



Swabhimaan Programme, Bihar

Impact Evaluation (2016-2021): Purnea



(स्थापना / Established in 1956)
बेहतर भविष्य के लिए क्षमता निर्माण
Capacity Building for a Better Future



Background

1. JEEViKA Programme in Bihar

In 2007, the Government of Bihar launched the JEEViKA programme, 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 with 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 Bihar Rural Livelihood Promotion Society (BRLPS), an independent society of the Government of Bihar, under the stewardship of the National Rural Livelihood Mission (NRLM), Ministry of Rural Development and Panchayati Raj, with funding from the World Bank.

Operationally, JEEViKA creates multi-tier structure of women involving SHGs at tier- 1, Village Organisations (VOs) comprising 10 to 20 SHGs at tier-2 and Cluster/Gram Panchayat Level Federations (CLFs) at tier-3. In some districts, high tier federations at block and district levels are also being formed. The JEEViKA Programme Management Units (PMUs) at state, district and block 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 link age and income generation, the JEEViKA 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 6,07,702 SHGs (tier-1), 25,014 VOs (tier-2) and 318 CLFs (tier-3) in Bihar. VOs have been engaged in running meal provision centres for pregnant and lactating women (101 blocks; 11 districts), construction of toilets (64 Gram Panchayats in 10 districts) and manufacturing of sanitary napkins. They also utilize their SHG platform to disseminate messages and generate demand for behaviours/ entitlements (46 blocks; 14 districts) and food fortification units (4 blocks, 2 districts).

Each VO is registered as a society and has office bearers, Community Resource Person (CRP) and a book keeper. A health risk and vulnerability reduction/food security risk fund is available to the members (particularly those belonging to the poorest households) to seek loans for health and other family emergencies. Community Investment Fund (CIF) is also available to initiate various income generation activities.

2. JEEViKA in Purnea District, Bihar

The JEEViKA was initiated in 2007 in three blocks in Purnea district and gradually scaled up to all 14 blocks by 2012. Programme data (2016) shows that there are a total of 26,887 SHGs (tier-1), 1,885 VOs (tier-2) and 43 CLFs (tier-3) in Purnea district. A total of 1,382 VOs out of 1,885 are

engaged in various food security, nutrition and WASH linked behaviour promotion and livelihood initiatives. In 2016, the JEEViKA programme covered 2,18,836 households. For programme purpose, JEEViKA has divided each block into three clusters (1, 2 and 3). Each cluster is supervised by a supervisor who reports to a block manager at block level. A district PMU supported by a thematic health and nutrition manager anchors various health and nutrition initiatives in the district.

3. Swabhimaan Programme (2016-2020), Purnea

In 2016, JEEViKA partnered with the United Nations Children's Fund (UNICEF) Bihar to initiate the Swabhimaan Project (2016-2020) with an aim to improve the nutritional status of adolescent girls, pregnant women and mothers of children under two years in Kasba and Jalalgarh blocks of Purnea district in Bihar, by increasing the coverage of five essential nutrition (specific and sensitive) interventions. JEEViKA is anchoring and implementing the Swabhimaan programme, in coordination with the Departments of Health, Civil Supplies, Social Welfare and Public Health

THE SWABHIMAAN DEMONSTRATION PROGRAMME

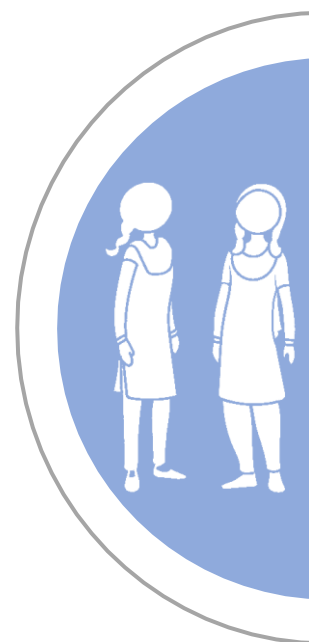
STRATEGY 1

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/counselling
- 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 (Rural Development, Civil Supplies & Consumer Welfare, Agriculture, Horticulture) to help them improve the delivery of entitlements and services
- Regularizing block nutrition convergence review mechanism



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 baseline survey was 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 (UCL) during the baseline survey (2016). The baseline survey has been registered with the Registry for International Development Impact Evaluations (RIDIE-STUDY-ID-58261b2f46876), Indian Council of Medical Research (ICMR) and National Clinical Trials Registry of India (CTRI/2016/11/007482). The International Institute for Population Sciences (IIPS) is the nodal agency for the process evaluation during the midline survey (2018). The process evaluation has been registered with the Institutional Review Board of IIPS – (IRB/SWABHIMAN/458/2018 for main survey and IRB/SWABHIMAN/702/2018 for anthropometric measurement). The endline survey has been registered with the Institutional Review Board of IIPS.

