

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

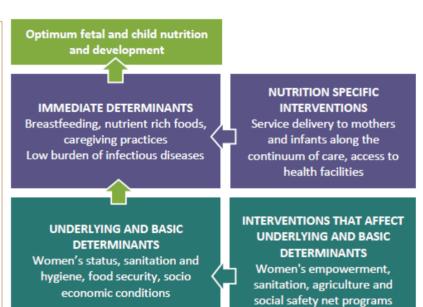
## Data Note

### No. 52 | SEPTEMBER 2021

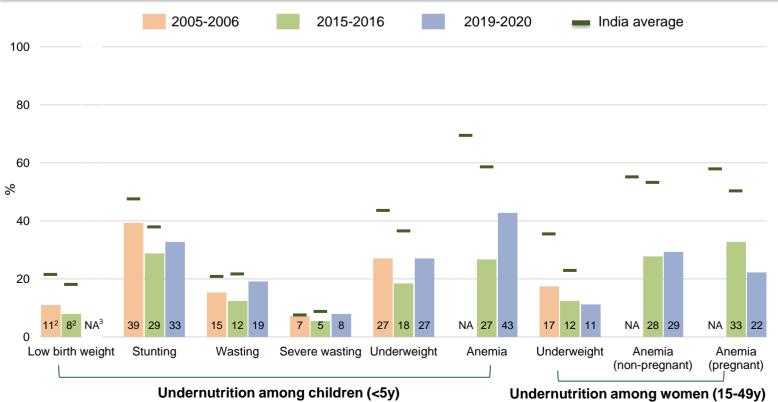
### **State Nutrition Profile: Nagaland**

#### **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>2</sup>In NFHS-3, 86% of data was missing, while 64% 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.

## NAGALAND

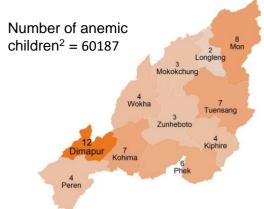
## Map 1 & 2. Number of stunted & anemic children <5y, 2019-2020



Note: Number in '000s in the above figure

Highest burden districts				
1	Dimapur	7843		
2	Mon	7723		
3	Tuensang	7244		
4	Kohima	5548		
5 Zunheboto 4702				
o. of districts with public health concern <sup>1</sup> : 11 of 11				

#### Map 2. Anemia



Note: Number in '000s in the above figure

	Highest burden districts				
1	Dimapur	12174			
2	2 Mon	7699			
3	3 Tuensang	6806			
4	k Kohima	6763			
5	5 Phek	6098			
No. of districts with public health concern <sup>1</sup> : 6 of 11					

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



Note: Number in '000s in the above figure

Highest burden districts			
1	Dimapur	6928	
2	Kohima	5274	
3	Tuensang	4803	
4	Zunheboto	2875	
5 Wokha 2475			

#### No. of districts with public health concern<sup>1</sup>: 9 of 11

#### Map 4. Severe Wasting



Note: Number in '000s in the above figure

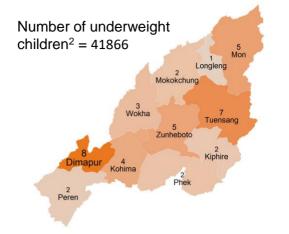
Highest burden districts			
1	Dimapur	3326	
2	Kohima	2235	
3	Tuensang	2011	
4	Wokha	1116	
5	Zunheboto	1101	

No. of districts with public health concern<sup>1</sup>: 9 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: The newly formed districts, for which no spatial boundaries were available, were not depicted on the maps. <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 number of children <5 years is 156,950

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

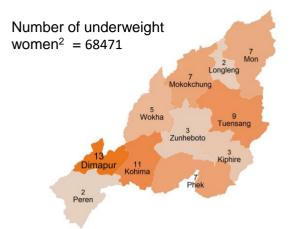
### Map 5. Underweight children



Note: Number in '000s in the above figure

Highest burden districts				
1	Dimapur	8259		
2	Tuensang	6678		
3	Mon	5069		
4	Zunheboto	4755		
5	Kohima	4333		
No. of districts with public health concern <sup>1</sup> : 10 of 11				

#### Map 6. Underweight women



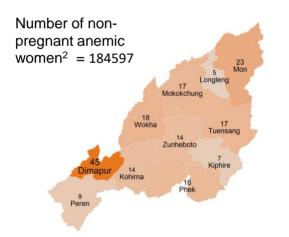
Note: Number in '000s in the above figure

