



# Swabhimaan Programme (Mocho Mangun), Chhattisgarh

Impact Evaluation (2017-2022): Bastar





# Background

## 1. Aajeevika Programme in Chhattisgarh

In 2012, the Government of Chhattisgarh launched the Aajeevika programme called BIHAN in the state, which creates institutions of women driven by women themselves for reducing widespread rural poverty in the state by – (i) organizing rural poor women into Self Help Groups (SHGs); (ii) building their capacity to establish their savings base and linking them to viable pro poor livelihood value chains, so that poor families can take charge and come out of poverty and (iii) increasing access to social protection and entitlements (including food, water and nutrition security). This is achieved through demand generation and promoting food, Water, Sanitation and Hygiene (WASH) and nutrition-based livelihoods. The programme is anchored by the Chhattisgarh Rural Livelihood Promotion Society (CGRLPS), an independent society of the Government of Chhattisgarh, under the stewardship of the National Rural Livelihood Mission (NRLM), Ministry of Rural Development and Panchayati Raj, with funding from the World Bank.

Operationally, BIHAN (Aajeevika) creates multi-tier structure of women involving SHGs at tier-1, Village Organisations (VOs) comprising 10 to 20 SHGs at tier-2 and Cluster Level Federations (CLFs) at tier-3. In some districts, high tier federations at block and district levels are going to be formed soon. The BIHAN (Aajeevika) Programme Management Units (PMUs) at state (SPMU), district (DPMU) and block (BPMU) levels provide supervisory and capacity building support to SHGs and their higher tiers.

After the initial period of mobilization and collectivization for thrift and credit, bank linkage and income generation. The Aajeevika programme focuses on capacity building of VOs that abide by the "Panchsutra" guides for at least six months and engage as farmer collectives. In addition to this, another pre-requisite for capacity building is that the VOs must layer social issues within their programmes, through utilization of the monthly meeting platform of SHGs, for behaviour promotion and food, WASH and nutrition-security based livelihoods. At present, there are 56,744 SHGs (tier-1), 2,851 VOs (tier-2), and 66 CLFs (tier-3) in Chhattisgarh.

Each VO has office bearers, Community Resource Person (CRP) and a book keeper. A Vulnerability Reduction Fund (VRF) is available to the members (particularly those belonging to the poorest households) to seek loans for health and other family emergencies. Revolving Fund (RF) and Community Investment Fund (CIF) is available to initiate various income generation activities.

## 2. BIHAN in Bastar District, Chhattisgarh

The BIHAN was initiated in 2012 in three blocks in Bastar district and gradually scaled up to all seven blocks by 2016. Programme data (2016) shows that there are a total of 3,855 SHGs (tier-1), 177 VOs (tier-2) and 4 CLFs (tier-3) in Bastar district. In 2016, the BIHAN programme covered

1,01,173 households. For programme purpose, BIHAN has divided each block into four clusters. Each cluster is supervised by an Area Coordinator (AC) who reports to a Block Manager (BM) at block level. A DPMU supports and anchors various initiatives in the district.

### 3. Swabhimaan Programme (2016-2021), Bastar District, Chhattisgarh

In 2016, BIHAN (Aajeevika) partnered with the United Nations Children's Fund (UNICEF) Chhattisgarh to initiate the Swabhimaan (named as 'Macho Mangun' in the state, which means self-esteem in Halbi) Project (2016-2020) with an aim to improve the nutritional status of adolescent girls, pregnant women and mothers of children under two years in Bastar block of Bastar district in Chhattisgarh, by increasing the coverage of five essential nutrition (specific and sensitive) interventions. BIHAN is anchoring and implementing the Swabhimaan ('Macho Mangun') programme, in coordination with

#### The Swabhimaan Demonstration Programme

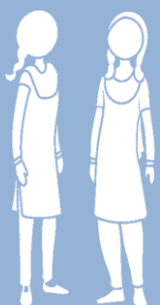
##### Strategy 1

Block-wide and entails formal systems strengthening to improve coverage of food security entitlements, health, nutrition, water and sanitation services



##### The activities under this strategy include:

- ➔ Strengthening Village Health, Sanitation and Nutrition Days (VHSNDs) to improve access to antenatal care, family planning and micronutrient supplementation through this platform. Strengthening will involve quarterly trainings of health service providers, monthly review of nutrition indicators and identification of women at risk of under nutrition for special supplementary food/counseling
- ➔ Strengthening adolescent health day to improve access to adolescent health and nutrition services via quarterly trainings of health and Integrated Child Development Services (ICDS) service providers
- ➔ An extended VHSND once every six months for newly-wed women, including individual counselling and providing information about entitlement camps
- ➔ Annual training and follow-up meetings with service providers from allied departments (Public Health Engineering Department, Civil Supplies) to help them improve the delivery of entitlements and services
- ➔ Regularizing block nutrition convergence review mechanism



the Departments of Health & Family Welfare, Civil Supplies, Panchayat & Rural Development, Women & Child Development, Agriculture, Horticulture and Public Health Engineering, with technical and financial support from the UNICEF. UNICEF in turn is partnering with relevant non-government partners (and resource persons) for development of capacity building tools and methodologies and with relevant academia for impact and process evaluation.

The impact evaluation is led by the All India Institute of Medical Sciences (AIIMS) in Bihar, Chhattisgarh and Odisha, with technical support from the International Institute for Population Sciences (IIPS) and University College London. The impact evaluation has been registered with the Registry for International Development Impact Evaluations (RIDIE-STUDY-ID- 58261 b2f46876) and Indian Council of Medical Research (ICMR) National Clinical Trials Registry of India (CTRI/2016/11/007482).

Bastar block of Bastar district, which has been designated as the intervention block is divided into


## Adopts Two Implementation Strategies



### Strategy 2

Partner with Village Organizations to design, implement and monitor a multi-sector programme for adolescent girls and women.

#### The activities under this strategy include:

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- ➔ Training cadres of VOs (Mangun Mit) to facilitate adolescent and women specific issues (Amcho Basul) through monthly meetings with women's SHGs using participatory learning and action cycle methodology.
  - ➔ Training cadres of VOs (Mangun Mit) to form and facilitate fortnightly adolescent girls' clubs (Kishori Samoo) for discussions, using participatory learning and action cycle, and link girls of the VOs to receive grants for secondary education
  - ➔ Quarterly trainings of community farming cadre of VOs (Krishi Mitra) who in turn engage monthly with women farmer/producer groups of BIHAN on nutrition-sensitive agriculture methodologies for creation of community nutrition-sensitive agriculture demonstration sites (farmer field school at cluster level) and promotion of backward micronutrient rich kitchen gardens at homes
  - ➔ Training community cadres of VOs (Mangun Mit) to identify 'at nutritional risk' adult women (Mid-Upper Arm Circumference [MUAC] <23 cm for women and first/adolescent pregnancy). track and follow up through fortnightly group/home visits and linkage with (a) VOs for provision of seed grants for agriculture and poultry-rearing activities and (b) one free hot-cooked noon meal
  - ➔ VOs conducting special meetings for newly-wed couples and theme-based rallies
  - ➔ VOs developing a micro social nutrition plan and conducting a bi-annual process audit of their progress against plan

four clusters of 2, 42, 118 and 17 VOs respectively for the purpose of programme impact evaluation. In the first year (2017) of programme implementation 11,180 villages of Cluster 4 will serve as the intervention area. Additionally, in Bastar block (from 2017 onwards), women's VOs (and SHGs) are being engaged in designing and implementing integrated village health, nutrition and WASH plans through community cash grants received by BIHAN via the VRF or other such options. Bakawand block of Bastar district will be the designated comparison area. Bakawand has 50 VOs (till date) and 1,026 SHGs that have been recently formed. CLFs are yet to be formed in Bakawand. We hypothesise that the Swabhimaan programme will lead to a 15% reduction in the proportion of adolescent girls with a Body Mass Index (BMI) <18.5, a 15% reduction in the proportion of mothers of children under two with a BMI <18.5 and a 0.4 cm improvement in mean MUAC among pregnant women, over the intervention period of three years. Additionally, improvements of 5% to 20% are expected in the coverage of 18 key nutrition specific and sensitive indicators in intervention areas over the span of three years.

#### **4. Swabhimaan Programme Baseline Survey (2017), Bastar District**

Data collection for the baseline survey was conducted in 40 villages of Bastar block (intervention area) and 40 villages of Bakawand block (comparison area) between January to April 2017.

Based on the outcome indicators and the change envisaged, a representative sample from all three target groups was selected using simple random sampling for the baseline survey in Bastar and Bakawand blocks. From Bastar, 1,468 adolescent girls, 442 pregnant women and 1,281 mothers of children under two years were interviewed. From Bakawand, 1,453 adolescent girls, 381 pregnant women and 1,258 mothers of children under two years were interviewed. Thus, a total of 2,921 adolescent girls, 823 pregnant women and 2,539 mothers of children under two years were interviewed from Bastar district.

The baseline survey protocol, methodology and tools were approved by the Institutional Ethics Committee of AI IMS Raipur. Separate paper based bilingual (English and Hindi) interview schedules, containing questions for collecting household and individual information for the three target groups, were used. Data collection was carried out by 30 investigators, who were supervised by six supervisors and edited by six field editors.

Quality control checks were conducted for 10% of the interviewed population. Verbal consent was taken from all participants before conducting the interviews. For respondents below the age of 18 years, written and verbal consent was taken from the respondents and their parents respectively.

A separate schedule was prepared for each target group. Information obtained included socio demographic and household characteristics, educational attainment, diet diversity, availability of a homestead kitchen garden, access to health, ICDS and Aajeevika services and decision-making practices using pre-tested interview schedules. Nutritional status was assessed using anthropometry (weight, height and MUAC).

## **5. Swabhimaan Programme Midline Survey (2018-19), Bastar District**

In order to examine the intervention process and the extent of the reach of beneficiaries, UNICEF entrusted IIPS for conducting the Midline process evaluation survey (2018-2019). This is a mixed method design study which includes a cross-sectional survey and qualitative data collection in Bastar and Bakawand blocks in Bastar district of Chhattisgarh. The cross-sectional survey aims to assess the system strengthening process and coverage of VO led interventions among beneficiaries. Qualitative data collection included in-depth interviews and focus group discussions of target groups, community cadres and service providers.

The specific objectives of the midline survey are:

- I. To study the extent of coverage of food security, health, nutrition and water and sanitation services in both intervention and control sites.
- II. To determine the coverage of VO led interventions among beneficiary in intervention site.
- III. Stakeholders view on areas requiring improvement on coverage of services, and behaviours.
- IV. To assess the nutritional status of women as well as their children under two years - to provide further program leads for improvement.

## **6. Swabhimaan Programme Endline Survey (2021-22), Bastar District**

In order to evaluate the impact of Swabhimaan programme, UNICEF entrusted IIPS for conducting the Endline impact evaluation survey (2021-22). This is a cross-sectional survey that collected data from the adolescent girls (10-19 years), pregnant women (15-49 years) and mothers of children under age two years (15-49 years) and their children under age two in Bastar and Bakawand blocks in Bastar district of Chhattisgarh.

The specific objectives of the Endline survey are:

- I. To assess the reduction in the proportion of adolescent girls and mothers of children under two years with a BMI<18.5.
- II. To examine the improvement in mean mid-upper arm circumference (MUAC) among pregnant women over the intervention period (2017-2021).
- III. To compare the baseline and endline data for estimating improvements in the coverage of key nutrition-specific and nutrition-sensitive interventions.
- IV. To assess the change in utilization of maternal health and nutrition services before and after the COVID 19 pandemic.

## 7. Methodology and data collection

The endline survey used quantitative methods for data collection.

### 7.1 Methodology

To study the impact of the programme, samples were selected according to the baseline survey indicator on SHG enrolment. Based on the prevalence of an average 30% of households attached to SHGs, sample size was calculated to examine the reach of beneficiaries. A sample size of 484 was determined in both control and intervention areas employing multi-stage stratified cluster sampling and allowing for design effect of 1.5. However, considering the non-response, 500 sample for each adolescent girls and mothers of children under two years, and 300 sample of pregnant women (as it is difficult to get 500 samples) were estimated.

The samples for the quantitative data were drawn by using a multi-stage stratified cluster sampling procedure. In the first stage of sampling, villages were selected and considered as Primary Sampling Units (PSUs). In the second stage, a systematic random selection of households within each PSU was conducted. Finally, the survey was carried out in 40 PSUs (21 PSUs Bastar and 19 PSUs from Bakawand blocks) in Chhattisgarh.

The list of villages from Census, 2011 was used as sampling frame. In each PSU, a mapping and household listing operation was carried out. The listing provides the necessary frame for selecting households at the second stage. In the midline survey, a 'village' is considered as a unit of at least 500 households. Therefore, small villages (with less than 500 households) were merged with the adjacent village in order to fulfil the criteria of at least 500 households. Afterwards, these villages were segmented into three sections based on certain characteristics and two segments were selected randomly using the Probability Proportional to Size (PPS) method. The household listing in the segmented PSUs was carried out only in the selected segments. After fulfilling the above criteria (minimum 500 households per village) a total of 40 PSUs were covered which comprises of 40 villages in Bastar block (intervention area) and 40 villages in Bakawand block (control area) in Bastar district.

### 7.2 Techniques and Tools of Data collection

The study instruments were developed by a group of experts to facilitate the midline survey.

Quantitative data were collected in Odisha through semi-structured questionnaires. A separate schedule was prepared for each target group including children under 2 years and were pretested. In baseline survey, there was no separate schedule for data collection of children under two years.

The quantitative data collection tools include:

- Household interview schedule
- Adolescent girls' interview schedule
- Pregnant women interview schedule
- Mothers of children under two years interview schedule
- Children under two years interview schedules

The data collection was completed during 16<sup>th</sup> November 2021 and 10<sup>th</sup> February 2022. Information collected includes socio-demographic and household characteristics, educational attainment, diet diversity, food insecurity and availability of a homestead kitchen garden, access to health, ICDS, Aajeevika services, decision making practices and nutritional status. Identification of women respondents in the three target groups was done by Mapping and Listing during November and December 2021. After mapping and listing, 2078 adolescent girls, 715 pregnant women, 2082 mothers of children under two years and their children under age two were interviewed from intervention and control areas.

Anthropometric measurements (weight, height and Mid Upper Arm Circumference (MUAC)) were assessed using the standard technique by trained field investigators. All the measurements were taken twice in order to avoid measurement errors. Weight was measured barefooted in kilograms (kgs) using a SECA electronic weighing scale recorded to the nearest 0.1 kg. Height was taken barefooted in centimeters (cms) using stadiometer nearest to 0.1 cms. MUAC was also measured in centimeters with a non-stretchable measuring tape nearest to 0.1 cm. The tape was placed firmly but gently on the arm to avoid compression of soft tissue. Quality control checks were conducted for 10% of the interviewed population. The weighing scales and stadiometer were calibrated on a weekly basis prior to data collection with standard weights (1, 2 and 5 kg) and a metre rod (100 cm). Anthropometric measurements of 2073 adolescent girls, 707 pregnant women and 2067 mothers of children under two years and their children were assessed.