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:

Training cadres of VOs Poshan Sakhis, to facilitate women-specific issues (Maitri Baithak) through monthly meetings with women's SHGs using participatory learning and action cycle methodology

Training cadres of VOs (Adolescent Sakhis) to form and facilitate fortnightly adolescent girls' clubs (Kishori Samooch) 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 Resource Persons) who in turn engage monthly with women farmer/producer groups of JEEViKA 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 (Poshan Sakhis) to identify at nutritional risk adult women (Mid-Upper Arm Circumference [MUAC] <23 cms 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 hotcooked noon meal

VOs conducting special meetings and rallies for newly-wed couples

VOs conducting a bi-annual process audit of their progress against plan



Jalalgarh and Kasba blocks are divided into three clusters of a total of 27, 41 and 36 villages respectively for impact evaluation of the programme. In the first year (2017) of programme implementation, a total of 41 villages of Cluster 2 served as the intervention area, while a total of 36 villages of Cluster 3 was designated control area. In each subsequent year, the remaining clusters of Jalalgarh and Kasba blocks are being added to the programme.

Additionally, in cluster 1 (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 JEEViKA via the Vulnerability Reduction Fund/other such options.

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 (2016), Purnea District

The Swabhimaan program baseline survey (2016) was conducted in Jalalgarh and Kasba blocks of Purnea district in Bihar. The data collection was carried out in the intervention (Cluster 2) and control (Cluster 3) areas between July and December 2016. A house-to-house census was conducted to enlist each and every house and its members in the two blocks between May and September 2016.

Based on the outcome indicators and the change envisaged a representative sample from all three target groups were selected using simple random sampling for the baseline survey in Jalalgarh and Kasba blocks. Finally, a total of 1,704 adolescent girls, 936 pregnant women and 2,612 mothers of children under two years were interviewed. The baseline survey protocol, methodology and tools were approved by the Institutional Ethics Committee of the AIIMS. Computer-Assisted Personal Interviewing (CAPI) based bilingual interview schedules were used for data collection. The baseline survey collected information on socio-demographic and household characteristics, educational attainment, diet diversity, availability of a homestead kitchen garden, access to health, ICDS and JEEViKA services and decision-making practices using pre-tested interview schedules. Nutritional status was assessed using anthropometry (weight, height and MUAC).

Dissemination of the baseline survey findings of Bihar was conducted on 12th July 2017. Based on the baseline survey data and findings, UNICEF and IIPS decided to prepare thematic papers on food security, nutrition status of adolescents, pregnant women and mothers of children under two years, ante-natal care (ANC), Water Sanitation and Hygiene (WASH), etc. Three of these thematic papers have been published in the international peer-reviewed journals, and others are under process.

5. Swabhimaan Programme Midline Survey (2018), Purnea District

In order to examine the intervention process and the extent of the reach of beneficiaries, NRLM and 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 Kasba and Jalalgarh blocks of Purnea district in Bihar.

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:

1. To study the extent of coverage of food security, health, nutrition and water and sanitation services in both intervention and control sites.
2. To determine the coverage of VO led interventions among beneficiary in intervention site.
3. Stakeholders view on areas requiring improvement on coverage of services, and behaviors.
4. 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), Purnea District, Bihar

In order to examine the intervention process and the extent of the reach of beneficiaries, JEEViKA and UNICEF entrusted IIPS for conducting the End line process evaluation survey (2021). The cross-sectional survey aims to assess the system strengthening process and coverage of VO led interventions among beneficiaries.

The specific objectives of the End line survey are:

1. To assess the reduction in the proportion of adolescent girls and mothers of children under two years with a BMI<18.5.
2. To examine the improvement in mean mid-upper arm circumference (MUAC) among pregnant women over the intervention period (2016-2021).
3. To compare the baseline and endline data for estimating improvements in the coverage of key nutrition-specific and nutrition-sensitive interventions.
4. To assess the change in utilization of maternal health and nutrition services before and after the COVID 19 pandemic.

Methodology and data collection ***Sampling***

To study system strengthening interventions and reach of beneficiaries, samples were selected according to the baseline survey indicator on SHG enrolment. 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 45 PSUs (23 interventions and 22 control PSUs from Purnea district) in Bihar.

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 endline 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. A total of 23 villages were covered in intervention area and 22 villages in control area (Kasba and Jalalgarh blocks of Purnea district combined). The estimated sample size for the survey was 1716 adolescents' girls, 726 pregnant women and 2772 Mothers of children under 2, which were equally divided among intervention and control areas.

Techniques and Tools of Data collection

Quantitative data was collected using Computer Assisted Personal Interview (CAPI). The questionnaires of baseline and midline surveys were reviewed to finalize the tools for the endline impact evaluation. The quantitative data tools included a separate structured and bilingual questionnaire for each target group. Additionally, there was a separate interview schedule for household information. The questionnaires were synchronized to state-specific programmes.