Highest burden districts					
1	Dimapur	12518			
2	Kohima	10555			
3	Tuensang	9325			
4	Phek	7493			
5	Mokokchung	7251			

No. of districts with public health concern<sup>1</sup>: 6 of 11

## 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	Dimapur	45379
2	Mon	22772
3	Wokha	17972
4	Tuensang	17185
5	Mokokchung	16556

No. of districts with public health concern<sup>1</sup>: 0 of 11

### Map 8. Anemia among pregnant women



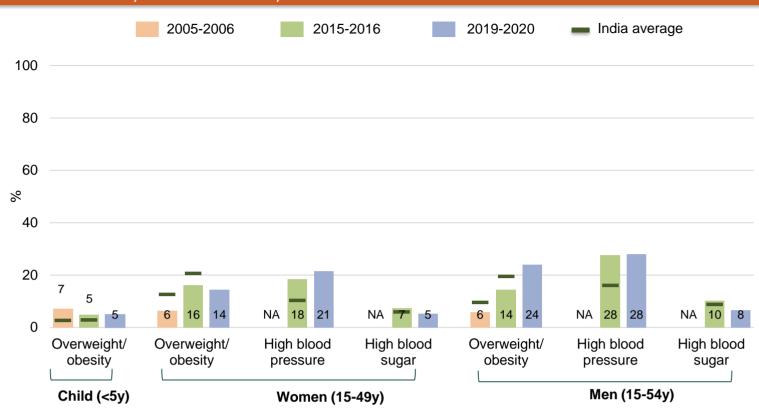
Note: Number in '000s in the above figure

Highest burden districts			
Dimapur	6961		
Mon	1073		
Tuensang	453		
Zunheboto	440		
Peren	396		
	Dimapur Mon Tuensang Zunheboto		

No. of districts with public health concern<sup>1</sup>: 1 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: The unit of the numbers in the graph above is thousands. <sup>1</sup>Public 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 156,950, pregnant women 15-49 years is 598,497

## 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)	Best performing districts (pp)	Highest burden districts (thousands) <sup>2</sup>	No of districts with public health concern <sup>3</sup> (total=11)
		Difference between (2019-2020) & (2015- 2016)	Difference between (2019-2020) & (2015- 2016)	2019-2020	2019-2020
Children <5 years	Overweight/ obesity	Kiphire: +3.6 Tuensang: +2.7	Mon: -6.7 Zunheboto: -3.3	Kohima: 1 Tuensang: 1	0
	Overweight/ obesity	Wokha: +6.1 Mon: +4.2	Zunheboto: -9.4 Kohima: - 8.7	Dimapur: 28 Wokha:11	1
Women (15-49 years)	High blood pressure	Zunheboto: +13.8 Mon: +9.1	Kiphire: -2.8 Phek: -1.4	Kohima: 23 Dimapur: 21	8
	High blood sugar	Dimapur: +0.3 Phek: +0.1	Mokokchung: -7.4 Wokha: -4.8	Dimapur: 9 Mon: 4	0
	Overweight /obesity	Data not available a	t district-level		
Men (15-54 years)	High blood pressure	Mon: +19.1 Zunheboto: 16.1	Mokokchung: -10.4 Kohima: -8.2	Kohima: 29 Mon: 27	10
	High blood sugar	Peren: +0.3 Mon: +0.2	Mokokchung: -10.5 Tuensang: -6.5	Dimapur: 7 Wokha:6	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>NCDs : non-communicable diseases.

<sup>1</sup>NA refers to the unavailability of data for a particular indicator in the specified NFHS round.

<sup>2</sup>Burden: 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) and projected population for 2019 was estimated using Census 2011.

<sup>3</sup>Public 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).