### **7.3 Technical Advisory Group (TAG) meeting**

A Technical Advisory Group (TAG) was constituted to guide and approve the survey design, tools, and protocols for the Endline survey. The members include technical experts in nutrition, intervention studies, sampling and survey methodology. The Technical Advisory Group (TAG) meeting was conducted in IIPS on 6<sup>th</sup> February 2021 for reviewing and finalizing the endline survey tools (Household, Adolescent Girl, Pregnant Woman, Mothers of children under two years and Children under two years interview schedules).

### **7.4 Ethical Consideration**

The endline survey protocol, methodology and tools were approved by the Institutional Ethics Committee of the IIPS. Computer-assisted-personal-interviews (CAPI) based on bilingual interview schedules were used for data collection. Written consent was taken from all the participants before conducting the interviews. In the case of adolescent girls below 18 years of age, verbal consents were taken from them and written consent were also taken from their parents.

### **7.5 Endline Survey Factsheet**

The factsheet of the endline survey demonstrates the effect of the programme on essential indicators over time using difference in difference (DID) technique. The factsheet also present information on the prevalence of other major indicators during baseline, midline and endline surveys according to intervention and control areas.



# **DIFFERENCE IN DIFFERENCE (DID)**

**ESSENTIAL NUTRITION INDICATORS (2017-2022)**

## ADOLESCENT GIRLS (10-19 YEARS)

	Key Indicators	BASTAR (Intervention Area)			BAKAWAND (Control Area)			Effect size of change
		Baseline 2017	Midline 2018	Endline 2022	Baseline 2017	Midline 2018	Endline 2022	DID (Baseline to Endline)
		(N=1468)	(N=509)	(N=1053)	(N=1453)	(N=508)	(N=1025)	
	Estimated sample of adolescent girls (n)	1098	500	1098	1098	500	1098	
	Adolescent girls interviewed (n)	1468	509	1053	1453	508	1025	
1	<b>NUTRITIONAL STATUS<sup>1</sup> (n)</b>	1464	506	1051	1451	503	1022	
1.1	Adolescent girls' mean Body Mass Index (BMI) <sup>2</sup> [SD]	17.3 [2.4]	17.8 [2.5]	17.8 [2.4]	17.4 [2.6]	17.8 [2.6]	17.9 [2.4]	
1.2	Adolescent girls with BMI for age < -2SD <sup>3</sup> (%)	15.7	12.7	12.0	12.9	12.4	10.4	-1.2
1.3	Adolescent girls with BMI for age < -3SD <sup>4,5</sup> (%)	2.4	2.0	2.8	3.2	2.0	1.7	1.9**
1.4	Adolescent girls experiencing both stunting and wasting <sup>6</sup> (%)	5.9	3.2	3.4	4.3	2.6	2.9	-1.1
1.5	Adolescent girls experiencing severe stunting and wasting <sup>7</sup> (%)	0.2	0.0	0.1	0.3	0.5	0.2	0.1
	<b>DIETARY DIVERSITY<sup>8</sup> (n)</b>	1411	442	729	1389	427	650	
2	Adolescent girls' mean Dietary Diversity Score (DDS) <sup>9</sup> [Standard Deviation (SD)]	4.3 [1.8]	4.3 [1.3]	5.4 [2.4]	4.4 [1.5]	4.6 [1.6]	5.2 [2.2]	
3	<b>Adolescent girls by number of food groups consumed</b>							
3.1	Five or more food groups (%)	40.0	36.1	56.6	42.6	46.9	53.2	6.0*
3.2	Adolescent girls with minimum DDS (6 or more out of 10) (%)	13.6	13.9	40.8	13.9	23.4	37.7	3.4
	<b>MICRONUTRIENT SUPPLEMENTATION</b>							
4	Adolescent girls who have consumed at least four IFA tablets in the last month/last three months preceding the survey <sup>10</sup> (%)	10.1	16.6	10.2	12.0	14.0	10.1	2.1
5	Adolescent girls living in households using adequately iodised salt <sup>11</sup> (%)	95.3	79.9	97.8	94.7	83.3	97.5	-0.3
6	Adolescent girls living in households with a kitchen garden <sup>12</sup> (%)	50.0	7.2	54.5	33.2	6.0	33.5	4.2
7	Adolescent girls living in households in which members practice open defecation (%)	85.2	40.2	28.5	81.1	37.3	25.9	-1.5
8	Adolescent girls who use safe pads or sanitary pads during periods <sup>13</sup> (%)	36.1	61.7	61.0	37.3	53.1	59.5	2.7
	<b>KISHORI DIVAS</b>							
9	Adolescent girls who have accessed adolescent health services (Kishori Divas) in the last one year preceding the survey <sup>14</sup> (%)	16.8	16.5	66.1	10.7	10.6	50.6	9.5***
10	Adolescent girls who have attended at least two Kishori group meetings in the six months preceding the survey (%)	2.5	4.4	45.5	3.6	0.4	0.0	46.6***

**Notes:**

Inference: \*\*\*  $p < 0.01$ ; \*\*  $p < 0.05$ ; \*  $p < 0.1$

((SD): Denotes the standard deviation

1. Includes only those adolescent girls who had given their consent for taking their anthropometric measurements.
2. The World Health Organisation (2004) defines Body Mass Index (BMI) as a simple index of weight for height and is used to categorise adults as either underweight, normal, overweight or obese. It is calculated as weight (kilograms) divided by the square of height (metres).
3. Adolescent girls whose z-score of BMI for age is below -2 SD units from the median of the 2007 WHO Growth Reference 5-19 years, are considered as underweight. It excludes 6 case whose weight were not measured/flagged in baseline, 8 flagged/weight not measured cases in midline and 5 flagged case/weight not measured in endline. In midline z-score for 38 adolescents whose age were more than 228 months were not estimated.
4. Adolescent girls whose z-score of BMI for age below -3 SD units from the median of the 2007 WHO Growth Reference 5-19 years, are considered as severely underweight. It excludes 6 case whose weight were not measured/flagged in baseline, 8 flagged/weight not measured cases in midline and 5 flagged case/weight not measured in endline. In midline z-score for 38 adolescents whose age were more than 228 months were not estimated.
5. Percentage of adolescent girls whose z-score of BMI for age greater than 2 SD units from the median of the 2007 WHO Growth Reference 5-19 years, was very low. Therefore, it is not included in the fact sheet.
6. Proportion of adolescent girls whose z-score of height for age is below -2 SD units and z-score of BMI for age is below – 2 SD units.
7. Proportion of adolescent girls whose z-score of height for age is below -3 SD units and z-score of BMI for age is below – 3 SD units.
8. Excludes those adolescent girls who ate less or more than usual on the day prior to the date of the interview, as in the case of a fast or a celebration.
9. Dietary Diversity Score (DDS) is computed on the basis of consumption of food items, from the ten food groups, on the day prior to the date of the interview. Based on Food and Agricultural Organisation (FAO) 2016 methodology, 14 major food items were clubbed together to form 10 food groups. A ten-point DDS scale was created (0 being the lowest value, 10 being the highest).
10. In baseline survey and endline survey the information on the consumption of IFA was collected based on the reference period of 'last month' and in midline the reference period was last 'three months' prior to the date of interview.
11. In baseline 'Adequately' iodized salt is used to refer to salt that has iodine content greater than 15 ppm. In midline salt with trademark logo bought from shops was used as a proxy measure for iodized salt.
12. Kitchen gardens are small plots of land cultivated by households. They provide the latter with easy access to fresh and nutritious vegetables and fruits, often on a daily basis.
13. Includes only those adolescent girls who had started or experienced menstruation.
14. Kishori Divas or Adolescent Girls' Day is held once in every three months at AWCs. Health services, including a free health check-up, are extended to all adolescent girls on this occasion.

## PREGNANT WOMEN (15-49 years)

	Key Indicators	BASTAR (Intervention Area)			BAKAWAND (Control Area)			Effect size of change
		Baseline 2017	Midline 2018	Endline 2022	Baseline 2017	Midline 2018	Endline 2022	DID (Baseline to Endline)
		(N=468)	(N=306)	(N=362)	(N=468)	(N=308)	(N=353)	
	Estimated sample of pregnant women (n)	374	300	374	374	300	374	
	Pregnant women interviewed (n)	442	306	362	381	308	353	
1	<b>NUTRITIONAL STATUS<sup>1</sup> (n)</b>	436	303	358	374	308	349	
1.1	Pregnant women's mean MUAC (cm [SD])	23.5 [1.9]	23.8 [2.3]	23.7 [2.1]	23.5 [2.0]	24.0 [2.7]	23.7 [2.4]	
1.2	Pregnant women with MUAC between 17-18.9 cm	0.2	0.0	0.6	0.3	0.0	0.6	0
1.3	Pregnant women with MUAC between 19-20.9 cm	6.2	5.6	5.6	6.4	5.2	3.8	2
1.4	Pregnant women with MUAC between 21-22.9 cm	32.3	32.0	28.0	32.9	29.5	26.0	2.5
1.5	Pregnant women with MUAC 23 cm and above	61.2	62.4	65.8	60.4	65.3	69.6	-4.5
1.6	Pregnant women experiencing severe wasting <sup>2</sup>	5.3	2.6	5.3	5.1	2.6	4.1	1
	<b>DIETARY DIVERSITY<sup>3</sup> (n)</b>	425	263	256	365	266	205	
2	Pregnant women's mean Dietary Diversity Score (DDS) <sup>4</sup> [Standard Deviation (SD)]	4.7 [1.3]	4.5 [1.3]	5.5 [2.1]	4.8 [1.2]	4.8 [1.5]	5.1 [2.0]	
3	Pregnant women with high dietary diversity score (6 or more out of 10) (%)	24.7	18.5	41.1	25.0	27.7	35.7	5.7
4	Pregnant women living in food secure households <sup>5</sup> (%)	39.9	52.9	42.0	38.6	57.0	44.1	-3
	<b>MICRONUTRIENT SUPPLEMENTATION AND DEWORMING</b>							
5	Pregnant women (in 2nd and 3rd trimester) who consumed at least 25 IFA tablets <sup>6</sup> (%)	47.3	36.6	65.1	58.8	36.7	72.3	4.3
6	Pregnant women (in 2nd and 3rd trimester) who received any calcium tablet <sup>6</sup> (%)	0.0	25.4	66.7	0.4	28.8	72.2	-5.2
7	Pregnant women (in 2nd and 3rd trimester) who consumed any tablet for deworming <sup>6</sup> (%)	0.0	5.8	45.7	0.0	8.8	43.9	1.8
8	Pregnant women living in households using adequately iodised salt <sup>7</sup> (%)	97.1	79.1	99.2	96.6	86.0	97.8	1
9	Pregnant women who have had ANC check-up in the first trimester (%)	28.1	55.6	70.5	42.0	61.4	69.2	15.1***
10	Pregnant women whose weight was monitored (%)	61.1	63.2	92.0	79.0	71.8	94.2	15.7***
11	Pregnant women living in households with a kitchen garden <sup>8</sup> (%)	52.3	7.8	55.3	30.7	9.1	36.1	-2.4
12	Pregnant women living in households in which members practice open defecation (%)	94.6	46.5	35.8	82.4	40.6	28.3	-4.6
13	Pregnant women living in households with access to PDS in the month preceding the survey (%)	86.0	97.3	98.5	85.6	96.9	99.1	-1
14	Pregnant women receiving ICDS entitlement for supplementary food <sup>9</sup> (%)	38.9	69.6	82.8	39.1	64.9	81.9	1.1
15	Adopted family planning methods to keep space between pregnancies <sup>10</sup> (%)	9.3	8.5	14.9	8.7	12.0	16.4	-2
16	Pregnant women who attended at least three VHSND meetings <sup>11</sup> in the six months preceding the survey (%)	13.6	39.5	9.4	11.8	8.4	5.4	3.2

**Notes:**

Inference: \*\*\*  $p < 0.01$ ; \*\*  $p < 0.05$ ; \*  $p < 0.1$

SD: Denotes the standard deviation

1. Includes only those pregnant women who had given consent for anthropometric measurements.
2. Pregnant women whose height is less than MUAC < 21 cm
3. Excludes those pregnant women who ate less or more than usual on the day prior to the date of the interview, as in the case of a fast or a celebration.
4. Dietary Diversity Score (DDS) is computed on the basis of consumption of food items, from the ten food groups, on the day prior to the date of the interview. Based on Food and Agricultural Organisation (FAO) 2016 methodology, 14 major food items were clubbed together to form 10 food groups. A ten-point DDS scale was thus created (0 being the lowest value, 10 being the highest).
5. There are eight items indicating different levels of food insecurity severities. The first three indicate mild level of insecurity, items four to six indicate moderate food insecurity and last two being items for severe food insecurity. FIES is then divided into four categories: 'food secure', if households have not reported affirmatively to any of the eight items; 'mildly insecure', if only any one of the first three are affirmatively reported; 'moderately insecure', if either of items four, five or six are affirmatively reported; 'severely insecure', if all items are affirmatively reported or either of items seven and eight are affirmatively reported.
6. Includes those pregnant women who are in their 2nd and 3rd trimester and received any IFA, deworming and calcium tablet.
7. In baseline 'Adequately' iodized salt is used to refer to salt that has iodine content greater than 15 ppm. In midline salt with trademark logo bought from shops was used as a proxy measure for iodized salt.
8. Kitchen gardens are small plots of land cultivated by households. They provide the latter with easy access to fresh and nutritious vegetables and fruits, often on a daily basis. They include homestead land, vacant plots, and road sides, edges of a field or even containers.
9. Supplementary nutrition is provided to pregnant women and lactating mothers under ICDS.
10. Includes only those pregnant women who had two or more pregnancies (Baseline (n): Intervention Area – 334; Control Area – 275, Midline (n): Intervention Area – 167; Control Area – 240 and End line (n) Intervention Area - 241; Control Area –215).
11. The Village Health, Sanitation and Nutrition Day (VHSND), a component of ICDS, is held at Anganwadi Centres across Bihar once every month. On this day, adolescent girls, pregnant women and lactating mothers are provided with integrated health solutions as per their needs. The Village Health, Sanitation and Nutrition Day (VHSND), a component of ICDS, is held at Anganwadi Centres across Bihar once every month. On this day, adolescent girls, pregnant women and lactating mothers are provided with integrated health solutions as per their needs.