Interview schedules:

1. Household schedule
2. Adolescent girl's schedule
3. Pregnant women schedule
4. Mothers of children under two years schedule

Information collected related to socio-demographic and household characteristics, educational attainment, diet diversity, food insecurity and availability of a homestead kitchen garden, access to health, ICDS, decision making practices and nutritional status. Identification of women respondents in the three target groups was done by Mapping and Listing during February 2021. After mapping and listing, 3694, adolescent girls, 1015 pregnant women, 2678 mothers of children under two years were identified. The target samples were selected based on the systematic random sampling method from the list of household selected in Mapping and Listing. The endline survey data collection was carried out during 6th March 2021 to 30th August 2021. Finally, 1119 adolescent girls, 443 pregnant women and 1162 mothers of children under two years and their children were interviewed.

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 1112 adolescent girls, 442 pregnant women and 1157 mothers of children under two years and their children were assessed.

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 January 2021 for reviewing and finalizing all the endline survey tools (Household, Adolescent Girl, Pregnant Woman, Mothers of children under two years and Children under two years interview schedules).

Ethical Consideration

The endline survey protocol, methodology and tools were approved by the Institutional Ethics Committee of the IIPS. Paper-pencil personal interviews 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.

Endline Survey Factsheet

Endline factsheet (DID) demonstrates the effect of the programme on selected indicators over time using the difference in difference (DID) technique. DID was used to understand the change between baseline to end line and midline to end line. The program's effect on three target groups, adolescent girls, pregnant women and mothers of children under two, is presented separately.

DIFFERENCE IN DIFFERENCE (DID)

ESSENTIAL NUTRITIONAL INDICATORS (2016-2021)

ADOLESCENT GIRLS (10-19 years)

	Key Indicators	Intervention Area			Control Area			Effect Size of Change
		Baseline 2016	Midline 2018	Endline 2021	Baseline 2016	Midline 2018	Endline 2021	DID (Baseline to Endline)
		(N=863)	(N=493)	(N=567)	(N=841)	(N=470)	(N=552)	
	Estimated sample of adolescent girls (n)	875	500	875	841	470	841	
	Adolescent girls interviewed (n)	863	493	567	841	470	552	
1	NUTRITIONAL STATUS¹ (n)	863	391	562	841	390	550	
1.01	Adolescent girls' mean Body Mass Index (BMI) ² [SD]	16.6[2.7]	17.1[2.5]	17.5[2.8]	16.9[2.8]	17.5[2.8]	17.7[2.7]	
1.02	Adolescent girls with BMI for age < -2SD ³ [% (SD)]	24.7[0.2]	15.4[0.4]	18.2[0.4]	21.8[0.2]	13.2[0.3]	17.3[0.4]	-1.9
1.03	Adolescent girls with BMI for age < -3SD ^{4, 5} [% (SD)]	6.4[0.2]	2.2[0.2]	2.9[0.1]	5.9[0.2]	3.9[0.2]	3.8[0.1]	-1.3
1.04	Adolescent girls experiencing both stunting and wasting ⁶ [% (SD)]	15.1[0.4]	6.8[0.2]	4.9[0.2]	10.9[0.3]	4.5[0.2]	6.0[0.2]	-5.2
1.05	Adolescent girls experiencing severe stunting and wasting ⁷ [% (SD)]	3.0[0.2]	0.7[0.1]	0.5[0.1]	1.6[0.1]	0.9[0.1]	1.5[0.1]	-2.5
	DIETARY DIVERSITY⁸ (n)	782	488	503	825	459	515	
2	Adolescent girls' mean Dietary Diversity Score (DDS) ⁹ [Standard Deviation (SD)]	3.9[1.4]	4.9[1.7]	5.5[1.7]	4.0[1.5]	4.8[1.8]	5.2[1.8]	
3	Adolescent girls by number of food groups consumed							
3.01	More than five food groups (%)	31.3	56.6	75.1	34.5	54.6	62.9	15.3***
3.02	Adolescent girls with minimum DDS (6 or more out of 10) (%)	12.3	33.0	50.0	14.2	33.4	37.5	14.3***
	MICRONUTRIENT SUPPLEMENTATION							
4	Adolescent girls who have consumed at least four IFA tablets in the last month/last three months preceding the survey ¹⁰ (%)	3.2	7.1	11.1	2.1	4.6	7.6	2.4
5	Adolescent girls living in households using adequately iodised salt ¹¹ (%)	78.8	95.8	96.7	68.0	93.0	96.2	--2.5
6	Adolescent girls living in households with a kitchen garden ¹² (%)	28.2	11.4	43.0	18.2	5.2	39.1	-6.0
7	Adolescent girls living in households in which members practice open defecation (%)	74.5	59.9	37.3	84.3	57.0	27.6	19.5***
8	Adolescent girls who use safe pads or sanitary pads during periods ¹³ (%)	30.3	39.9	74.7	26.2	41.1	57.0	13.7**
	KISHORI DIVAS							
9	Adolescent girls who have accessed adolescent health services (Kishori Divas) in the last six months preceding the survey ¹⁴ (%)	3.1	14.8	62.7	1.9	2.8	38.3	23.2***
10	Adolescent girls who have attended at least two Kishori group meetings in the last six months preceding the survey (%)	1.2	19.0	29.4	1.1	0.0	1.2	28.1***