# 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	53	56	58
	Exclusive breastfeeding	30	44	43
	Timely introduction of complementary foods <sup>o</sup>	<b>—</b> 15	73	69
IVCE prestiese	Continued breastfeeding at 2 years	100	59	
IYCF practices	Adequate diet <sup>o</sup>	8	<b>1</b> 8	15
	Eggs and/or flesh foods consumption, 6-23m	34	52	
	Sweet beverage consumption, 6-23m	<b>5</b>	28	
	Bottle feeding of infants, 6-23m	23	29	
Maternal	Women with body mass index <18.5 kg/m2º	20	<b>—</b> 13	<b>—</b> 11
determinants	Consumed IFA 100+ days	<b>1</b>	<b>4</b>	<b>—</b> 10
Diseases	Diarrhea in the last two weeks <sup>o</sup>	<b>7</b>	<b>7</b>	<b>3</b>
DISEASES	ARI in the last two weeks <sup>o</sup>	<b>5</b>	● 2	● 1

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

Immediate	Worst performing	Best performing	Top coverage
determinants	districts (pp)	districts (pp)	districts (%) <sup>2</sup>
	Difference between (2019-2020) & (2015-2016) <sup>1</sup>	Difference between (2019-2020) & (2015-2016)	2019-2020
Early initiation of	Zunheboto: -23.4	Phek: +19.8	Tuensang: 69.4
breastfeeding	Wokha: -22.7	Kiphire: +14.0	Phek: 64.8
Exclusive	Tuensang: -46.0	Kiphire: +11.9	Mon: 48.4
breastfeeding	Phek: -2.6	Mon: +7.3	Phek: 47.6
Timely introduction of complementary foods <sup>0</sup>	Data not available		
Adequate diet <sup>o</sup>	Kohima: -11.8	Tuensang: +7.9	Wokha: 28.8
	Mon: -10.9	Longleng: +4.9	Zunheboto: 20.8
Women with BMI<18.5	Phek: +6.1	Mon: -7.0	Peren: 6.6
kg/m2⁰	Tuensang: +4.9	Dimapur: -5.0	Zunheboto: 5.6
Consumed IFA 100+	Phek: -1.5	Mon: +9.8	Kohima: 17.2
days	Kiphire: +0.1	Phek: +12.6	Dimapur: 14.9
Diarrhea in the last two	Mon: +2.5	Peren: -8.1	Kohima: 0.5
weeks⁰	Longleng: +2.9	Dimapur: -8.1	Zunheboto: 1.8
ARI in the last two	Longleng: +1.2	Peren: -5.7	Peren: 0
weeks⁰		Dimapur: -3.0	Zunheboto: 0.5
	determinants Early initiation of preastfeeding Exclusive preastfeeding Timely introduction of complementary foods <sup>o</sup> Adequate diet <sup>o</sup> Nomen with BMI<18.5 kg/m2 <sup>o</sup> Consumed IFA 100+ days Diarrhea in the last two weeks <sup>o</sup> ARI in the last two	determinantsdistricts (pp)Difference between (2019-2020) & (2015-2016)1Early initiation of preastfeedingZunheboto: -23.4 Wokha: -22.7Exclusive preastfeedingTuensang: -46.0 Phek: -2.6Fimely introduction of complementary foods oData not availableAdequate dietoKohima: -11.8 Mon: -10.9Nomen with BMI<18.5 kg/m20Phek: +6.1 Tuensang: +4.9Consumed IFA 100+ daysPhek: -1.5 Kiphire: +0.1Diarrhea in the last two weeks0Mon: +2.5 Longleng: +1.2	determinantsdistricts (pp)districts (pp)Difference between (2019-2020) & (2015-2016)1Difference between (2019-2020) & (2015-2016)1Early initiation of breastfeedingZunheboto: -23.4 Wokha: -22.7Phek: +19.8 Kiphire: +14.0Exclusive breastfeedingTuensang: -46.0 Phek: -2.6Kiphire: +11.9 Mon: +7.3Exclusive breastfeedingTuensang: -46.0 

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>o</sup>Indicator definition differs slightly between NFHS-4 and NFHS-5 <sup>1</sup>All 11 districts are comparable between 2015-2016 and 2019-2020.

<sup>2</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>3</sup>Prevalence did not increase or decrease in any of the districts.

# 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>	69	74	86
Maternal	Women with ≥10 years education⁰	14	25	44
determinants	Girls 20-24 years married before age of 18 years <sup>o</sup>	47	34	6
	Women 15-19 years with child or pregnant		6	4
	HHs with improved drinking water source <sup>o</sup>	57	76	91
	HHs with improved sanitation facility <sup>o</sup>	42	71	88
	HHs with hand washing facility		62	
Household determinants	Open defecation	18	2	• 0
	Safe disposal of feces	31	56	
	HHs with BPL card	<b>4</b>	22	67
	HHs with electricity <sup>o</sup>	77	95	99