## MOTHERS (of children under two years) (15-49 years)

	Key Indicators	BASTAR Intervention Area			BAKAWAND Control Area			Effect size of change
		Baseline 2017	Midline 2018	Endline 2022	Baseline 2017	Midline 2018	Endline 2022	DID (Baseline to Endline)
		(N=1281)	(N=531)	(N=992)	(N=1258)	(N=520)	(N=1090)	
	Estimated sample of mothers <sup>1</sup> (n)	1098	500	1098	1098	500	1098	
	Mothers interviewed (n)	1281	531	992	1258	520	1090	
<b>1</b>	<b>NUTRITIONAL STATUS<sup>2</sup> (n)</b>	<b>1280</b>	<b>450</b>	<b>985</b>	<b>1255</b>	<b>438</b>	<b>1082</b>	
1.1	Mothers' mean Body Mass Index (BMI) <sup>3</sup> [SD]	18.6 [2.3]	18.8 [2.3]	19.1 [2.4]	18.5 [2.2]	18.8 [3.7]	19.1 [2.3]	
1.2	Mothers who are underweight (BMI<18.5)	53.7	50.3	43.3	54.8	53.1	44.8	-0.4
1.3	Mothers who are normal weight (BMI between 18.5-24.9)	45.3	48.2	54.8	44.5	45.4	53.2	0.8
1.4	Mothers who are overweight (BMI between 25.0-29.9)	0.9	1.1	1.4	0.6	1.1	1.8	-0.7
1.5	Mothers who are obese (BMI >29.9)	0.2	0.3	0.6	0.2	0.4	0.3	0.4
1.6	Mothers experiencing both severe stunting and wasting <sup>4</sup>	6.2	3.2	4.9	5.3	4.5	3.7	0.2
	<b>DIETARY DIVERSITY<sup>5</sup> (n)</b>	<b>1050</b>	<b>462</b>	<b>648</b>	<b>1137</b>	<b>1082</b>	<b>644</b>	
2	Mothers mean Dietary Diversity Score (DDS) <sup>6</sup> [Standard Deviation (SD)]	4.5 [1.3]	4.6 [1.3]	5.5 [2.0]	4.6 [1.2]	4.9 [1.5]	5.2 [1.9]	
3	Mothers with minimum dietary diversity score (6 or more out of 10) (%)	18.8	20.4	43.0	19.1	28.9	37.7	5.7*
4	Mothers living in food secure households <sup>7</sup> (%)	28.3	45.9	36.9	34.3	45.0	41.0	1.9
	<b>MICRONUTRIENT SUPPLEMENTATION AND DEWORMING</b>							
5	Mothers who consumed at least 100 IFA tablets during the last pregnancy <sup>8</sup> (%)	17.4	14.2	29.7	27.0	12.3	35.5	3.7
6	Mothers who received any calcium tablet during the last pregnancy <sup>8</sup> (%)	25.8	31.8	86.1	30.4	43.4	90.9	-0.2
7	Mothers who have consumed any tablet for deworming during the last pregnancy <sup>8</sup> (%)	15.4	16.3	52.3	24.3	21.8	46.4	14.9***
8	Mothers living in households which use adequately iodised salt <sup>9</sup> (%)	93.9	79.6	97.8	93.6	82.1	98.3	-0.8
9	Mothers who had ANC check-up in the first trimester (%)	27.4	49.0	69.5	35.4	59.4	68.3	9.2***
9.1	Mothers who had at least four ANC check-ups (%)	15.8	38.0	45.9	31.7	49.1	52.0	9.8***
10	Mothers who were weighed at least four times (%)	18.0	24.2	32.6	27.3	27.5	37.8	4
11	Mothers living in households with a kitchen garden <sup>10</sup> (%)	48.9	7.9	54.8	26.1	5.9	30.2	1.7
12	Mothers living in households in which members practice open defecation (%)	83.9	43.4	34.5	82.4	40.3	29.6	3.4
13	Mothers living in households with access to PDS in the month preceding the survey <sup>11</sup> (%)	97.5	97.7	98.3	96.2	96.9	98.2	-1.2
14	Mothers receiving ICDS entitlement for supplementary food <sup>12</sup> (%)	43.8	87.6	91.4	41.9	87.0	92.1	-2.5
15	Mothers who had an institutional delivery <sup>13</sup> (%)	62.2	63.8	69.2	67.2	67.4	72.6	1.6
16	Mothers who received maternity entitlement payment (JSY) from government <sup>14</sup> (%)	47.7	40.9	46.4	47.8	41.0	54.5	-8.0***
17	Currently use any modern contraceptive <sup>15</sup> (%)	5.5	10.0	33.6	9.5	15.9	32.4	5.2**
18	Mothers who attended at least three VHSND <sup>16</sup> meetings in the six months preceding the survey (%)	32.7	10.6	10.1	30.8	12.4	8.2	-0.1

## Notes

Inference: \*\*\*  $p < 0.01$ ; \*\*  $p < 0.05$ ; \*  $p < 0.1$

SD: Denotes the standard deviation

1. Mothers refer to women who have children under two years of age.
2. Includes mothers who consented to have their anthropometric measurements taken.
3. The World Health Organisation (2004) defines Body Mass Index (BMI) as a simple index of weight for height and is used to categorise adults as either underweight, normal weight, overweight or obese. It is calculated as weight (kilograms) divided by the square of height (metres).
4. Double burden of stunting and wasting is defined as mothers whose height is  $< 145$  cm and MUAC  $< 23$  cm.
5. Excludes those mothers who ate less or more than usual on the day prior to the date of the interview, as in the case of a fast or a celebration.
6. Dietary Diversity Score (DDS) is computed on the basis of consumption of food items, from the ten food groups, on the day prior to the date of the interview. Based on Food and Agricultural Organisation (FAO) 2016 methodology, 14 major food items were clubbed together to form 10 food groups. A ten-point DDS scale was thus created (1 being the lowest value, 10 being the highest).
7. Food security is evaluated based on eight items indicating different levels of food insecurity severities. The first three indicate mild level of insecurity, items four to six indicate moderate food insecurity, and last two being items for severe food insecurity. FIES is then divided into four categories: 'food secure', if households have not reported affirmatively to any of the eight items.
8. Among those mothers who received IFA tablets during the last pregnancy. (Baseline (n): Intervention Area=981; Control Area=1049 and Midline (n): Intervention Area=381; Control Area=413 and Endline (n): Intervention Area=923; Control Area=1002).
9. In baseline 'Adequately' iodized salt is used to refer to salt that has iodine content greater than 15 ppm. In midline salt with trademark logo bought from shops was used as a proxy measure for iodized salt.
10. Kitchen gardens are small plots of land cultivated by households. They provide the latter with easy access to fresh and nutritious vegetables and fruits, often on a daily basis. They include homestead land, vacant plots, road sides, edges of a field or even containers.
11. Includes only those households which possessed a ration card. (Baseline (n): Intervention Area=1111; Control Area=1119 and Midline (n): Intervention Area=452; Control Area=420 and Endline (n): Intervention Area=926; Control Area=1028).
12. Supplementary Nutrition is provided to mothers and lactating mothers under ICDS. (In baseline double amount of ICDS food and in midline mothers who received THR, egg and HCM).
13. Institutional delivery refers to last birth(s), which took place in a health facility/institution.
14. Under the Janani Suraksha Yojana (JSY), pregnant women from BPL category, SCs and STs are entitled to receive cash assistance for giving birth in a government or accredited private health facility.
15. Modern contraceptives include female and male sterilizations, Intra-Uterine Devices (IUDs), injectable, pills, condoms and diaphragms.
16. The Village Health, Sanitation and Nutrition Day (VHSND), a component of ICDS, is held at Anganwadi Centres across Bihar once every month. On this day, adolescent girls, mothers and lactating mothers are provided with integrated health solutions as per their needs.



# **ENDLINE FACTSHEET CHHATTISGARH (2017-2022)**

## ADOLESCENT GIRLS (10-19 years)

	Key Indicators	BASTAR (Intervention Area)			BAKAWAND (Control Area)		
		Baseline 2017	Midline 2018	Endline 2022	Baseline 2017	Midline 2018	Endline 2022
		(N=1468)	(N=509)	(N=1053)	(N=1453)	(N=508)	(N=1025)
	<b>SOCIO-DEMOGRAPHIC INDICATORS</b>						
1	Estimated sample of adolescent girls (n)	1098	500	1098	1098	500	1098
2	Adolescent girls interviewed (n)	<b>1468</b>	<b>509</b>	<b>1053</b>	<b>1453</b>	<b>508</b>	<b>1025</b>
	<b>Distribution of adolescent girls by age groups (years)</b>						
3.01	10-14 (%) [n]	55.3 [812]	45.2 [230]	39.7 [415]	55.6 [808]	50.6 [261]	45.2 [459]
3.02	15-19 (%) [n]	44.7 [656]	54.8 [279]	60.3 [638]	44.4 [645]	49.4 [247]	54.8 [566]
	<b>Educational status of adolescent girls</b>						
4	<b>Educational status of adolescent girls (10-14 years) (n)</b>	812	230	415	80	261	459
4.01	Never attended school (%)	1.4	2.3	0.3	0.7	0.7	0.3
4.02	Currently attending school (%)	86.2	90.9	90.7	91.2	92.8	86.4
4.03	Currently not attending school (%)	12.4	6.8	9.0	8.0	6.4	13.3
4.04	<b>Before COVID-19 Adolescent girls attending school/college<sup>1</sup></b>			<b>29.5</b>			<b>42.5</b>
5	<b>Educational status of adolescent girls (15-19 years) (n)</b>	656	279	638	645	247	566
5.01	Never attended school (%)	2.7	4.9	0.9	1.2	1.8	1.4
5.02	Currently attending school (%)	54.7	64.4	63.9	60.5	61.0	59.8
5.03	Currently not attending school (%)	42.5	30.6	35.2	38.3	37.3	38.8
5.04	<b>Before COVID-19 Adolescent girls attending school/college<sup>1</sup></b>			<b>33.0</b>			<b>39.7</b>
6	Adolescent girls who were engaged in paid work outside their home (%)	30.8	17.0	16.0	30.1	10.6	18.6
	<b>Religion of the head of household</b>						
7.01	Hindu (%)	98.4	98.7	99.1	98.1	98.6	99.0
7.02	Muslim (%)	0.2	0.0	0.0	0.3	0.3	0.3
7.03	Others <sup>2</sup> (%)	1.4	1.3	0.9	1.6	1.1	0.8
	<b>Caste/Tribe of the head of household</b>						
8.01	Scheduled Caste (SC) (%)	2.1	15.3	29.1	2.7	9.7	29.1
8.02	Scheduled Tribe (ST) (%)	65.6	53.6	42.3	64.7	58.2	44.7
8.03	Other Backward Classes (OBCs) (%)	28.9	24.6	23.6	26.8	24.1	21.6
8.04	Others <sup>3</sup>	3.4	6.6	5.0	5.8	8.1	4.7
	<b>FOOD SECURITY</b>						
	<b>Ration Card</b>						
9	<b>Adolescent girls women living in households having</b>						

	Key Indicators	BASTAR (Intervention Area)			BAKAWAND (Control Area)		
		Baseline 2017	Midline 2018	Endline 2022	Baseline 2017	Midline 2018	Endline 2022
		(N=1468)	(N=509)	(N=1053)	(N=1453)	(N=508)	(N=1025)
9.01	No ration card (%)	5.0	5.1	0.9	3.7	5.3	1.3
9.02	Above Poverty Line (APL) card (%)	1.1	3.7	15.4	1.7	3.5	15.8
9.03	Below Poverty Line (BPL) card <sup>4</sup> (%)	68.8	60.8	76.0	77.4	71.2	76.9
9.04	Antyodaya Anna Yojana (AAY) card <sup>5</sup> (%)	25.1	25.3	7.4	17.1	16.9	5.9
9.05	Any Other card (%)	0.1	5.1	0.3	0.2	3.1	0.1
	<b>Integrated Child Development Services (ICDS)</b>						
10.01	Adolescent girls who visit Anganwadi Centre (AWC) for any service <sup>6</sup> (%)	32.3	26.5	45.5	41.9	20.5	34.6
10.02	Adolescent girls who receive dry ration from AWC <sup>7</sup> (%)	88.8	45.9	67.6	87.6	54.7	76.8
11	Adolescent girls living in households with a kitchen garden <sup>8</sup> (%)	50.0	7.2	54.5	33.2	6.0	33.5
	<b>MICRONUTRIENT SUPPLEMENTATION AND DEWORMING</b>						
12	Adolescent girls who ever received any Iron and Folic Acid (IFA) tablet (blue coloured) (%)	52.4	55.2	72.1	68.5	57.6	80.2
13	Adolescent girls who have consumed at least four IFA tablets in the last month/last three months preceding the survey <sup>9</sup> (%)	10.1	16.6	10.2	12.0	14.0	10.1
14	Adolescent girls who have taken any tablet for deworming in the last six months/one year preceding the survey <sup>9</sup> (%)	58.0	60.2	60.9	65.6	71.7	54.4
15	Adolescent girls living in households using adequately iodised salt <sup>10</sup> (%)	95.3	79.9	97.8	94.7	83.3	97.5
	<b>DIETARY DIVERSITY<sup>11</sup>(n)</b>	1411	442	729	1389	427	650
16	Adolescent girls' mean Dietary Diversity Score (DDS) <sup>12</sup> [Standard Deviation (SD)]	4.3 [1.8]	4.3 [1.3]	5.4 [2.4]	4.4 [1.5]	4.6 [1.6]	5.2 [2.2]
17	<b>In the 24 hours preceding the survey, food groups consumed by adolescent girls</b>						
17.01	Grains, white roots and tubers and plantains (%)	99.9	100.0	98.8	99.9	99.8	98.7
17.02	Pulses (beans, peas and lentils) (%)	62.2	55.8	54.8	64.5	61.5	48.9
17.03	Nuts or seeds (%)	5.7	6.3	24.0	10.3	8.1	20.4
17.04	Dairy (%)	12.0	9.2	22.6	16.8	13.8	23.6
17.05	Meat, poultry and fish (%)	20.8	26.3	46.2	27.0	32.7	47.4
17.06	Egg (%)	6.6	6.8	33.3	8.1	15.3	29.1
17.07	Dark green leafy vegetables (%)	42.8	36.8	60.7	31.9	41.3	55.5
17.08	Other vitamin A-rich fruits and vegetables (%)	91.5	95.2	90.7	94.7	93.2	90.1
17.09	Other vegetables (%)	82.7	83.1	77.0	79.4	82.9	76.8
17.10	Other fruits (%)	18.9	14.4	31.5	20.4	12.8	29.5
17.11	Any insects and other small protein foods (%)	6.6	1.3	21.5	4.4	3.9	24.0
17.12	Any sugar-sweetened beverages (%)	59.3	59.2	63.3	79.3	55.1	58.8
17.13	Any savoury and fried snacks (%)	13.7	33.6	46.9	19.2	41.6	42.8