Notes:

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

((SD): Denotes the standard deviation of proportion

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 2 flagged cases and 1 case whose weight were not measured in baseline, 4 flagged cases in midline and 1 flagged case in endline.
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 2 flagged cases and 1 case whose weight were not measured in baseline, 4 flagged cases in midline and 1 flagged case in endline.
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	Intervention Area			Control Area			Effect size of change
		Baseline 2016	Midline 2018	Endline 2021	Baseline 2016	Midline 2018	Endline 2021	DID Baseline to Endline
		(N=468)	(N=322)	(N=212)	(N=468)	(N=306)	(N=231)	
	Estimated sample of pregnant women (n)	374	300	374	374	300	374	
	Pregnant women interviewed (n)	468	322	212	468	306	231	
1	NUTRITIONAL STATUS¹(n)	467	197	212	465	202	230	
1.01	Pregnant women's mean MUAC (cm [SD])	23.1 [2.2]	23.8 [2.3]	23.2 [2.3]	22.6 [2.7]	23.9 [2.7]	23.4 [2.2]	
1.02	Pregnant women with MUAC between 17-18.9 cm	1.9	0.6	0.4	1.5	0.0	1.3	-0.9
1.03	Pregnant women with MUAC between 19-20.9 cm	1165	5.1	15.4	19.6	7.2	7.9	15.4***
1.04	Pregnant women with MUAC between 21-22.9 cm	36.8	30.7	33.3	36.6	29.3	34.0	-1.1
1.05	Pregnant women with MUAC 23 cm and above	49.7	63.6	50.9	42.4	63.5	56.9	-13.4**
1.06	Pregnant women experiencing severe wasting ²	13.5	5.7	15.8	21.1	7.2	9.2	14.5***
	DIETARY DIVERSITY³ (n)	420	319	189	458	304	205	
2	Pregnant women's mean Dietary Diversity Score (DDS) ⁴ [Standard Deviation (SD)]	4.0[1.4]	4.7[1.7]	5.7[1.9]	4.0[1.4]	4.4[1.7]	5.2 [1.9]	
3	Pregnant women with high dietary diversity score (6 or more out of 10) (%)	13.6	32.7	52.8	16.6	21.6	42.2	10.6*
4	Pregnant women living in food secure households ⁵ (%)	24.4	25.5	22.7	25.0	24.5	26.3	-2.9
	MICRONUTRIENT SUPPLEMENTATION AND DEWORMING							
5	Pregnant women (in 2nd and 3rd trimester) who consumed at least 25 IFA tablets ⁶ (%)	42.1	44.6	62.9	51.1	44.9	56.7	15.0*
6	Pregnant women (in 2nd and 3rd trimester) who received any calcium tablet ⁶ (%)	11.8	69.0	63.1	13.5	61.4	46.6	18.4
7	Pregnant women (in 2nd and 3rd trimester) who consumed any tablet for deworming ⁶ (%)	5.9	15.4	23.7	3.1	11.5	13.3	7.6
8	Pregnant women living in households using adequately iodised salt ⁷ (%)	79.9	95.6	97.9	66.5	91.5	94.6	-10.1
9	Pregnant women who have had ANC check-up in the first trimester (%)	36.3	39.5	52.6	33.5	35.1	36.6	13.2
10	Pregnant women whose weight was monitored (%)	62.0	62.2	78.1	65.8	44.4	58.4	23.6**
11	Pregnant women living in households with a kitchen garden ⁸ (%)	18.8	10.7	41.2	14.3	2.8	31.8	4.9
12	Pregnant women living in households in which members practice open defecation (%)	78.6	58.9	39.3	91.2	67.5	35.4	16.5***
13	Pregnant women living in households with access to PDS in the month preceding the survey (%)	58.4	96.2	98.6	71.4	99.1	97.2	14.5***
14	Pregnant women receiving ICDS entitlement for supplementary food ⁹ (%)	16.2	34.3	34.2	26.1	22.6	25.6	18.5***

15	Adopted family planning methods to keep space between pregnancies ¹⁰ (%)	3.5	14.4	19.1	2.5	9.2	8.0	10.1**
16	Pregnant women who attended at least three VHSND meetings ¹¹ in the six months preceding the survey (%)	3.2	9.9	32.6	1.9	4.4	17.7	13.6***
17	Pregnant women who attended at least three Poshan Sakhi meetings in the 12 months preceding the survey (%)	1.1	4.3	28.2	0.4	0.2	2.4	21.2**

Notes:

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

((SD): Denotes the standard deviation of proportion

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 – 344; Control Area – 366, Midline (n): Intervention Area – 167; Control Area – 240 and End line (n) Intervention Area - 165; Control Area –172).
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	Intervention Area			Control Area			Effect size of change
		Baseline 2016	Midline 2018	Endline 2021	Baseline 2016	Midline 2018	Endline 2021	DID Baseline to Endline
		(N=1400)	(N=532)	(N=564)	(N=1212)	(N=510)	(N=598)	
	Estimated sample of mothers ¹ (n)	1424	500	1424	1424	500	1424	
	Mothers interviewed (n)	1400	532	564	1212	510	598	
1	NUTRITIONAL STATUS² (n)	1400	476	559	1186	535	598	
1.1	Mothers' mean Body Mass Index (BMI) ³ [SD]	19.2 [2.6]	19.2 [2.8]	19.8 [3.5]	19.0 [2.4]	19.3 [2.6]	19.9 [2.9]	
1.2	Mothers who are underweight (BMI<18.5)	44.8	43.6	36.4	45.0	43.1	37.3	-0.7
1.3	Mothers who are normal weight (BMI between 18.5-24.9)	52.0	51.5	58.1	52.4	53.7	57.0	1.5
1.4	Mothers who are overweight (BMI between 25.0-29.9)	2.8	4.2	4.9	2.5	2.7	5.3	-0.7
1.5	Mothers who are obese (BMI >29.9)	0.4	0.7	0.6	0.2	0.5	0.4	-0.1
1.6	Mothers experiencing both severe stunting and wasting ⁴	11.0	10.9	5.2	9.1	6.3	5.9	-0.9
	DIETARY DIVERSITY⁵ (n)	1293	526	483	1191	508	534	
2	Mothers mean Dietary Diversity Score (DDS) ⁶ [Standard Deviation (SD)]	3.6 [1.4]	4.9 [1.9]	5.6 [1.8]	3.9 [1.5]	4.4 [1.7]	5.2 [1.7]	
3	Mothers with minimum dietary diversity score (6 or more out of 10) (%)	9.2	32.5	50.0	12.6	23.4	41.9	11.5***
4	Mothers living in food secure households ⁷ (%)	20.4	23.1	18.8	22.6	20.7	18.8	2.1
	MICRONUTRIENT SUPPLEMENTATION AND DEWORMING							
5	Mothers who consumed at least 100 IFA tablets during the last pregnancy ⁸ (%)	10.7	5.8	27.0	14.2	3.4	15.6	14.8***
6	Mothers who received any calcium tablet during the last pregnancy ⁸ (%)	13.2	50.3	88.9	9.7	44.2	78.2	7.2***
7	Mothers who have consumed any tablet for deworming during the last pregnancy ⁸ (%)	7.9	17.2	39.6	5.2	14.2	39.0	-2.1
8	Mothers living in households which use adequately iodised salt ⁹ (%)	82.3	95.8	98.4	71.0	90.2	94.6	-7.5***
9.1	Mothers who had ANC check-up in the first trimester (%)	36.3	42.7	56.1	27.7	33.1	42.7	4.9
9.2	Mothers who had at least four ANC check-ups (%)	16.4	19.3	31.8	14.5	13.4	18.3	11.5***
10	Mothers who were weighed at least four times (%)	6.2	12.1	20.8	3.5	5.7	8.4	9.6***
11	Mothers living in households with a kitchen garden ¹⁰ (%)	16.2	8.5	44.3	14.2	2.7	35.3	6.9**
12	Mothers living in households in which members practice open defecation (%)	79.6	69.9	34.5	90.7	63.0	35.4	10.3***
13	Mothers living in households with access to PDS in the month preceding the survey ¹¹ (%)	64.2	93.7	98.0	72.5	96.4	96.4	10.0***
14	Mothers receiving ICDS entitlement for supplementary food ¹² (%)	17.3	45.0	54.4	27.8	32.5	49.8	15.1***
15	Mothers who had an institutional delivery ¹³ (%)	78.9	81.9	90.2	76.2	63.9	75.2	12.3***

	Key Indicators	Intervention Area			Control Area			Effect size of change
		Baseline 2016	Midline 2018	Endline 2021	Baseline 2016	Midline 2018	Endline 2021	DID Baseline to Endline
		(N=1400)	(N=532)	(N=564)	(N=1212)	(N=510)	(N=598)	
16	Mothers who received maternity entitlement payment (JSY) from government ¹⁴ (%)	58.8	56.5	55.6	59.5	43.9	39.4	17.0***
17	Currently use any modern contraceptive ¹⁵ (%)	9.2	13.5	23.3	7.7	10.7	13.7	8.0***
18	Mothers who attended at least three VHSND ¹⁶ meetings in the six months preceding the survey (%)	2.1	20.7	43.2	2.2	14.0	33.9	9.4***
19	Mothers who attended at least two Maitri Baithak in the 12 months preceding the survey (%)	2.4	16.1	44.3	0.2	0.6	3.0	39.***

Notes:

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

SD: Denotes the standard deviation of proportion

1. Mothers refer to women who have children under two years of age.
2. Includes only those mothers who had given consent for taking anthropometric measurements. Women who gave birth in the preceding two months of the survey were excluded.
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<23cm.
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. 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.
8. Among those mothers who received IFA tablets during the last pregnancy. (Baseline (n): Intervention Area=698; Control Area=534, Midline (n): Intervention Area=372; Control Area=351 and Endline (n): Intervention Area - 528; Control Area – 504).
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, and road sides, edges of a field or even containers.