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

Category	Underlying determinants	Worst performing districts (pp)	Best performing districts (pp)	Top coverage districts (%) <sup>2</sup>	
		Difference between (2019-2020) & (2015-2016) <sup>1</sup>	Difference between (2019-2020) & (2015-2016)	2019-2020	
	Women who are literate <sup>0</sup>	Zenheboto: +1.0 Mokokchung: +0.2	Mon: +19.3 Phek: +15.4	Kohima: 95.2 Mokokchung: 94.0	
Matana	Women with ≥10 years education⁰	Mokokchung: +6.7 Kiphire: +4.6	Kohima +34.9 Phek: +21.1	Kohima: 70.9 Mokokchung: 55.8	
Maternal determinants	Girls 20-24 years married before age of 18 years <sup>0</sup>	Tuensang: -14.0 Mokokchung: -6.6	Dimapur: -46.0 Peren: -35.3	Mon: 3.0 Kohima: 1.0	
	Women 15-19 years with child or pregnant	Kiphire: +5.5 Zenheboto: +1.2	Mon: -4.9	Kohima: 1.3 Mokokchung: 0.7	
	HHs with improved drinking water source <sup>0</sup>	Zenheboto: +3.9 Tuensang: +3.0	Peren: +40.1 Longleng: +36.1	Phek: 98.1 Mokokchung: 97.4	
Household determinants	HHs with improved sanitation facility <sup>0</sup>	Kiphire: +5.0 Mon: +4.7	Dimapur: +23.6 Tuensang: +23.6	Mokokchung: 96.7 Tuensang: 92.0	
	HHs with electricity <sup>0</sup>	Kiphire: -1.0 Mokokchung: - 0.4	Mon: +11.8 Peren: +2.8	Dimapur: 99.8 Wokha: 99.7	

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>0</sup>Indicator definition differs slightly between NFHS-4 and NFHS-5 <sup>1</sup>All 11 districts are comparable between 2015-2016 and 2019-2020.

<sup>2</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>3</sup>Prevalence did not increase or decrease in any of the districts.

# Figure 5. Trends in interventions across the first 1000 days 2005-2006, 2015-2016, 2019-2020

	Intervention	2005-2006	2015-2016	2019-2020		
	Demand for FP satisfied	41	44	68		
	lodized salt <sup>o</sup>	97	99	99		
5 C	Any ANC visits	58	46			
าลท	ANC first trimester	29	25	50		
egr	≥ 4ANC	<b>—</b> 12	<b>— 1</b> 5	21		
br	Received MCP card	<b>7</b>	31	92		
ing	Received IFA tab/syrup	26	42	68		
Pre-pregnancy and during pregnancy	Tetanus injection	52	61	81		
p	Deworming	• 1	• 2	<b>7</b>		
an	Weighing	23	37	95		
Š	Birth preparedness counselling	<b>5</b>	0			
nar	Breastfeeding counselling	<b>2</b>	• 3	68		
egl	Counselling on keeping baby warm		56	65		
p	Cord care counselling		• 3	64		
Pre	Food supplementation <sup>o</sup>	<b>—</b> 5	9	23		
	Health & nutrition education <sup>o</sup>	• 1	• 1	• 4		
	Malaria prevention- use of bed nets		65			
	Institutional birth <sup>o</sup>	<b>—</b> 14	36	46		
<u></u> –	Financial assistance (JSY)		<b>—</b> 10	37		
ata	Skilled birth attendant <sup>o</sup>	28	44	55		
elivery and post-natal	Postnatal care for mothers	<b>—</b> 10	<b>22</b>	44		
ols sol	Postnatal care for babies	0	• 2	42		
ŏ°	Food supplementation <sup>o</sup>	<b>—</b> 4	8	25		
	Health & nutrition education <sup>o</sup>	0	• 1	• 3		
	Full immunization <sup>o</sup>	<b>20</b>	<b>3</b> 6	58		
	Vitamin A <sup>o</sup>	8	28	<b>4</b> 6		
	Pediatric IFA <sup>o</sup>	• 4	9	<b>—</b> 13		
po	Deworming <sup>o</sup>	<b>—</b> 18	<b>—</b> 16	<b>—</b> 15		
Childhood	Care seeking for ARI <sup>o</sup>	<b>2</b> 5	33	<b>31</b>		
ild	ORS during diarrhea <sup>o</sup>	<b>—</b> 15	39	55		
ธ	Zinc during diarrhea <sup>o</sup>	0	<b>—</b> 17	9		
	Food supplementation (6-35 months)	<b>3</b> 6	<b>3</b> 6			
	Weighing	• 1	• 4	<b>2</b> 3		
	Counselling on child growth	0	0	41		