	Key Indicators	BASTAR (Intervention Area)			BAKAWAND (Control Area)		
		Baseline 2017	Midline 2018	Endline 2022	Baseline 2017	Midline 2018	Endline 2022
		(N=1468)	(N=509)	(N=1053)	(N=1453)	(N=508)	(N=1025)
18	<b>Adolescent girls consuming food from specific food groups</b>						
18.01	Animal-source food (meat, poultry, fish and egg) (%)	25.4	31.1	53.6	33.4	41.1	55.1
18.02	Pulses (beans, peas and lentils) and nuts or seeds (%)	64.1	56.8	58.8	68.6	62.5	54.7
18.03	Dark green leafy vegetables and other vitamin A-rich fruits and vegetables (%)	52.7	43.9	68.4	46.0	46.1	67.0
19	<b>Adolescent girls by number of food groups consumed</b>						
19.01	Only one food group (%)	0.1	0.8	0.8	0.1	0.2	0.4
19.02	Only two food groups (%)	4.3	3.2	6.2	2.4	4.1	6.6
19.03	Only three food groups (%)	19.2	24.3	16.5	16.8	18.6	17.5
19.04	Only four food groups (%)	36.4	35.7	19.9	38.1	30.2	22.3
19.05	Less than five food group (%)	60.0	63.9	43.4	57.4	53.1	46.8
19.06	Five or more food groups (%)	40.0	36.1	56.6	42.6	46.9	53.2
19.07	Adolescent girls with minimum DDS (6 or more out of 10) (%)	13.6	13.9	40.8	13.9	23.4	37.7
20	Adolescent girls who ate at least three meals in the last 24 hours including main and small meals (%)	74.3	79.1	80.8	71.2	72.7	77.7
	<b>ACCESS TO HEALTH SERVICES AND WATER, SANITATION AND HYGIENE (WASH)</b>						
	<b>Kishori Divas</b>						
21	Adolescent girls who think that there are times in a woman's cycle when she is more likely to get pregnant than other times <sup>13</sup> (%)	9.9	16.7	27.3	14.4	11.3	31.1
22	Adolescent girls who have accessed adolescent health services (Kishori Divas) in the last one year preceding the survey <sup>14</sup> (%)	16.8	16.5	66.1	10.7	10.6	50.6
23	Adolescent girls who have attended any Kishori group meeting in the six months preceding the survey <sup>15</sup> (%)	5.8	6.8	67.8	6.1	1.1	0.0
24	Adolescent girls who have attended at least two Kishori group meetings in the six months preceding the survey (%)	2.5	4.4	45.5	3.6	0.4	0.0
25	<b>Number of Kishori group meetings attended in the six months preceding the survey</b>						
25.01	Never attended (%)	94.2	93.2	32.2	93.9	98.9	100.0
25.02	Attended once (%)	3.3	2.5	22.3	2.5	0.7	0.0
25.03	Attended twice (%)	1.5	2.1	20.7	1.7	0.2	0.0
25.04	Attended thrice (%)	0.6	1.8	12.1	0.8	0.1	0.0
25.05	Attended more than three (%)	0.4	0.4	12.8	1.0	0.2	0.0
26	<b>Knowledge of social protection scheme for adolescents</b>						
26.01	Rashtriya Kishori Swasthya Karyakram (RKSK) (%)	4.1	7.3	18.9	3.2	7.8	17.2
26.02	Rajeev Gandhi Scheme for Empowerment of Adolescent Girls (Sabla) (%)	2.2	6.5	30.3	3.1	8.8	30.4

	Key Indicators	BASTAR (Intervention Area)			BAKAWAND (Control Area)		
		Baseline 2017	Midline 2018	Endline 2022	Baseline 2017	Midline 2018	Endline 2022
		(N=1468)	(N=509)	(N=1053)	(N=1453)	(N=508)	(N=1025)
27	<b>Adolescent girls who</b>						
27.01	Ever received any vocational training (%)	6.1	2.8	9.1	5.6	6.7	9.8
27.02	Ever attended any school/community occasions (%)	62.1	24.8	45.9	65.2	19.2	47.3
	<b>Water, Sanitation and Hygiene</b>						
28	<b>Adolescent girls living in households having access to drinking water from</b>						
28.01	Public tap/Stand pipe (%)	1.8	12.2	37.2	3.0	12.8	43.3
28.02	Tube well or Borehole (%)	82.0	63.9	23.0	86.6	71.9	20.4
28.03	Others <sup>16</sup> (%)	16.1	24.0	39.7	10.3	15.3	36.3
29	Adolescent girls living in households in which members practice open defecation (%)	85.2	40.2	28.5	81.1	37.3	25.9
30	Adolescent girls living in households in which members use soap for hand-washing after defecation (%)	75.5	66.9	84.9	74.1	69.8	84.2
	<b>Personal hygiene<sup>17</sup>(n)</b>	951	371	806	953	366	794
31	Adolescent girls who use safe pads or sanitary pads during periods (%)	36.1	61.7	61.0	37.3	53.1	59.5
32	Adolescent girls who use any cloth for protection during their periods (%)	74.9	48.5	42.7	78.3	53.6	49.1
	<b>ABILITY TO MAKE CHOICES AND DECISIONS</b>						
33	Adolescent girls taking decisions about their own health care (%)	26.9	15.7	40.5	20.9	17.3	43.1
34	Adolescent girls taking decisions about making major purchases for the household (%)	20.4	8.6	37.7	19.8	6.7	41.0
35	Adolescent girls taking decisions about making purchases for daily household needs (%)	35.1	33.8	39.3	33.4	27.6	41.1
36	Adolescent girls taking decisions about visits to family members or relatives (%)	27.9	21.6	39.6	23.7	21.1	40.5
37	Adolescent girls taking decisions about going to school or studying <sup>18</sup> (%)	69.8	57.0	49.0	73.0	50.4	55.0
38	Adolescent girls taking decisions about keeping/spending the money they currently have (%)	50.7	50.7	60.8	63.5	43.8	66.9
39	Adolescent girls who think that they can take decision regarding whom to marry (%)	17.7	18.1	36.1	14.0	15.9	39.9
	<b>NUTRITIONAL STATUS<sup>19</sup></b>						
	<b>Early adolescence (10-14 years) (n)</b>	809	227	414	806	259	458
40	Adolescent girls' mean weight (kg [SD])	33.8 [6.8]	35.4 [7.4]	35.4 [6.3]	34.2 [7.7]	36.1 [7.6]	36.1 [6.8]
41	Adolescent girls' mean height (cm [SD])	143.2 [8.2]	144.8[8.0]	145.3 [7.3]	143.5 [8.3]	145.3 [7.7]	145.6 [7.0]
42.01	Adolescent girls' height for age < -2SD <sup>20</sup> (%)	24.0	16.4	12.2	19.7	14.5	14.6
42.02	Adolescent girls' height for age < -3SD <sup>21</sup> (%)	4.3	2.7	2.5	2.7	3.5	1.8
43	Adolescent girls' mean Mid-Upper Arm Circumference (MUAC) <sup>22</sup> (cm [SD])	20.5 [2.4]	21.1 [2.5]	21.1 [2.5]	20.6 [2.6]	21.3 [2.7]	21.2 [2.3]
44.01	Adolescent girls with MUAC < 17 cm (%)	4.6	4.6	3.5	6.1	4.8	2.7
44.02	Adolescent girls with MUAC between 17-18.9 cm (%)	23.2	16.1	12.4	21.1	12.2	8.3
44.03	Adolescent girls with MUAC between 19-20.9 cm (%)	31.3	29.2	28.9	28.7	27.7	31.5

	Key Indicators	BASTAR (Intervention Area)			BAKAWAND (Control Area)		
		Baseline 2017	Midline 2018	Endline 2022	Baseline 2017	Midline 2018	Endline 2022
		(N=1468)	(N=509)	(N=1053)	(N=1453)	(N=508)	(N=1025)
44.04	Adolescent girls with MUAC between 21-22.9 cm (%)	24.7	28.4	30.6	25.7	25.7	34.9
44.05	Adolescent girls with MUAC 23 cm and above (%)	16.2	21.7	24.6	18.5	29.6	22.6
45	Adolescent girls' mean Body Mass Index (BMI) <sup>23</sup> [SD]	16.3 [2.2]	16.8 [2.5]	16.7 [2.1]	16.5 [2.7]	16.9 [2.5]	16.9 [2.3]
46.01	Adolescent girls with BMI for age < -2SD <sup>24</sup> (%)	17.8	15.0	11.9	17.0	13.7	11.7
46.02	Adolescent girls with BMI for age < -3SD <sup>25,26</sup> (%)	2.6	1.4	4.6	4.6	3.9	1.5
47	Adolescent girls experiencing both stunting and wasting <sup>27</sup> (%)	6.6	3.8	2.6	5.1	4.3	2.2
48	Adolescent girls experiencing severe stunting and wasting <sup>28</sup> (%)	0.3	0.0	0.0	0.4	1.0	0.0
	<b>Late adolescence (15-19 years) (n)</b>	655	279	637	645	244	564
49	Adolescent girls' mean weight (kg [SD])	41.9 [5.6]	42.0 [5.4]	42.3 [5.7]	42.3 [5.3]	43.3 [6.1]	42.5 [5.5]
50	Adolescent girls' mean height (cm [SD])	150.8 [8.4]	150.5 [5.8]	150.7 [5.4]	151.1 [5.3]	151.7 [5.6]	150.8 [5.1]
51.01	Adolescent girls' height for age < -2SD <sup>20</sup> (%)	36.5	40.0	35.3	33.3	30.7	36.2
51.02	Adolescent girls' height for age < -3SD <sup>21</sup> (%)	5.2	6.6	7.0	4.2	5.1	4.4
52	Adolescent girls' mean Mid-Upper Arm Circumference (MUAC) <sup>22</sup> (cm [SD])	23.4 [2.1]	23.3 [2.1]	23.1 [2.2]	23.4 [2.1]	23.6 [2.2]	23.1 [1.9]
53.01	Adolescent girls with MUAC < 17 cm (%)	0.0	0.4	0.9	0.5	0.0	0.4
53.02	Adolescent girls with MUAC between 17-18.9 cm (%)	1.8	1.6	1.0	1.1	1.2	0.5
53.03	Adolescent girls with MUAC between 19-20.9 cm (%)	9.3	8.1	9.6	6.4	6.0	8.7
53.04	Adolescent girls with MUAC between 21-22.9 cm (%)	30.5	34.4	33.2	32.4	33.8	35.1
53.05	Adolescent girls with MUAC 23 cm and above (%)	58.3	55.6	55.2	59.7	58.9	55.4
54	Adolescent girls' mean Body Mass Index (BMI) <sup>23</sup> [SD]	18.4 [2.1]	18.5 [2.2]	18.6 [2.2]	18.5 [2.0]	18.8 [2.3]	18.7 [2.2]
55.01	Adolescent girls with BMI for age < -2SD <sup>24</sup> (%)	13.2	10.8	12.1	7.8	11.2	9.3
55.02	Adolescent girls with BMI for age < -3SD <sup>25,26</sup> (%)	2.1	2.4	1.6	1.4	0.0	1.9
56	Adolescent girls experiencing both stunting and wasting <sup>27</sup> (%)	5.1	2.8	4.0	3.3	1.0	3.6
57	Adolescent girls experiencing severe stunting and wasting <sup>28</sup> (%)	0.2	0.0	0.1	0.3	0.0	0.3
	<b>Total adolescents (10-19 years) (n)</b>	1464	506	1051	1451	503	1022
58	Adolescent girls' mean weight (kg [SD])	37.4 [7.5]	39.0 [7.0]	39.6 [6.8]	37.8 [7.8]	39.6 [7.8]	39.7 [6.9]
59	Adolescent girls' mean height (cm [SD])	146.6 [8.1]	147.9 [7.4]	148.6 [6.7]	146.9 [8.0]	148.4 [7.5]	148.5 [6.5]
60.01	Adolescent girls' height for age < -2SD <sup>20</sup> (%)	29.6	29.5	26.1	25.8	22.5	26.5
60.02	Adolescent girls' height for age < -3SD <sup>21</sup> (%)	4.7	4.2	5.2	3.4	4.3	3.2
61	Adolescent girls' mean Mid-Upper Arm Circumference (MUAC) <sup>22</sup> (cm [SD])	21.8 [2.7]	22.3 [2.6]	22.3 [2.5]	21.9 [2.8]	22.4 [2.7]	22.2 [2.3]
62.01	Adolescent girls with MUAC < 17 cm (%)	2.5	2.3	1.9	3.6	2.4	1.4
62.02	Adolescent girls with MUAC between 17-18.9 cm (%)	13.7	8.1	5.5	12.2	6.8	4.0
62.03	Adolescent girls with MUAC between 19-20.9 cm (%)	21.4	17.6	17.3	18.7	17.0	19.0

	Key Indicators	BASTAR (Intervention Area)			BAKAWAND (Control Area)		
		Baseline 2017	Midline 2018	Endline 2022	Baseline 2017	Midline 2018	Endline 2022
		(N=1468)	(N=509)	(N=1053)	(N=1453)	(N=508)	(N=1025)
62.04	Adolescent girls with MUAC between 21-22.9 cm (%)	27.3	31.7	32.2	28.7	29.7	35.0
62.05	Adolescent girls with MUAC 23 cm and above (%)	35.0	40.4	43.1	36.8	44.1	40.5
63	Adolescent girls' mean Body Mass Index (BMI) <sup>23</sup> [SD]	17.3 [2.4]	17.8 [2.5]	17.8 [2.4]	17.4 [2.6]	17.8 [2.6]	17.9 [2.4]
64.01	Adolescent girls with BMI for age < -2SD <sup>24</sup> (%)	15.7	12.7	12.0	12.9	12.4	10.4
64.02	Adolescent girls with BMI for age < -3SD <sup>25,26</sup> (%)	2.4	2.0	2.8	3.2	2.0	1.7
65	Adolescent girls experiencing both stunting and wasting <sup>27</sup> (%)	5.9	3.2	3.4	4.3	2.6	2.9
66	Adolescent girls experiencing severe stunting and wasting <sup>28</sup> (%)	0.2	0.0	0.1	0.3	0.5	0.2
	<b>GENDER AND MENTAL HEALTH</b>						
67	Adolescent girls (10-19 years) reporting Patient Health Questionnaire-9 score >=10 (%)	NA	NA	17.3	NA	NA	23.5
68	Adolescent girls (10-19 years) reporting Generalized Anxiety Disorder-7 score >=10 (%)	NA	NA	15.9	NA	NA	18.3
69	Adolescent girls (10-19 years) reporting score <=2.99 (low resilience) on Brief Resilience Scale (%)	NA	NA	26.8	NA	NA	28.8
70	Adolescent girls (10-19 years) reporting score >=1 on Checklist for Assessment of Gender Disadvantage (CAGED) (%)	NA	NA	25.3	NA	NA	26.3

