®</sup>	Percentage of youngest children under age 5 living in households with BPL card
HHs with electricity <sup>0</sup>	<sup>1</sup> Percentage of youngest children under age 5 living in household that has electricity; <sup>2</sup> Population living in households with electricity

<sup>^</sup>Indicator not available in NFHS-3. Indicator not available in NFHS-5 factsheets/state reports 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>	Percentage of currently married women aged 15-49 with demand for family planning satisfied by modern methods
Iodized salt <sup>o</sup>	<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
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
Descrived MCD cord	Survey
Received MCP card	Percentage of mothers who registered last pregnancy in the 5 years preceding the survey for which she received a
Received IFA tab/syrup®	Mother and Child Protection (MCP) card  Percentage of women who received IFA (given or purchased) tablets during the pregnancy for their most recent live
Received if A tab/syrup	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
5: 4	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
Breastfeeding counselling@	preceding the survey  Percentage of women who met with a community health worker in the last three months of pregnancy and received
Dreastreeding counselling	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 <sup>®</sup>	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 -	<sup>1</sup> Percentage of youngest children under age 5 whose mother received supplementary food from AWC during
pregnancy <sup>®</sup>	pregnancy; <sup>3</sup> Among children under 6 years, percentage whose mother received specific benefits from AWC during
	pregnancy: supplementary food
Health & nutrition education –	<sup>1</sup> Percentage of mothers who received health and nutrition education from an Anganwadi Centre (AWC) during last
pregnancy <sup>®</sup>	pregnancy in the five years preceding the survey; <sup>3</sup> Among children under 6 years, percentage whose mother received
Malaria prevention- use of bed	specific benefits from AWC during pregnancy: health and nutrition education  Percentage of women who used mosquito net during the pregnancy for their most recent live birth in the 5 years
nets <sup>\\$</sup>	preceding the survey
Institutional birth <sup>0</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)@	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
Postnatal care for mothers	years before the survey  Percentage of mothers who received postnatal care from a doctor/nurse/LHV/ANM/midwife/other health personnel
1 Ostriatal care for mothers	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>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 –	<sup>1</sup> Percentage of youngest children under age 5 whose mother received health check-ups from AWC while
postnatal <sup>@</sup>	breastfeeding; <sup>3</sup> Among children under 6 years, percentage whose mother received specific benefits from AWC while
Full immunication()	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
manner cany annunced	preceding the survey; 2 Percentage of children aged 9-35 months who received a vitamin A dose in the last 6 months
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
ORS during diarrhea <sup>0</sup>	of ARI in the 2 weeks preceding the survey taken to a health facility or health provider  ¹Percentage of youngest children under age 5 years with diarrhea in the 2 weeks preceding the survey who received
OKS during diarrileas	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 <sup>0</sup>	<sup>1</sup> Percentage of youngest children under age 5 years with diarrhea in the 2 weeks preceding the survey who
Č	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-	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 <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. \$Indicator not available in NFHS-5 factsheets/state reports. @Indicator not available in NFHS-5 factsheets but available in NFHS-5 states reports. OIndicator comparable between NFHS-3 and NFHS-4 but differs slightly from NFHS-5.

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

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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.

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