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

	Counselling on child growth												
	gningieW												
	Food supplementarion (shtnom 2E-3)												
	ธุราวอย่าง Sning diarrhea	9.1											
ildhood	oRS during diarrhea	54.5											
Early childhood	RA Tot guidees each	30.9	36.7			27.8			32.4		13.8		
	Deworming												
	AAI sinteib969												
	A nimstiV	45.6	49.4	42.3	76.8	46.8	51.3	46.9	44.2	42.2	27.5	44.9	33.5
	noitezinummi Ilu7	57.9	55.9	42.8	82.8	53.0	92.0	62.4	63.3	54.6	39.9	42.8	60.7
	Health & nutrition education												
	noitetnemelqqus boo7												
stnatal	Postnatal care for babies	41.8	64.7	33.5	55.6	28.5	47.3	22.4	45.1	34.9	30.2	45.4	24.7
Delivery & postnata	Postnatal care for mothers	43.9	68.7	31.9	58.9	28.5	47.4	25.6	46.9	39.6	29.5	50.7	24.9
Delive	Skilled birth attendant	55.3	80.7	46.7	78.9	44.6	61.7	30.9	52.5	50.7	39.2	63.5	40.5
	Financial assistance (JSY)	37.1	17.6	28.9	36.8	37.0	53.4	0.69	43.0	56.3	44.8	38.2	38.3
	Institutional birth	45.7	73.7	34.8	6.99	38.7	51.5	21.4	43.5	32.2	34.8	43.6	35.0
	education Malaria prevention- use of bed nets									-			
	Health & nutrition												
	Food supplementation												
	Cord care counselling												
	Keeping baby warm												
	Breastfeeding counselling												
	Birth preparedness counselling												
ancy	gningieW												
Pregnancy	Deworming	7.3	11.9	ĽL	4.4	3.6	8.4	8.4	5.2	11.7	5.3	3.4	8.0
	Tetanus injection	81.3	86.4	63.0	94.3	75.5	91.7	78.0	85.1	83.8	69.0	77.6	81.3
	Aəl bəviəcə qurys\dst	67.8	70.7	50.2	82.3	67.9	84.2	55.3	70.3	65.3	58.3	75.8	66.3
	Received MCP card	92.4	82.3	92.4	95.2	91.6	96.6	95.8	97.3	97.6	90.9	96.8	90.7
	⊃t ANC	20.7	50.1	5.8	28.3	15.4	18.2	9.7	14.5	9.5	4.4	34.7	11.2
	ANC first trimester	49.5	71.4	27.2	61.9	42.3	51.6	44.6	45.1	50.1	27.1	57.8	46.5
	sjisiv JNA γnA												
e- ancy	tlsz bəzibol	0.66	98.7	99.7	99.7	98.6	98.7	99.5	99.5	98.3	98.2	98.9	99.1
Pre- pregnancy	Demand for FP baitsites												
District name		NAGALAND	Dimapur	Kiphire	Kohima	Longleng	Mokokchung	Mon	Peren	Phek	Tuensang	Wokha	Zunheboto

Not Available

×08"<

60-<80%

40-<60%

20-<40%

<20%

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 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. 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).