**Note:**

(SD): Denotes the standard deviation

- Total number of adolescent girls who are currently not attending school. 10-14 years (n) Baseline: Intervention Area =101; Control Area=65; Midline (n): Intervention Area =17; Control Area =16 and Endline (n): Intervention Area =35; Control Area =55. 15-19 years (n) Baseline: Intervention Area =279; Control Area=247; Midline (n): Intervention Area =85; Control Area =92 and Endline (n): Intervention Area =216; Control Area =208.
- Others include Christians, Buddhist/Neo-Buddhist and other religion
- In midline others include those who have reported others, can't say or don't know.
- Below Poverty Line (BPU cards are distributed to those households living below the poverty line. which includes households with a Monthly Per Capita Consumer Expenditure (MPCEI less than Rs. 911.80 (Chhattisgarh) (Report of the Expert Group to Review the Methodology for Measurement of Poverty, Government of India Planning Commission, June, 2014). These households are entitled to receive 10 kg wheat per card at Rs. 5.22 per kg, 15 kg rice per card at Rs. 6.78 per kg, and 1.49 kg sugar per family at Rs. 13.5 per kg. Retrieved from: <http://www.pdsportal.nic.in/main.aspx>.
- Antyodaya Anna Yojana (AAY) cards are distributed to those households which comprise the poorest segments of the BPL population, including a II households who are perceived to be at the risk of hunger. These households are entitled to receive 14 kg wheat per card at Rs. 2 per kg and 21 kg rice per card at Rs. 3 per kg. Retrieved from: <http://www.pdsportal.nic.in/main.aspx>.
- Under the Kishori Shakti Yojana (KSY), nutritional and health services are extended to adolescent girls, with local Anganwadi Centres serving as the focal point for delivery of the mandated services.
- Dry ration is provided from the AWC to those adolescent girls who visited AWC for services and who weight less than 35 kg. *Baseline (n): Intervention Area=89; Control Area=105; Midline (n): Intervention Area=29; Control Area=19 and Endline(n): Intervention Area=92; Control Area=73. In midline/endline reference period was one year but in the case of baseline it was six months.*
- Kitchen gardens are small plots of land cultivated by households. They provide the latter with easy access to fresh and nutritious vegetables and fruits, often on a daily basis. They include

homestead land, vacant plots, roadsides, edges of a field or even containers.

9. In baseline survey the information on the consumption of IFA and deworming tablets was collected based on the reference period of 'last month' and in midline the reference period was last 'three months' prior to the date of interview.
10. In baseline 'Adequately' iodized salt is used to refer to salt that has iodine content greater than 15 ppm. In midline salt with trademark logo bought from shops was used as a proxy measure for iodized salt.
11. Excludes those adolescent girls who ate less or more than usual on the day prior to the date of the interview, as in the case of a fast or a celebration.
12. Dietary Diversity Score (DDS) is computed on the basis of consumption of food items, from the ten food groups, on the day prior to the date of the interview. Based on Food and Agricultural Organisation (FAO) 2016 methodology, 14 major food items were clubbed together to form 10 food groups. A ten-point DDS scale was created (0 being the lowest value, 10 being the highest).
13. The information was collected from girls in late adolescence aged 15-19 years. Baseline (n): Intervention Area=656; Control Area=645 ;Midline (n): Intervention Area=279; Control Area=247 and Endline (n): Intervention Area=638; Control Area=566.
14. Kishori Divas or Adolescent Girls' Day is held once in every three months at AWCs. Health services, including a free health check-up, are extended to all adolescent girls on this occasion.
15. In baseline survey the information on attending Kishori group meeting was based on the reference period of 'last six months' and in midline the reference period was 'last three months' prior to the date of interview.
- 15a. In baseline participated in social drive to prevent child marriage or exploitation or violence was direct question however in the midline was an indirect question on participated in social drives organised in their village early marriage or exploitation or violence
- 15b. Who can socialise outside home was direct question in baseline however, in the midline it was combination of any participation in sports or recreational activities in the village
16. Others include those households which have other source of drinking water (Cart with small tank/drum and Packaged /bottled water).
17. Includes only those adolescent girls who had started or experienced menstruation.
18. Only those adolescent girls who ever attended school are included (Baseline (n): Intervention Area - 1439; Control Area – 1439 ; Midline (n): Intervention Area=492; Control Area=501) and Endline (n): Intervention Area=1046; Control Area=1016).
19. Includes only those adolescent girls who had given their consent for taking their anthropometric measurements.
20. Adolescent girls, whose z-score of height-for-age is below -2 SD units from the median of the 2007 WHO Growth Reference 5-19 years, are considered too short for their age (stunted). It excludes 1 flagged case in midline.
21. Adolescent girls whose z-score of height-for-age is below -3 SD units from the median of the 2007 WHO Growth Reference 5-19 years, are considered as severely stunted. It excludes 1 flagged case in midline.
22. The measurement of MUAC is commonly used as a potential indicator of nutritional status.
23. The World Health Organisation (2004) defines Body Mass Index (BMI) as a simple index of weight for height and is used to categorise adults as either underweight, normal, overweight or obese. It is calculated as weight (kilograms) divided by the square of height (metres).
24. Adolescent girls whose z-score of BMI for age is below -2 SD units from the median of the 2007 WHO Growth Reference 5-19 years, are considered as underweight. It excludes 6 case whose weight were not measured/flagged in baseline, 8 flagged/weight not measured cases in midline and 5 flagged case/weight not measured in endline. In midline z-score for 38 adolescents whose age were more than 228 months were not estimated.
25. Adolescent girls whose z-score of BMI for age below -3 SD units from the median of the 2007 WHO Growth Reference 5-19 years, are considered as severely underweight It excludes 6 case whose weight were not measured/flagged in baseline, 8 flagged/weight not measured cases in midline and 5 flagged case/weight not measured in endline. In midline z-score for 38 adolescents whose age were more than 228 months were not estimated.
26. Percentage of adolescent girls whose z-score of BMI for age greater than 2 SD units from the median of the 2007 WHO Growth Reference 5-19 years, was very low. Therefore, it is not included in the fact sheet.
27. Proportion of adolescent girls whose z-score of height for age is below -2 SD units and z-score of BMI for age is below – 2 SD units.
28. Proportion of adolescent girls whose z-score of height for age is below -3 SD units and z-score of BMI for age is below – 3 SD units.

## PREGNANT WOMEN (15-49 years)

	Key Indicators	BASTAR (Intervention Area)			BAKAWAND (Control Area)		
		Baseline 2017	Midline 2018	Endline 2022	Baseline 2017	Midline 2018	Endline 2022
		(N=468)	(N=306)	(N=362)	(N=468)	(N=308)	(N=353)
	<b>SOCIO-DEMOGRAPHIC INDICATORS</b>						
1	Estimated sample of pregnant women (n)	374	300	374	374	300	374
2	Pregnant women interviewed (n)	442	306	362	381	308	353
	<b>Distribution of pregnant women by age groups (years)</b>						
3.01	15-19 (%) [n]	7.9 [35]	6.9 [21]	9.7 [35]	10.5 [40]	15.6 [48]	11.4 [40]
3.02	20-29 (%) [n]	77.6 [343]	77.8 [238]	66.0 [239]	75.6 [288]	71.4 [220]	73.5 [260]
3.03	30-39 (%) [n]	13.6 [60]	14.7 [45]	23.5 [85]	13.4 [51]	13.0 [40]	14.3 [50]
3.04	40-49 (%) [n]	0.9 [4]	0.7 [2]	0.8 [3]	0.5 [2]	0.0 [0]	0.8 [3]
	<b>Educational status of pregnant women</b>						
4	Never attended school (%)	37.8	28.2	26.2	36.2	25.6	24.8
5	Completed 10 or more years of schooling <sup>2</sup> (%)	21.8	26.8	38.3	21.8	27.9	39.8
	<b>Self Help Groups (SHGs)</b>						
6	Pregnant women who are members of SHGs (%)	28.1	32.6	24.6	22.8	36.4	30.0
7	SHG members among the pregnant women who attended three or more Poshan Sakhi meetings in the 12 months preceding the survey <sup>3</sup> (%)	16.1	7.0	9.0	10.3	0.9	6.5
	<b>Religion of the head of household</b>						
8.01	Hindu (%)	98.2	99.7	98.9	99.2	98.1	98.5
8.02	Others <sup>4</sup>	1.8	0.3	1.1	0.8	1.9	1.5
	<b>Caste/Tribe of the head of household</b>						
9.01	Scheduled Caste (SC) (%)	2.0	12.4	27.7	2.6	8.1	23.3
9.02	Scheduled Tribe (ST) (%)	77.4	56.5	44.2	58.0	53.2	46.8
9.04	Other Backward Classes (OBCs) (%)	19.2	23.2	24.5	38.1	31.2	23.7
9.05	Others <sup>5</sup> (%)	1.4	7.9	3.6	1.3	7.5	6.2
10	Pregnant women who consumed alcohol and/or tobacco during pregnancy (%)	46.4	40.8	34.0	34.4	26.3	34.6
	<b>FOOD SECURITY</b>						
	<b>Ration Card</b>						
11	Pregnant women living in households having						

	Key Indicators	BASTAR (Intervention Area)			BAKAWAND (Control Area)		
		Baseline 2017	Midline 2018	Endline 2022	Baseline 2017	Midline 2018	Endline 2022
		(N=468)	(N=306)	(N=362)	(N=468)	(N=308)	(N=353)
11.01	No ration card (%)	8.8	15.4	7.4	8.4	17.5	4.2
11.02	Above Poverty Line (APL) card (%)	0.5	2.0	13.8	3.7	3.9	12.6
11.03	Below Poverty Line (BPL) card <sup>6</sup> (%)	68.6	58.2	68.8	69.8	66.2	74.5
11.04	Antyodaya Anna Yojana (AAY) card <sup>7</sup> (%)	22.2	19.9	10.0	17.8	10.4	8.7
11.05	Any Other card (%)	0.0	4.6	0.0	0.3	1.9	0.0
	<b>Public Distribution System (PDS) and Integrated Child Development Services (ICDS)</b>						
12	Pregnant women living in households with access to PDS in the month preceding the survey <sup>8</sup> (%)	86.0	97.3	98.5	85.6	96.9	99.1
13	Pregnant women receiving ICDS entitlement for supplementary food <sup>9</sup> (%)	38.9	69.6	82.8	39.1	64.9	81.9
14	Pregnant women living in households with a kitchen garden <sup>10</sup> (%)	52.3	7.8	55.3	30.7	9.1	36.1
	<b>FOOD INSECURITY<sup>11</sup></b>						
15	Pregnant women who experienced food insecurity in the 12 months preceding the survey						
15.01	Worried about insufficient food (%)	50.7	38.6	50.6	54.1	36.7	46.9
15.02	Unable to eat healthy and nutritious food (%)	45.0	36.0	41.9	39.6	33.8	37.8
15.03	Had to eat limited variety of food (%)	36.2	32.3	41.1	33.6	31.2	36.4
15.04	Had to skip a meal (%)	12.7	6.8	11.6	12.1	7.8	14.8
15.05	Had to eat less meals (%)	21.5	13.0	17.5	23.1	13.6	17.9
15.06	Household ran out of food (%)	16.1	5.6	8.8	10.5	8.1	11.4
15.07	Had no food to eat at any time (%)	6.1	3.3	4.2	3.9	5.2	5.9
15.08	Had to go an entire day without food (%)	3.2	2.9	5.2	2.1	2.9	5.3
	<b>Food Insecurity Experience Scale (FIES)</b>						
16.01	Pregnant women living in food secure households (%)	39.9	52.9	42.0	38.6	57.0	44.1
16.02	Pregnant women living in mildly food insecure households (%)	33.5	29.8	34.5	32.5	24.7	32.3
16.03	Pregnant women living in moderately food insecure households (%)	19.0	13.7	16.6	23.4	12.0	16.1
16.04	Pregnant women living in severely food insecure households (%)	7.5	3.6	6.9	5.0	6.2	7.6
	<b>Coping mechanism to manage shortfall of food</b>						
17	Coping strategies of the households as reported by pregnant women						
17.01	Household head now spends extra hours at work to earn more money (overtime) (%)	31.9	22.9	23.3	36.2	23.1	27.9
17.02	Unlike earlier, now female(s) of household start working outside home (%)	50.5	21.7	20.9	42.8	20.1	21.7
17.03	Unlike earlier, now children of household start working outside home (%)	5.2	4.9	3.9	5.5	3.2	6.4