11. Includes only those households which possessed a ration card.
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.

ADOLESCENT GIRLS (10-19 years)

	Key Indicators	Kasba		Jalalgarh	
		Baseline 2016	Endline 2021	Baseline 2016	Endline 2021
		(N=442)	(N=315)	(N=421)	(N=252)
	Estimated sample of adolescent girls (n)	438	438	438	438
	Adolescent girls interviewed (n)	442	315	421	252
1	NUTRITIONAL STATUS¹				
1.01	Adolescent girls' mean Body Mass Index (BMI) ² [SD]	16.5 [2.6]	17.4 [2.5]	16.8 [2.7]	17.6 [2.7]
1.02	Adolescent girls with BMI for age < -2SD ³ (%)	25.5	17.4	23.8	20.6
1.03	Adolescent girls with BMI for age < -3SD ^{4, 5} (%)	6.4	2.7	6.4	3.5
1.04	Adolescent girls experiencing both stunting and wasting ⁶ (%)	15.3	4.9	14.8	4.8
1.05	Adolescent girls experiencing severe stunting and wasting ⁷ (%)	3.4	0.6	2.6	0.0
	DIETARY DIVERSITY⁸ (n)	389	270	393	233
2	Adolescent girls' mean Dietary Diversity Score (DDS) ⁹ [Standard Deviation (SD)]	4.0 [1.4]	5.7 [1.7]	3.9 [1.4]	5.3 [1.7]
3	Adolescent girls with minimum DDS (6 or more out of 10) (%)	15.4	51.9	9.2	44.5
	MICRONUTRIENT SUPPLEMENTATION				
4	Adolescent girls who have consumed at least four IFA tablets in the last month/last three months preceding the survey ¹⁰ (%)	4.5	9.9	1.9	14.7
5	Adolescent girls living in households using adequately iodised salt ¹¹ (%)	75.3	96.4	82.4	97.8
6	Adolescent girls living in households with a kitchen garden ¹² (%)	30.5	35.0	25.7	67.5
7	Adolescent girls living in households in which members practice open defecation (%)	90.7	44.2	57.5	16.4
8	Adolescent girls who use safe pads or sanitary pads during periods ¹³ (%)	29.3	73.3	31.4	78.7
	KISHORI DIVAS				
9	Adolescent girls who have accessed adolescent health services (Kishori Divas) in the last one year preceding the survey ¹⁴ (%)	3.2	64.5	3.1	59.5
10	Adolescent girls who have attended at least two Kishori group meetings in the three months preceding the survey (%)	1.1	25.0	1.2	43.0

Notes:

(SD): Denotes the standard deviation of proportion

- Includes only those adolescent girls who had given their consent for taking their anthropometric measurements.
- 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).
- 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 a total of 13 flagged cases in baseline, and 1 case in endline.
- 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 a total of 13 flagged cases in baseline, and 1 case in endline.
- 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.
- 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.
- 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.
- 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 and endline surveys the information on the consumption of IFA tablets was collected based on the reference period of 'last month'..
11. In baseline 'Adequately' iodized salt is used to refer to salt that has iodine content greater than 15 ppm. In endline 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		Kasba		Jalalgarh	
		Baseline 2016	Endline 2021	Baseline 2016	Endline 2021
		(N=230)	(N=95)	(N=238)	(N=117)
	Estimated sample of pregnant women (n)	187	187	187	187
	Pregnant women interviewed (n)	230	95	238	117
1	NUTRITIONAL STATUS¹(n)	230	95	238	117
1.01	Pregnant women's mean MUAC (cm [SD])	23.0 [2.2]	23.1 [2.5]	23.1 [2.2]	23.2 [2.2]
1.02	Pregnant women with MUAC between 17-18.9 cm	2.6	0.8	1.3	0.0
1.03	Pregnant women with MUAC between 19-20.9 cm	12.2	20.5	10.9	9.9
1.04	Pregnant women with MUAC between 21-22.9 cm	35.8	31.2	37.8	35.5
1.05	Pregnant women with MUAC 23 cm and above	49.3	47.5	50.0	54.6
1.06	Pregnant women experiencing severe wasting ²	14.8	21.3	12.2	9.8
	DIETARY DIVERSITY³(n)	197	84	223	105
2	Pregnant women's mean Dietary Diversity Score (DDS) ⁴ [Standard Deviation (SD)]	4.0 [1.4]	5.9 [1.7]	3.9 [1.4]	5.7 [2.0]
3	Pregnant women with high dietary diversity score (6 or more out of 10) (%)	14.7	50.4	12.6	55.3
4	Pregnant women living in food secure households ⁵ (%)	28.7	19.3	20.2	26.4
	MICRONUTRIENT SUPPLEMENTATION AND DEWORMING				
5	Pregnant women (in 2nd and 3rd trimester) who consumed at least 25 IFA tablets ⁶ (%)	38.6	52.8	45.5	71.7
6	Pregnant women (in 2nd and 3rd trimester) who received any calcium tablet ⁶ (%)	11.9	53.8	11.7	71.7
7	Pregnant women (in 2nd and 3rd trimester) who consumed any tablet for deworming ³ (%)	4.7	28.8	7.2	19.0
8	Pregnant women living in households using adequately iodised salt ⁷ (%)	79.1	98.7	80.7	97.2
9	Pregnant women who have had ANC check-up in the first trimester (%)	35.2	45.9	37.4	59.9
10	Pregnant women whose weight was monitored (%)	58.3	74.9	65.5	81.6
11	Pregnant women living in households with a kitchen garden ⁸ (%)	16.5	28.6	21	54.9
12	Pregnant women living in households in which members practice open defecation (%)	93.9	55.4	63.9	21.8
13	Pregnant women living in households with access to PDS in the month preceding the survey (%)	61.5	97.9	55.0	99.0
14	Pregnant women receiving ICDS entitlement for supplementary food ⁹ (%)	10.9	33.4	21.4	35.1
15	Adopted family planning methods to keep space between pregnancies ¹⁰ (%)	2.4	12.6	4.6	25.7
16	Pregnant women who attended at least three VHSND meetings ¹¹ in the six months preceding the survey (%)	2.6	23.3	3.8	42.5
17	Pregnant women who attended at least two Maitri Baithak meetings in the 12 months preceding the survey (%)	1.3	15.8	0.8	41.5

Notes:

(SD): Denotes the standard deviation of proportion

1. Includes only those pregnant women who had given consent for anthropometric measurements.
2. Pregnant women whose 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.
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.

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

	Key Indicators	Kasba		Jalalgarh	
		Baseline 2016	Endline 2021	Baseline 2016	Endline 2018
		(N=706)	(N=355)	(N=1054)	(N=345)
	Estimated sample of mothers ¹ (n)	712	712	712	712
	Mothers interviewed (n)	722	338	678	226
1	NUTRITIONAL STATUS² (n)	722	334	678	225
1.01	Mothers' mean Body Mass Index (BMI) ³ [SD]	19.1 [2.5]	19.6 [2.9]	19.2 [2.7]	20.2 [4.3]
1.02	Mothers who are underweight (BMI<18.5)	44.7	38.6	44.8	33.7
1.03	Mothers who are normal weight (BMI between 18.5-24.9)	52.0	56.2	52.0	60.
1.04	Mothers who are overweight (BMI between 25.0-29.9)	3.2	4.8	2.4	5.1
1.05	Mothers who are obese (BMI >29.9)	0.0	0.4	0.8	0.8
1.06	Mothers experiencing both severe stunting and wasting ⁴	10.2	4.0]	11.8	6.7
	DIETARY DIVERSITY⁵ (n)	656	282	637	201
2	Mothers mean Dietary Diversity Score (DDS) ⁶ [Standard Deviation (SD)]	3.6 [1.3]	5.6 [1.8]	3.7 [1.5]	5.5 [2.0]
3	Mothers with minimum dietary diversity score (6 or more out of 10) (%)	7.5	47.7	11.0	52.5
4	Mothers living in food secure households ⁷ (%)	19.7	19.0	21.5	20.9
	MICRONUTRIENT SUPPLEMENTATION AND DEWORMING				
5	Mothers who consumed at least 100 IFA tablets during the last pregnancy (%)	6.3	18.6	14.4	37.1
6	Mothers who received any calcium tablet during the last pregnancy (%)	11.4	86.2	15.2	92.1
7	Mothers who have consumed any tablet for deworming during the last pregnancy (%)	9.3	52.0	6.5	25.2
8	Mothers living in households which use adequately iodised salt ⁸ (%)	76.9	97.9	88.1	99.0
9.01	Mothers who had ANC check-up in the first trimester (%)	30.5	53.5	42.5	59.2
9.02	Mothers who had at least four ANC check-ups (%)	11.2	29.7	22.0	34.3
10	Mothers who were weighed at least four times (%)	3.3	17.2	9.3	25.1
11	Mothers living in households with a kitchen garden ⁹ (%)	13.3	32.2	19.3	58.3
12	Mothers living in households in which members practice open defecation (%)	92.9	51.5	65.3	14.7
13	Mothers living in households with access to PDS in the month preceding the survey ¹⁰ (%)	66.7	96.6	61.0	99.2
14	Mothers receiving ICDS entitlement for supplementary food ¹¹ (%)	13.9	55.5	20.9	53.1
15	Mothers who had an institutional delivery ¹² (%)	80.9	90.2	76.9	90.3
16	Mothers who received maternity entitlement payment (JSY) from government ¹³ (%)	61.4	59.5	56.1	51.1
17	Currently use any modern contraceptive ¹⁴ (%)	6.0	17.8	12.7	2.9
18	Mothers who attended at least three VHSND ¹⁵ meetings in the six months preceding the survey (%)	1.5	39.6	2.7	47.4
19	Mothers who attended at least two Maitri Baithak in the 12 months preceding the survey (%)	2.9	32.3	1.9	58.3