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

Category	Interventions	Worst performing districts (pp)	Best performing districts (pp)	Top coverage districts (%)	
		Difference between (2019-2020) & (2015-2016) <sup>1</sup>	Difference between (2019-2020) & (2015-2016)	2019-2020	
	ANC first trimester	Mokokchung: +10.8 Tuensang: +8.2	Mon: +35.6 Dimapur: +37.0	Dimapur: 71.4 Kohima: 61.9	
	≥4 ANC visits	Mokokchung: +17.4 Kohima: -2.1	Dimapur: : +23.6 Longleng: +13.9	Dimapur: 50.1 Wokha: 34.7	
Pregnancy	Received MCP Card	Not applicable <sup>2</sup>	Mon: +79.6 Phek: +78.4	Perek:97.3 Phek: 97.6	
	Tetanus injection	Not applicable <sup>2</sup>	Mon: +43.9 Longleng: +28.7	Kohima:94.3 Mokokchun: 91.7	
	Institutional birth°	Not applicable <sup>2</sup>	Mon: +43.9 Longleng: +28.7	Dimapur: 73.7 Kohima: 66.9	
Delivery and	Skilled birth attendant°	Mokokchung: -13.4 Peren: -5.0	Phek: +23.0 Longleng: +25.8	Dimapur: 80.7 Kohima: 78.9	
post-natal	Postnatal care for mothers	Not applicable <sup>2</sup>	Dimapur: +33.1 Phek: +28.1	Dimapur: 68.7 Kohima: 58.9	
	Postnatal care for babies°	Not applicable <sup>2</sup>	Dimapur: 61.6 Kohima: 55.1	Dimapur: 64.7 Kohima: 55.6	
	Full immunization	Tuensang: -3.8	Longleng: +45.1 Mon: +42.8	Mokokchung: 92.0 Kohima: 82.8	
Early childhood	Vitamin A supplementation°	Mokokchung: -8.3	Kohima: +36.6 Longleng: +34.9	Kohima: 76.8 Mokokchung: 51.3	
	Care seeking for ARI°	Dimapur: -4.5	Peren: +12.1 Tuensang: +5.5	Dimapur: 36.7 Peren: 32.4	
	ORS treatment during diarrhea°	Data not available	Data not available	Data not available	
	Zinc treatment during diarrhea°	Data not available	Data not available	Data not available	

### Key takeaways

**Children:** Stunting prevalence declined by 10 pp from 2006 and 2016 but increased by 4pp from 2016 and 2020. Wasting decline by 3pp from 2006 and 2016 but increased by 7pp in 2020. Underweight declined by 9pp from 2006 to 2016 but increased by 9pp from 2016 to 2020. Anemia increased by 16pp from 2016 to 2020.

**Women:** Underweight declined by 5pp from 2006 to 2016 and continued to decline by 1pp from 2016 to 2020. Anemia in nonpregnant women increased by 1pp from 2016 to 2020. Anemia in pregnant women declined by 11pp from 2016 to 2020. Overweight/obesity increased by 10pp from 2006 to 2016 and decline by 2pp from 2016 to 2020.

Men: Overweight/obesity increased by 8pp from 2006 to 2016 and continued to increase by 10pp from 2016 to 2020. Attention is needed to improve (%s in 2020):

- Outcomes: Stunting (33%) and anemia in children (43%); anemia in non-pregnant (29%) and pregnant (22%) women
- Immediate determinants: Early initiation of breastfeeding (58%); exclusive breastfeeding (43%); adequate diet (15%); 100+ IFA (10%)
- **Underlying determinants:** Women with ≥10 years education (44%)
- Coverage of interventions: >4 ANC visits (21%); food supplementation (23-25%); health and nutrition education for women (3-4%); improvement need in most childhood coverage indicators (9-58%)

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. Indicator definition differs slightly between NFHS-4 and NFHS-5. 1All 8 districts are comparable between 2015-2016 and 2019-2020

<sup>o</sup>Indicator definition differs slightly between NFHS-4 and NFHS-5. <sup>1</sup>All 8 districts are comparable between 2015-2016 and 2019-2020. <sup>2</sup>Prevalence did not increase or decrease in any of the districts.

## 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 <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
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> 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 d
Vomen with body mass index <18.5 kg/m <sup>20</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/m <sup>2</sup> )
	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 <sup>1</sup> Percentage of youngest children under age five who had diarrhea in the two weeks preceding the survey;
Diarrhea in the last two weeks <sup>0</sup>	<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 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 <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 schoolin <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 ag 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 year 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	<sup>1</sup> Percentage of youngest children under age 5 living in household that uses improved toilet facility; <sup>2</sup> Population living
facility <sup>0</sup>	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
	<sup>1</sup> Percentage of youngest children under age 5 living in household that has electricity; <sup>2</sup> Population living in household
HHs with electricity <sup>0</sup>	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>	Percentage of currently married women aged 15-49 with demand for family planning satisfied by modern methods
lodized salt <sup>0</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 <sup>\$</sup>	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 <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
Proportfooding opuppolling@	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	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®	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	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>	<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
Legith 9 putrition advantion	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
postnatal	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; 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 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); 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
<b>U</b> - <sup>1</sup>	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) <sup>\$</sup>	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. <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-4. <sup>2</sup>Definition as per NFHS-5 factsheet. <sup>3</sup>Definition as per NFHS-5 state reports.

## Led by IFPRI

### **AUTHORS**

Nishmeet Singh, Research Analyst, IFPRI Phuong Hong Nguyen, 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

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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.

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#### **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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