	Key Indicators	BASTAR (Intervention Area)			BAKAWAND (Control Area)		
		Baseline 2017	Midline 2018	Endline 2022	Baseline 2017	Midline 2018	Endline 2022
		(N=468)	(N=306)	(N=362)	(N=468)	(N=308)	(N=353)
17.04	Migration of a family member to another city to earn money and send it back to the family (%)	15.2	5.9	6.4	13.9	5.8	6.7
17.05	Borrowing money to meet household expenses (%)	64.7	25.2	9.4	60.1	30.5	10.3
17.06	Resort to low-cost food grains/items available (%)	6.8	32.7	30.4	10.2	31.2	23.4
17.07	Borrowing grains to meet food requirements (%)	52.0	33.7	20.1	59.6	32.8	21.3
17.08	Sold household articles or possessions (%)	15.8	2.0	3.6	13.4	5.2	6.7
	<b>MICRONUTRIENT SUPPLEMENTATION AND DEWORMING</b>						
18	Pregnant women (in 2nd and 3rd trimester) who received any Iron and Folic Acid (IFA) tablet <sup>12</sup> (%)	73.5	74.2	89.2	77.1	70.7	93.0
19	Pregnant women (in 2nd and 3rd trimester) who consumed at least 25 IFA tablets <sup>13</sup> (%)	47.3	36.6	65.1	58.8	36.7	72.3
20	Pregnant women (in 2nd and 3rd trimester) who received any calcium tablet <sup>14</sup> (%)	0.0	25.4	66.7	0.4	28.8	72.2
21	Pregnant women (in 2nd and 3rd trimester) who consumed any tablet for deworming <sup>14</sup> (%)	0.0	5.8	45.7	0.0	8.8	43.9
22	Pregnant women living in households using adequately iodised salt <sup>15</sup> (%)	97.1	79.1	99.2	96.6	86.0	97.8
	<b>DIETARY DIVERSITY<sup>16</sup>(n)</b>	425	263	256	365	266	205
23	Pregnant women's mean Dietary Diversity Score (DDS) <sup>17</sup> [Standard Deviation (SD)]	4.7 [1.3]	4.5 [1.3]	5.5 [2.1]	4.8 [1.2]	4.8 [1.5]	5.1 [2.0]
24	<b>In the 24 hours preceding the survey, food groups consumed by pregnant women</b>						
24.01	Grains, white roots and tubers, and plantains (%)	98.8	100.0	98.0	100.0	99.6	98.5
24.02	Pulses (beans, peas and lentils) (%)	55.1	54.8	59.2	63.0	62.0	52.0
24.03	Nuts or seeds (%)	6.4	5.9	20.3	7.1	7.0	19.7
24.04	Dairy (%)	11.1	5.1	25.5	15.3	9.1	19.0
24.05	Meat, poultry and fish (%)	24.0	33.5	44.6	30.7	40.5	38.5
24.06	Egg (%)	5.9	7.2	27.4	12.1	13.6	25.0
24.07	Dark green leafy vegetables (%)	55.3	50.6	70.8	43.0	53.3	72.5
24.08	Other vitamin A-rich fruits and vegetables (%)	92.0	92.9	86.8	94.8	92.6	80.0
24.09	Other vegetables (%)	87.0	86.6	84.4	84.3	86.8	80.2
24.10	Other fruits (%)	31.3	12.6	31.3	33.2	16.9	25.5
24.11	Any Insects and other small protein source	7.8	2.9	18.4	6.6	3.3	17.0
24.12	Any sweets	61.7	59.0	59.9	81.1	62.0	57.9
24.13	Savoury / Fried snacks	10.6	17.2	36.4	12.3	25.2	33.0
25	<b>Pregnant women consuming food from specific food groups</b>						
25.01	Animal-source food (meat, poultry, fish and egg) (%)	28.7	38.5	48.2	40.1	49.2	47.2

	Key Indicators	BASTAR (Intervention Area)			BAKAWAND (Control Area)		
		Baseline 2017	Midline 2018	Endline 2022	Baseline 2017	Midline 2018	Endline 2022
		(N=468)	(N=306)	(N=362)	(N=468)	(N=308)	(N=353)
25.02	Pulses (beans, peas and lentils) and nuts or seeds (%)	56.6	56.1	62.2	65.9	64.0	60.3
25.03	Dark green leafy vegetables and other vitamin A-rich fruits and vegetables (%)	68.2	54.9	74.4	62.9	58.3	76.4
26	<b>Pregnant women by number of food groups consumed</b>						
26.01	Only one food group (%)	0.0	0.0	0.0	0.0	0.0	0.0
26.02	Only two food groups (%)	2.8	2.5	5.7	1.9	5.0	5.3
26.03	Only three food groups (%)	15.6	18.8	10.9	8.5	11.2	13.5
26.04	Only four food groups (%)	29.1	33.1	21.5	30.2	25.6	21.9
26.05	Less than six food groups (%)	52.4	81.5	61.9	59.4	72.3	57.9
26.06	Pregnant women with high dietary diversity score (6 or more out of 10) (%)	24.7	18.5	41.1	25.0	27.7	35.7
27	Pregnant women having at least three meals in a day	48.7	45.8	56.0	50.7	43.1	49.5
	<b>ACCESS TO HEALTH SERVICES AND WATER, SANITATION AND HYGIENE (WASH)</b>						
	<b>Registration in Antenatal Care (ANC) services</b>						
28	Pregnant women who have registered their pregnancy (%)	79.9	79.1	85.3	88.2	84.4	87.6
29	Pregnant women who have registered in the first trimester (%)	53.2	61.2	74.5	70.6	71.4	78.8
30	Pregnant women who have received a Mother and Child Protection (MCP) card <sup>18</sup> (%)	69.7	63.6	65.3	80.4	81.5	88.6
	<b>ANC services received during pregnancy</b>						
31	Pregnant women who have sought ANC services (%)	83.0	75.5	95.0	89.0	81.8	94.6
32	Pregnant women who have had ANC check-up in the first trimester (%)	28.1	55.6	70.5	42.0	61.4	69.2
33	Pregnant women who have received Tetanus Toxoid (TT) injection (%)	69.5	63.5	92.2	83.5	72.1	89.8
34	Pregnant women who have received counselling on birth preparedness by a frontline health worker <sup>19</sup> (%)	43.2	45.1	79.1	45.9	59.7	81.2
	<b>Monitoring of nutritional status during pregnancy</b>						
35	Pregnant women whose weight was monitored (%)	61.1	63.2	92.0	79.0	71.8	94.2
36	Pregnant women whose height was recorded (%)	9.5	14.7	46.9	15.7	27.6	48.8
37	Pregnant women whose Mid-Upper Arm Circumference (MUAC) was measured <sup>20</sup> (%)	13.6	27.5	64.6	14.4	23.1	63.6
	<b>Village Health, Sanitation and Nutrition Day (VHSND)</b>						
38.01	Pregnant women who attended VHSND meeting(s) in the six months preceding the survey <sup>21</sup> (%)	53.2	27.1	37.9	53.8	25.3	28.4
38.02	Pregnant women who attended at least three VHSND meetings in the six months preceding the survey (%)	13.6	39.5	9.4	11.8	8.4	5.4

	Key Indicators	BASTAR (Intervention Area)			BAKAWAND (Control Area)		
		Baseline 2017	Midline 2018	Endline 2022	Baseline 2017	Midline 2018	Endline 2022
		(N=468)	(N=306)	(N=362)	(N=468)	(N=308)	(N=353)
	<b>WATER, SANITATION AND HYGIENE</b>						
39	Pregnant women living in households having access to drinking water from						
39.01	Public tap/Stand pipe (%)	2.5	12.8	32.8	1.1	12.3	44.9
39.02	Tube well or Borehole (%)	79.4	64.1	24.9	81.9	71.4	23.0
39.03	Others <sup>22</sup> (%)	18.1	23.1	42.3	17.1	16.2	32.2
40	Pregnant women living in households in which members practice open defecation (%)	94.6	46.5	35.8	82.4	40.6	28.3
41	Pregnant women living in households in which members use soap for hand-washing after defecation (%)	77.1	64.7	85.1	66.7	73.1	85.3
	<b>KNOWLEDGE AND EVER USE OF FAMILY PLANNING METHODS AS REPORTED BY PREGNANT WOMEN</b>						
42	Knowledge of family planning methods (%)	41.9	85.9	95.4	47.5	86.0	95.8
43	Used any method to delay or avoid getting pregnant before first pregnancy (%)	6.6	6.2	13.3	9.2	8.8	15.9
44	Adopted family planning methods to keep space between pregnancies <sup>23</sup> (%)	9.3	8.5	14.9	8.7	12.0	16.4
	<b>ABILITY TO MAKE CHOICES AND DECISIONS</b>						
45	Pregnant women taking decisions about their own health care (%)	71.4	71.2	70.0	75.1	73.4	68.1
46	Pregnant women taking decisions about making major purchases for household (%)	74.5	71.8	69.2	72.7	76.0	68.4
47	Pregnant women taking decisions about visits to family members or relatives (%)	73.2	77.4	69.5	75.1	75.0	68.2
	<b>NUTRITIONAL STATUS<sup>24</sup> (n)</b>	436	303	358	374	308	349
48	Pregnant women's mean height (cm [SD])	151.5 [5.1]	151.7 [5.4]	151.4 [5.4]	151.5 [5.1]	152.2 [5.2]	151.6 [4.8]
49	Pregnant women with height < 145 cm [% (SD)]	9.6	7.0	10.1	9.9	8.4	7.0
50	Pregnant women's mean MUAC (cm [SD])	23.5 [1.9]	23.8 [2.3]	23.7 [2.1]	23.5 [2.0]	24.0 [2.7]	23.7 [2.4]
51.01	Pregnant women with MUAC between 17-18.9 cm [% (SD)]	0.2	0.0	0.6	0.3	0.0	0.6
51.02	Pregnant women with MUAC between 19-20.9 cm [% (SD)]	6.2	5.6	5.6	6.4	5.2	3.8
51.03	Pregnant women with MUAC between 21-22.9 cm [% (SD)]	32.3	32.0	28.0	32.9	29.5	26.0
51.04	Pregnant women with MUAC 23 cm and above [% (SD)]	61.2	62.4	65.8	60.4	65.3	69.6
52	Pregnant women experiencing both severe stunting and wasting <sup>25</sup> [% (SD)]	5.2	2.6	5.3	5.1	2.6	4.1
	<b>GENDER AND MENTAL HEALTH</b>						
53	Pregnant Women who reported depression <sup>26</sup> (%)	NA	NA	15.7	NA	NA	23.1
54	Pregnant Women who reported having anxiety disorder <sup>27</sup> (%)	NA	NA	13.8	NA	NA	19.3
55	Pregnant Women who experienced gender disadvantage <sup>28</sup> (%)	NA	NA	24.1	NA	NA	28.7

	Key Indicators	BASTAR (Intervention Area)			BAKAWAND (Control Area)		
		Baseline 2017	Midline 2018	Endline 2022	Baseline 2017	Midline 2018	Endline 2022
		(N=468)	(N=306)	(N=362)	(N=468)	(N=308)	(N=353)
56	Pregnant women who reported feeling husband is given preference for food consumption (priority, quantity) (%)	NA	NA	27.4	NA	NA	24.0
57	Pregnant women who got same opportunities as husband (for nutrition, work, study, health etc) (%)	NA	NA	79.5	NA	NA	81.5
58	Pregnant Women who experienced domestic violence (%)	NA	NA	7.7	NA	NA	7.7
59	Pregnant Women who reported having low resilience <sup>29</sup> (%)	NA	NA	26.3	NA	NA	25.4

#### Notes

Inference: \*\*\* p<0.01; \*\* p<0.05; \* p<0.1

SD: Denotes the standard deviation

- Others includes remarried, never married, widow, separated, and not stated
- Considered only those pregnant women who have ever attended school (Baseline (n): Intervention Area - 275; Control Area – 243; Midline (n): Intervention Area - 220; Control Area – 229 and Endline (n): Intervention Area - 267; Control Area – 265).
- Considered only those pregnant women who have are member of SHGs (Baseline (n): Intervention Area - 124; Control Area – 87; Midline (n): Intervention Area - 100; Control Area – 112) and Endline (n): Intervention Area - 89; Control Area – 106).
- Others include Christians and others.
- Others include those who have reported others, can't say or don't know.
- Below Poverty Line (BPL) cards are distributed to those households living below the poverty line, which includes households with a Monthly Per Capita Consumer Expenditure (MPCE) less than Rs. 971.28 (Bihar) (Report of the Expert Group to Review the Methodology for Measurement of Poverty, Government of India Planning Commission, June, 2014). These households are entitled to receive 10 kg wheat per card at Rs. 5.22 per kg, 15 kg rice per card at Rs. 6.78 per kg, and 1.49 kg sugar per family at Rs. 13.5 per kg. Retrieved from: <http://www.pdsportal.nic.in/main.aspx>.
- Antyodaya Anna Yojana (AAY) cards are distributed to those households which comprise the poorest segments of the BPL population, including all households who are perceived to be at the risk of hunger. These households are entitled to receive 14 kg wheat per card at Rs. 2 per kg and 21 kg rice per card at Rs. 3 per kg. Retrieved from: <http://www.pdsportal.nic.in/main.aspx>.
- Includes only those households which possessed a ration card (Baseline (n): Intervention Area - 403; Control Area – 349; Midline (n): Intervention Area - 259; Control Area – 254 and Endline (n): Intervention Area - 335; Control Area – 338).
- Supplementary nutrition is provided to pregnant women and lactating mothers under ICDS.
- Kitchen gardens are small plots of land cultivated by households. They provide the latter with easy access to fresh and nutritious vegetables and fruits, often on a daily basis. They include homestead land, vacant plots, road sides, edges of a field or even containers.
- There are eight items indicating different levels of food insecurity severities. The first three indicate mild level of insecurity, items four to six indicate moderate food insecurity and last two being items for severe food insecurity. FIES is then divided into four categories: 'food secure', if households have not reported affirmatively to any of the eight items; 'mildly insecure', if only any one of the first three are affirmatively reported; 'moderately insecure', if either of items four, five or six are affirmatively reported; 'severely insecure', if all items are affirmatively reported or either of items seven and eight are affirmatively reported.
- Includes those pregnant women who are in their 2nd and 3rd trimester of pregnancy (Baseline (n): Intervention Area - 322; Control Area – 289; Midline (n): Intervention Area - 215; Control Area – 224) and Endline (n): Intervention Area - 315; Control Area - 306).

13. Includes those pregnant women who are in their 2nd and 3rd trimester and received any IFA tablet (Baseline (n): Intervention Area - 222; Control Area - 216; Midline (n): Intervention Area - 152; Control Area - 166) and Endline (n): Intervention Area - 281; Control Area - 285).
14. Includes those pregnant women who are in their 2nd and 3rd trimester of pregnancy (Baseline (n): Intervention Area - 322; Control Area – 289; Midline (n): Intervention Area - 215; Control Area – 224) and Endline (n): Intervention Area - 315; Control Area - 306).
15. In baseline 'Adequately' iodized salt is used to refer to salt that has iodine content greater than 15 ppm. In midline salt with trademark logo bought from shops was used as a proxy measure for iodized salt.
16. Excludes those pregnant women who ate less or more than usual on the day prior to the date of the interview, as in the case of a fast or a celebration.
17. Dietary Diversity Score (DDS) is computed on the basis of consumption of food items, from the ten food groups, on the day prior to the date of the interview. Based on Food and Agricultural Organisation (FAO) 2016 methodology, 14 major food items were clubbed together to form 10 food groups. A ten-point DDS scale was thus created (0 being the lowest value, 10 being the highest).
18. Mother and Child Protection (MCP) card is a joint initiative of ICDS and the National Rural Health Mission (NRHM). It is a comprehensive multipurpose card which provides information to the parents/guardians on various types of services delivered through ICDS and NRHM. Included only those pregnant women who have registered their current pregnancy (Baseline (n): Intervention Area - 353; Control Area – 336; Midline (n): Intervention Area - 242; Control Area – 260 and Endline (n): Intervention Area - 309; Control Area - 310)
19. Frontline health workers include Auxiliary Nurse Midwives (ANMs), Accredited Social Health Activist (ASHA) and Anganwadi Workers (AWW).
20. The measurement of MUAC is commonly used as a potential indicator of nutritional status.
21. The Village Health, Sanitation and Nutrition Day (VHSND), a component of ICDS, is held at Anganwadi Centres across Bihar once every month. On this day, adolescent girls, pregnant women and lactating mothers are provided with integrated health solutions as per their needs.
22. Others include those households which have other source of drinking water (Cart with small tank/drum and Packaged /bottled water).
23. Includes only those pregnant women who had two or more pregnancies (Baseline (n): Intervention Area – 334; Control Area – 275; Midline (n): Intervention Area – 202; Control Area – 200) and Endline (n): Intervention Area - 241; Control Area – 215.
24. Includes only those pregnant women who had given consent for anthropometric measurements.
25. Pregnant women whose height is less than 145 cm and MUAC < 23 cm.
26. Depression was screened using Patient Health Questionnaire – 9 (PHQ-9). The PHQ-9 is the 9-item depression module. Mothers who scored  $\geq 10$  on this module were diagnosed to have depression.
27. Generalized anxiety disorder (GAD-7) was used to screen anxiety disorder which is a 7-item anxiety scale. Mothers who scored  $\geq 10$  on this were characterised as having anxiety disorder.
28. Gender disadvantage was measured using GAGED. Women who score  $\geq 1$  on this scale were said to have experienced gender-based disadvantage.
29. Resilience was measure using Brief Resilience Scale (BRS). Mothers who scored <3 on this scale were said to have low resilience.

## MOTHERS (of children under two years) (15-49 years)

	Key Indicators	BASTAR (Intervention Area)			BAKAWAND (Control Area)		
		Baseline 2017	Midline 2018	Endline 2022	Baseline 2017	Midline 2018	Endline 2022
		(N=1281)	(N=531)	(N=992)	(N=1258)	(N=520)	(N=1090)
	<b>SOCIO-DEMOGRAPHIC INDICATORS</b>						
1	Estimated sample of mothers <sup>1</sup> (n)	1098	500	1098	1098	500	1098
2	<b>Mothers interviewed (n)</b>	<b>1281</b>	<b>531</b>	<b>992</b>	<b>1258</b>	<b>520</b>	<b>1090</b>
	<b>Distribution of mothers by age groups (years)</b>						
3.01	15-19 (%) [n]	4.0 [51]	3.6 [19]	5.6 [51.0]	6.3 [79]	5.8 [29]	3.6 39[]
3.02	20-29 (%) [n]	71.0 [909]	73.9 [392]	65.7 [655]	79.0 [994]	74.0 [385]	72.2 [788]
3.03	30-39 (%) [n]	24.0 [307]	21.2 [113]	26.9 [270]	14.0 [176]	19.5 [102]	23.0 [249]
3.04	40-49 (%) [n]	1.1 [14]	1.3 [7]	1.8 [16]	0.7 [9]	0.8 [4]	1.3 [14]
	<b>Educational status of mothers</b>						
4.01	Never attended school (%)	43.4	35.2	27.6	35.8	34.3	25.8
4.02	Completed 10 or more years of schooling <sup>2</sup> (%)	21.4	25.2	35.7	18.7	25.6	34.2
	<b>Self Help Groups (SHGs)</b>						
5.01	Mothers who are members of SHGs (%)	32.2	39.8	28.9	22.9	45.1	30.4
5.02	SHG members among the mothers who attended three or more Poshan Sakhi meetings in the 12 months preceding the survey <sup>3</sup> (%)	19.4	7.3	10.4	5.6	5.0	7.7
	<b>Religion of the head of household</b>						
6.01	Hindu (%)	97.9	98.4	99.3	97.3	98.1	98.6
6.02	Others <sup>4</sup>	2.1	1.6	0.7	2.7	1.9	1.4
	<b>Caste/Tribe of the head of household</b>						
7.01	Scheduled Caste (SC) (%)	2.3	14.8	31.1	2.9	8.5	26.6
7.02	Scheduled Tribe (ST) (%)	66.4	53.0	42.6	66.0	57.6	46.7
7.03	Other Backward Classes (OBCs) (%)	28.4	25.0	21.5	25.4	26.9	21.5
7.04	Others <sup>5</sup> (%)	3.0	1.9	4.8	5.6	3.0	5.2
8	<b>Mothers who consumed alcohol and/or tobacco during the last pregnancy (%)</b>	45.0	38.8	39.4	37.3	34.1	34.0
	<b>FOOD SECURITY</b>						
	<b>Ration Card</b>						
9	<b>Mothers living in households having</b>						
9.01	No ration card (%)	13.3	14.7	6.7	11.0	19.9	5.5

	Key Indicators	BASTAR (Intervention Area)			BAKAWAND (Control Area)		
		Baseline 2017	Midline 2018	Endline 2022	Baseline 2017	Midline 2018	Endline 2022
		(N=1281)	(N=531)	(N=992)	(N=1258)	(N=520)	(N=1090)
9.02	Above Poverty Line (APL) card (%)	1.1	4.1	14.6	1.8	6.0	12.8
9.03	Below Poverty Line (BPL) card <sup>6</sup> (%)	66.4	57.7	70.1	73.2	60.9	75.2
9.04	Antyodaya Anna Yojana (AAY) card <sup>7</sup> (%)	19.3	19.7	8.9	13.8	11.0	6.4
	<b>Public Distribution System (PDS) and Integrated Child Development Services (ICDS)</b>						
10	Mothers living in households with access to PDS in the month preceding the survey <sup>8</sup> (%)	97.5	97.7	98.3	96.2	96.9	98.2
11	Mothers receiving ICDS entitlement for supplementary food <sup>9</sup> (%)	43.8	87.6	91.4	41.9	87.0	92.1
12	<b>Mothers living in households with a kitchen garden<sup>10</sup> (%)</b>	48.9	7.9	54.8	26.1	5.9	30.2
	<b>FOOD INSECURITY<sup>11</sup></b>						
13	<b>Mothers who experienced food insecurity in the 12 months preceding the survey</b>						
13.01	Worried about insufficient food (%)	63.7	45.1	53.7	58.3	48.1	51.8
13.02	Unable to eat healthy and nutritious food (%)	56.2	42.4	46.1	46.3	42.3	45.3
13.03	Had to eat limited variety of food (%)	46.5	41.1	42.5	36.5	40.8	41.9
13.04	Had to skip a meal (%)	19.0	9.6	16.2	18.0	15.5	15.0
13.05	Had to eat less meals (%)	28.5	18.7	21.6	26.7	23.6	18.2
13.06	Household ran out of food (%)	21.2	7.5	10.6	15.3	12.9	8.8
13.07	Had no food to eat at any time (%)	3.3	6.1	5.7	1.6	8.4	6.0
13.08	Had to go an entire day without food (%)	2.5	7.2	2.0	1.4	10.2	3.4
	<b>Food Insecurity Experience Scale (FIES)</b>						
14.01	Mothers living in food secure households (%)	28.3	45.9	36.9	34.3	45.0	41.0
14.02	Mothers living in mildly food insecure households (%)	35.8	31.3	36.4	32.4	25.3	34.4
14.03	Mothers living in moderately food insecure households (%)	31.6	12.0	20.7	30.5	16.7	17.2
14.04	Mothers living in severely food insecure households (%)	4.3	9.8	6.0	2.9	13.0	7.4
	<b>Coping mechanism to manage shortfall of food</b>						
15	<b>Coping strategies of the households as reported by mothers</b>						
15.01	Household head now spends extra hours at work to earn more money (overtime) (%)	32.9	25.4	26.8	36.1	32.1	26.6
15.02	Unlike earlier, now female(s) of household start working outside home (%)	44.6	21.4	20.2	38.2	24.1	21.0
15.03	Unlike earlier, now children of household start working outside home (%)	6.5	3.4	7.0	4.7	3.8	6.4
15.04	Migration of a family member to another city to earn money and send it back to the family (%)	14.3	7.1	10.2	10.5	7.1	8.4
15.05	Borrowing money to meet household expenses (%)	70.1	32.7	13.5	58.9	35.8	10.5

	Key Indicators	BASTAR (Intervention Area)			BAKAWAND (Control Area)		
		Baseline 2017	Midline 2018	Endline 2022	Baseline 2017	Midline 2018	Endline 2022
		(N=1281)	(N=531)	(N=992)	(N=1258)	(N=520)	(N=1090)
15.06	Resort to low-cost food grains/items available (%)	6.3	29.3	31.1	12.6	37.3	22.3
15.07	Borrowing grains to meet food requirements (%)	58.6	37.2	22.4	60.8	42.3	17.6
15.08	Sold household articles or possessions (%)	17.6	2.0	6.0	14.0	3.5	3.9
	<b>MICRONUTRIENT SUPPLEMENTATION AND DEWORMING</b>						
16	Mother who received any Iron and Folic Acid (IFA) tablet during the last pregnancy (%)	76.6	71.6	93.0	83.4	78.9	92.2
17	Mothers who consumed at least 100 IFA tablets during the last pregnancy <sup>12</sup> (%)	17.4	14.2	29.7	27.0	12.3	35.5
18	Mothers who received any calcium tablet during the last pregnancy (%)	25.8	31.8	86.1	30.4	43.4	90.9
19	Mothers who have consumed any tablet for deworming during the last pregnancy (%)	15.4	16.3	52.3	24.3	21.8	46.4
20	Mothers living in households which use adequately iodised salt <sup>13</sup> (%)	93.9	79.6	97.8	93.6	82.1	98.3
	<b>DIETARY DIVERSITY<sup>14</sup>(n)</b>	1050	462	648	1137	1082	644
21	Mothers mean Dietary Diversity Score (DDS) <sup>15</sup> [Standard Deviation (SD)]	4.5 [1.3]	4.6 [1.3]	5.5 [2.0]	4.6 [1.2]	4.9 [1.5]	5.2 [1.9]
22	<b>In the 24 hours preceding the survey, food groups consumed by mothers</b>						
22.01	Grains, white roots and tubers and plantains (%)	99.1	100.0	99.6	99.8	100.0	99.9
22.02	Pulses (beans, peas and lentils) (%)	63.7	61.6	56.1	69.7	66.4	55.7
22.03	Nuts or seeds (%)	4.7	2.5	18.5	6.4	4.1	14.3
22.04	Dairy (%)	8.2	4.8	21.5	10.5	8.3	17.4
22.05	Meat, poultry and fish (%)	21.2	30.9	46.3	30.2	32.1	45.3
22.06	Egg (%)	6.1	8.3	34.0	8.5	13.2	31.1
22.07	Dark green leafy vegetables (%)	47.2	61.7	75.7	37.4	68.6	64.1
22.08	Other vitamin A-rich fruits and vegetables (%)	89.9	89.4	91.0	90.5	88.5	92.8
22.09	Other vegetables (%)	86.1	87.2	79.0	84.1	84.3	75.4
22.10	Other fruits (%)	21.5	13.4	31.1	21.5	14.2	25.3
22.11	Any insects and other small protein foods (%)	8.0	3.8	22.9	5.4	5.9	17.4
22.12	Any sugar-sweetened beverages (%)	60.8	59.4	56.0	82.5	50.2	54.5
22.13	Any savoury and fried snacks (%)	8.2	9.7	29.9	13.9	14.5	26.1
23	<b>Mothers consuming food from specific food groups</b>						
23.01	Animal-source food (meat, poultry, fish and egg) (%)	24.9	35.4	55.0	37.1	38.0	55.0
23.02	Pulses (beans, peas and lentils) and nuts or seeds (%)	64.3	61.9	62.9	72.0	67.1	61.6
23.03	Dark green leafy vegetables and other vitamin A-rich fruits and vegetables (%)	57.5	65.7	79.6	49.9	71.2	70.2

	Key Indicators	BASTAR (Intervention Area)			BAKAWAND (Control Area)		
		Baseline 2017	Midline 2018	Endline 2022	Baseline 2017	Midline 2018	Endline 2022
		(N=1281)	(N=531)	(N=992)	(N=1258)	(N=520)	(N=1090)
24	<b>Mothers by number of food groups consumed</b>						
24.01	Only one food group (%)	0.1	0.4	0.1	0.1	0.2	0.3
24.02	Only two food groups (%)	5.3	4.6	3.3	3.7	4.5	2.5
24.03	Only three food groups (%)	16.2	13.7	10.3	11.7	13.8	14.8
24.04	Only four food groups (%)	31.0	28.3	21.2	34.1	25.0	21.8
24.05	Less than five food groups (%)	52.7	47.0	34.9	49.6	43.4	39.4
24.06	Five or more food groups (%)	47.3	53.0	65.1	50.4	56.5	60.6
25.01	Mothers with minimum dietary diversity score (6 or more out of 10) (%)	18.8	20.4	43.0	19.1	28.9	37.7
25.02	Mother who ate more than three meals in the last 24 hours including main and small meals (%)	42.9	25.8	52.6	47.0	29.2	43.3
	<b>ACCESS TO HEALTH SERVICES AND WATER, SANITATION AND HYGIENE (WASH)</b>						
	<b>Registration in Antenatal Care (ANC) services during last pregnancy</b>						
26	Mothers who have registered their last pregnancy (%)	95.7	95.4	97.4	98.3	96.4	98.1
27	Mothers who have registered in the first trimester (%)	63.5	70.5	87.6	76.4	79.9	86.7
28	Mothers who have received a Mother and Child Protection (MCP) card <sup>16</sup> (%)	81.9	77.5	82.4	93.7	91.6	93.3
	<b>ANC services received during last pregnancy</b>						
29	Mothers who sought ANC services (%)	97.3	82.0	96.4	98.6	90.1	96.5
30	Mothers who had ANC check-up in the first trimester (%)	27.4	49.0	69.5	35.4	59.4	68.3
31	Mothers who had at least four ANC check-ups (%)	15.8	38.0	45.9	31.7	49.1	52.0
32	Mothers who have received Tetanus Toxoid (TT) injection (%)	95.5	80.7	99.7	98.1	88.1	99.7
33	Mothers who had received counselling on birth preparedness by a frontline health worker <sup>17</sup> (%)	80.0	72.3	96.3	86.6	87.5	97.9
	<b>Monitoring of nutritional status during pregnancy</b>						
34	Mothers whose weight was monitored (%)	86.6	79.2	97.4	95.5	87.6	98.4
35	Mothers who were weighed at least four times (%)	18.0	24.2	32.6	27.3	27.5	37.8
36	Mothers whose height was recorded (%)	17.9	32.6	60.3	23.0	31.4	53.1
37	Mothers whose Mid-Upper Arm Circumference (MUAC) was measured <sup>18</sup> (%)	23.4	48.3	75.0	21.8	36.8	74.4
	<b>Delivery and Post-Natal Care (PNC)</b>						
38	Mothers who had an institutional delivery <sup>19</sup> (%)	62.2	63.8	69.2	67.2	67.4	72.6
39	Mothers who received IFA tablets after delivery (%)	22.1	40.6	76.4	23.1	50.9	76.0
40	Mothers who received calcium tablets after delivery	15.5	27.9	78.5	19.4	39.5	82.5

	Key Indicators	BASTAR (Intervention Area)			BAKAWAND (Control Area)		
		Baseline 2017	Midline 2018	Endline 2022	Baseline 2017	Midline 2018	Endline 2022
		(N=1281)	(N=531)	(N=992)	(N=1258)	(N=520)	(N=1090)
41	Mothers who received maternity entitlement payment (JSY) from government <sup>20</sup> (%)	47.7	40.9	46.4	47.8	41.0	54.5
	<b>Village Health, Sanitation and Nutrition Day (VHSND)<sup>21</sup></b>						
42.01	Mothers who attended VHSND meeting(s) in the six months preceding the survey (%)	66.8	35.1	46.5	59.0	29.5	27.3
42.02	Mothers who attended at least three VHSND meetings in the six months preceding the survey (%)	32.7	10.6	10.1	30.8	12.4	8.2
43	Mothers who attended Maitri Baithak (s) in the last twelve months preceding the survey (%)	15.5	NA	40.3	NA	NA	NA
	<b>Water, Sanitation and Hygiene</b>						
44	<b>Mothers living in households having access to drinking water from</b>						
44.01	Public tap/Stand pipe (%)	2.3	10.5	32.3	3.0	15.6	43.4
44.02	Tube well or Borehole (%)	80.7	64.7	25.7	86.5	72.5	21.5
44.03	Others <sup>22</sup> (%)	17.0	24.8	41.9	10.5	11.9	35.1
45	Mothers living in households in which members practice open defecation (%)	83.9	43.4	34.5	82.4	40.3	29.6
46	Mothers living in households in which members use soap for hand-washing after defecation (%)	78.3	87.6	81.4	73.1	88.5	84.1
47	<b>CURRENT USE OF FAMILY PLANNING METHODS AS REPORTED BY MOTHERS</b>						
47.01	Currently use any family planning method (%)	8.4	12.0	49.8	11.1	16.8	50.3
47.02	Currently use any modern contraceptive <sup>23</sup> (%)	5.5	10.0	33.6	9.5	15.9	32.4
48	Number of pregnancies including last birth (mean [SD])	2.7 [1.6]	2.6 [1.5]	3.3 [2.2]	2.3 [1.4]	2.5 [1.4]	2.9 [1.7]
	<b>ABILITY TO MAKE CHOICES AND DECISIONS</b>						
49	Mothers taking decisions about their own health care (%)	68.1	69.6	60.5	68.4	73.6	68.7
50	Mothers taking decisions about making major purchases for the household (%)	74.2	76.4	60.8	73.8	81.8	68.6
51	Mothers taking decisions about visits to family members or relatives (%)	72.7	75.4	59.7	72.5	79.1	68.4
	<b>NUTRITIONAL STATUS<sup>24</sup> (n)</b>	<b>1280</b>	<b>450</b>	<b>985</b>	<b>1255</b>	<b>438</b>	<b>1082</b>
52	Mothers' mean weight (kg [SD])	42.5 [5.6]	43.2 [5.9]	43.8 [6.3]	42.6 [5.8]	42.9 [5.8]	43.9 [5.8]
53	Mothers' mean height (cm [SD])	151.2 [5.4]	151.8 [5.3]	151.3 [5.3]	151.6 [5.3]	151.6 [7.3]	151.6 [4.7]
53.01	Mothers with height<145 cm [% (SD)]	11.6	8.6	10.3	9.6	8.8	7.2
54	Mothers' mean Body Mass Index (BMI) <sup>25</sup> [SD]	18.6 [2.3]	18.8 [2.3]	19.1 [2.4]	18.5 [2.2]	18.8 [3.7]	19.1 [2.3]
54.01	Mothers who are underweight (BMI<18.5) [%]	53.7	50.3	43.3	54.8	53.1	44.8
54.02	Mothers who are normal weight (BMI between 18.5-24.9) [%]	45.3	48.2	54.8	44.5	45.4	53.2
54.03	Mothers who are overweight (BMI between 25.0-29.9) [%]	0.9	1.1	1.4	0.6	1.1	1.8
54.04	Mothers who are obese (BMI >29.9) [%]	0.2	0.3	0.6	0.2	0.4	0.3

	Key Indicators	BASTAR (Intervention Area)			BAKAWAND (Control Area)		
		Baseline 2017	Midline 2018	Endline 2022	Baseline 2017	Midline 2018	Endline 2022
		(N=1281)	(N=531)	(N=992)	(N=1258)	(N=520)	(N=1090)
55	Mothers' mean MUAC (cm [SD])	23.5 [2.1]	23.6 [2.2]	23.4 [2.2]	23.3 [2.2]	23.5 [2.4]	23.3 [2.0]
55.01	Mothers with MUAC between 17-18.9 cm (%)	0.9	1.0	1.4	0.6	1.8	0.5
55.02	Mothers with MUAC between 19-20.9 cm (%)	8.3	8.1	6.9	8.9	8.7	8.3
55.03	Mothers with MUAC between 21-22.9 cm (%)	31.3	31.4	32.0	35.0	29.8	30.3
55.04	Mothers with MUAC 23 cm and above (%)	59.5	59.6	59.7	55.5	59.7	60.9
56	Mothers having height<145cm and MUAC<23 cm <sup>26</sup> (%)	6.2	3.2	4.9	5.3	4.5	3.7
	<b>COMMUNITY ACTION ACTIVITIES</b>						
57	Mothers who attended pariwaar chaupal in the last 3 years (%)	NA	NA	31.1	NA	NA	NA
58.01	Mothers who attended 1-3 Maitri Baithaks in the 12 months preceding the survey <sup>27</sup> (%)	45.2	NA	92.4	NA	NA	NA
58.02	Mothers who attended 4-6 Maitri Baithaks in the 12 months preceding the survey <sup>27</sup> (%)	30.2	NA	6.0	NA	NA	NA
58.03	Mothers who attended more than six Maitri Baithaks in the 12 months preceding the survey <sup>27</sup> (%)	24.6	NA	1.6	NA	NA	NA
59	Nutritionally-at-risk mothers who received home visits by Poshan Sakhi/AWW/ASHA <sup>28</sup> (%) (n=178)	NA	NA	87.4	NA	NA	NA
	Frequency of home visits received by Poshan Sakhi <sup>27</sup> (%)						
59.01	Weekly	NA	NA	36.4	NA	NA	NA
59.02	Fortnightly	NA	NA	12.2	NA	NA	NA
59.03	Monthly	NA	NA	25.0	NA	NA	NA
59.04	Quarterly	NA	NA	16.9	NA	NA	NA
59.05	Never	NA	NA	9.6	NA	NA	NA
60	Nutritionally-at-risk mothers who attended food demonstration sessions organised by Poshan Sakhi in last 12 months <sup>28</sup> (%)	NA	NA	68.1	NA	NA	NA
60.01	Nutritionally-at-risk mothers who attended at least three food demonstration sessions in the last 12 months preceding the survey (%)	NA	NA	20.8	NA	NA	NA
	<b>GENDER DISADVANTAGE AND MENTAL HEALTH</b>						
61	Mothers who reported depression <sup>30</sup> (%)	NA	NA	19.0	NA	NA	23.9
62	Mothers who reported having anxiety disorder <sup>31</sup> (%)	NA	NA	20.3	NA	NA	22.0
63	Mothers who experienced gender disadvantage <sup>32</sup> (%)	NA	NA	31.3	NA	NA	26.9
64	Mothers who reported males in the household are given preference (more and better food, better sleeping arrangements, more pocket money) (%)	NA	NA	14.0	NA	NA	12.3
65	Mothers who got same opportunities as the male members in the households (for work, study, health etc) (%)	NA	NA	89.1	NA	NA	88.2
66	Mothers of children under two who experienced domestic violence (%)	NA	NA	9.0	NA	NA	6.8
67	Mothers who reported having low resilience <sup>33</sup> (%)	NA	NA	25.0	NA	NA	25.3

## Notes

Inference: \*\*\*  $p < 0.01$ ; \*\*  $p < 0.05$ ; \*  $p < 0.1$

SD: Denotes the standard deviation

1. Mothers refer to women who have children under two years of age.
2. Considered only those mothers who have ever attended school (Baseline (n): Intervention Area - 725; Control Area – 808; Midline (n): Intervention Area - 348; Control Area – 334 and Endline (n): Intervention Area - 718; Control Area – 812).
3. Considered only those mothers who have are member of SHGs (Baseline (n): Intervention Area - 412; Control Area – 288 and Midline (n): Intervention Area - 212; Control Area – 240 and Endline (n): Intervention Area - 281; Control Area – 335).
4. Others include Muslim, Christians, Buddhists/Neo-Buddhist and others.
5. Others include those who have reported others, can't say or don't know.
6. Below Poverty Line (BPLJ cards are distributed to those households living below the poverty line, which includes households with a Monthly Per Capita Consumer Expenditure (MPCEJ less than Rs. 911.80 (Chhattisgarh) (Report of the Expert Group to Review the Methodology for Measurement of Poverty, Government of India Planning Commission, June, 2014). These households are entitled to receive 1 O kg wheat per card at Rs. 5.22 per kg, 15 kg rice per card at Rs. 6. 78 per kg, and 1 .49 kg sugar per family at Rs. 13.5 per kg. Retrieved from: <http://WWW.pdsp0rtal.nic.in/main.aspx>.
7. Antyodaya Anna Yojana (AAY) cards are distributed to those households which comprise the poorest segments of the BPL population. including all households who are perceived to be at the risk of hunger. These households are entitled to receive 14 kg wheat per card at Rs. 2 per kg and 21 kg rice per card at Rs. 3 per kg. Retrieved from: <http://WWW.pdsp0rtal.nic.in/main.aspx>.
8. Includes only those households which possessed a ration card. (Baseline (n): Intervention Area=1111; Control Area=1119 and Midline (n): Intervention Area=452; Control Area=420 and Endline (n): Intervention Area=926; Control Area=1028).
9. Supplementary Nutrition is provided to mothers and lactating mothers under ICDS. (In baseline double amount of ICDS food and in midline mothers who received THR, egg and HCM)
10. Kitchen gardens are small plots of land cultivated by households. They provide the latter with easy access to fresh and nutritious vegetables and fruits, often on a daily basis. They include homestead land, vacant plots, road sides, edges of a field or even containers.
11. There are eight items indicating different levels of food insecurity severities. The first three indicate mild level of insecurity, items four to six indicate moderate food insecurity, and last two being items for severe food insecurity. FIES is then divided into four categories: 'food secure', if households have not reported affirmatively to any of the eight items; 'mildly insecure', if only any one of the first three are affirmatively reported; 'moderately insecure', if either of items four, five or six are affirmatively reported; 'severely insecure', if all items are affirmatively reported or either of items seven and eight are affirmatively reported.
12. Among those mothers who received IFA tablets during the last pregnancy. (Baseline (n): Intervention Area=981; Control Area=1049 and Midline (n): Intervention Area=381; Control Area=413 and Endline (n): Intervention Area=923; Control Area=1002).
13. In baseline 'Adequately' iodized salt is used to refer to salt that has iodine content greater than 15 ppm. In midline salt with trademark logo bought from shops was used as a proxy measure for iodized salt.
14. Excludes those mothers who ate less or more than usual on the day prior to the date of the interview, as in the case of a fast or a celebration.
15. Dietary Diversity Score (DDS) is computed on the basis of consumption of food items, from the ten food groups, on the day prior to the date of the interview. Based on Food and Agricultural Organisation (FAO) 2016 methodology, 14 major food items were clubbed together to form 10 food groups. A ten-point DDS scale was thus created (1 being the lowest value, 10 being the highest).
16. Mother and Child Protection (MCP) card is a joint initiative of ICDS and the National Rural Health Mission (NRHM). It is a comprehensive multipurpose card which provides information to the parents/guardians on various types of services delivered through ICDS and NRHM. Included only those mothers who have registered their last pregnancy (Baseline (n): Intervention Area - 1226; Control Area – 1237 and Midline (n): Intervention Area - 508; Control Area – 502 and Endline (n): Intervention Area=967; Control Area=1069).
17. Frontline health workers include Auxiliary Nurse Midwives (ANMs), Accredited Social Health Activist (ASHA) and Anganwadi Workers (AWW).
18. The measurement of MUAC is commonly used as a potential indicator of nutritional status.
19. Institutional delivery refers to last birth(s), which took place in a health facility/institution.

20. Under the Janani Suraksha Yojana (JSY), pregnant women from BPL category, SCs and STs are entitled to receive cash assistance for giving birth in a Government or accredited private health facility.
21. The Village Health, Sanitation and Nutrition Day (VHSND), a component of ICDS, is held at Anganwadi Centres across Bihar once every month. On this day, adolescent girls, mothers and lactating mothers are provided with integrated health solutions as per their needs.
22. Others include those households which have other source of drinking water (Cart with small tank/drum and Packaged /bottled water).
23. Modern contraceptives include female and male sterilizations, Intra-Uterine Devices (IUDs), injectable, pills, condoms and diaphragms.
24. Includes mothers who consented to have their anthropometric measurements taken.
25. The World Health Organisation (2004) defines Body Mass Index (BMI) as a simple index of weight for height and is used to categorise adults as either underweight, normal weight, overweight or obese. It is calculated as weight (kilograms) divided by the square of height (metres).
26. Double burden of stunting and wasting is defined as mothers whose height is <145 cm and MUAC<23cm.
27. Includes mothers in the intervention area who attended maitri baithak in the last 12 months preceding the survey (Baseline (n) = 199 and Endline (n) = 391).
28. Includes nutritionally-at-risk mothers only (Endline Intervention (n) = 178).
29. Includes nutritionally-at-risk mothers who were visited at home by Poshan Sakhi in the last 12 months preceding the survey (Endline Intervention (n) = 157).
30. Depression was screened using Patient Health Questionnaire – 9 (PHQ-9). The PHQ-9 is the 9-item depression module. Mothers who scored  $\geq 10$  on this module were diagnosed to have depression.
31. Generalized anxiety disorder (GAD-7) was used to screen anxiety disorder which is a 7-item anxiety scale. Mothers who scored  $\geq 10$  on this were characterised as having anxiety disorder.
32. Gender disadvantage was measured using GAGED. Women who score  $\geq 1$  on this scale were said to have experienced gender-based disadvantage.
33. Resilience was measure using Brief Resilience Scale (BRS). Mothers who scored <3 on this scale were said to have low resilience.

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