Notes:

SD: Denotes the standard deviation of proportion

1. Mothers refer to women who have children under two years of age.

2. Includes only those mothers who had given consent for taking anthropometric measurements. Women who gave birth in the preceding two months of the survey were excluded
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<23cm.
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. 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.
8. 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.
9. 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.
10. Includes only those households which possessed a ration card.
11. 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)
12. Institutional delivery refers to last birth(s), which took place in a health facility/institution.
13. 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.
14. Modern contraceptives include female and male sterilizations, Intra-Uterine Devices (IUDs), injectable, pills, condoms and diaphragms.
15. 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 BIHAR (2016-2021)

ADOLESCENT GIRLS (10-19 years)

	Key Indicators	Intervention Area			Control Area		
		Baseline 2016 (N=863)	Midline 2018 (N=493)	Endline 2021 (N=567)	Baseline 2016 (N=841)	Midline 2018 (N=470)	Endline 2021 (N= 552)
	SOCIO-DEMOGRAPHIC INDICATORS						
1	Estimated sample of adolescent girls (n)	875	500	875	841	470	841
2	Adolescent girls interviewed (n)	863	493	567	841	470	552
	Distribution of adolescent girls by age groups (years)						
3.01	10-14 [%]	63.6 [549]	50.5 [248]	52.1 [293]	62.8 [528]	52.5 [252]	50.2 [272]
3.02	15-19 [%]	36.4 [314]	49.5 [245]	47.9 [274]	37.2 [313]	47.5 [218]	49.9 [280]
	Educational status of adolescent girls¹						
4	Educational status of adolescent girls (10-14)	549	248	293	528	252	272
4.01	Never attended school (%)	7.7	5.0	7.7	10.0	9.2	8.1
4.02	Currently attending school (%)	86.0	81.6	81.9	86.9	78.1	73.5
5	Educational status of adolescent girls (15-19)	314	245	274	313	218	280
5.01	Never attended school (%)	11.1	12.6	9.5	11.5	18.8	11.4
5.02	Currently attending school (%)	72.0	59.3	65.9	69.3	48.3	70.1
6	Adolescent girls who were engaged in paid work outside their home (%)	13.6	7.2	3.9	9.8	6.4	2.5
	Religion of the head of household						
7.01	Hindu (%)	47.4	53.5	54.5	36.3	44.1	33.6
7.02	Muslim (%)	52.6	46.5	45.0	63.4	55.6	66.1
7.03	Others ² (%)	0.0	0.0	0.6	0.4	0.3	0.3
	Caste/Tribe of the head of household						
8.01	Scheduled Caste (SC) ³ (%)	26.9	21.0	23.0	11.1	16.1	20.5
8.02	Scheduled Tribe (ST) (%)	8.5	7.4	12.6	1.2	8.4	9.9
8.03	Other Backward Classes (OBCs) (%)	55.9	35.0	38.3	81.1	32.3	44.1
8.04	Others ⁴	8.8	36.7	26.1	6.7	43.2	25.5
	FOOD SECURITY						
	Ration Card						

	Key Indicators	Intervention Area			Control Area		
		Baseline 2016	Midline 2018	Endline 2021	Baseline 2016	Midline 2018	Endline 2021
		(N=863)	(N=493)	(N=567)	(N=841)	(N=470)	(N= 552)
9	Adolescent girls women living in households having						
9.01	No ration card (%)	4.6	13.5	11.0	9.6	11.4	9.8
9.02	Above Poverty Line (APL) card (%)	22.0	28.7	17.6	21.2	29.9	17.7
9.03	Below Poverty Line (BPL) card ⁴ (%)	57.7	53.7	69.8	62.7	54.3	68.3
9.04	Antyodaya Anna Yojana (AAY) card ⁵ (%)	5.7	4.1	1.6	6.5	4.3	4.3
	Integrated Child Development Services (ICDS)						
10.01	Adolescent girls who visit Anganwadi Centre (AWC) for any service ⁵ (%)	3.2	27.1	43.9	3.6	11.4	31.0
10.02	Adolescent girls who receive dry ration from AWC ⁶ (%)	22.2	13.5	18.8	30.8	0.0	18.0
11	Adolescent girls living in households with a kitchen garden ⁷ (%)	28.2	11.4	43.1	18.2	5.2	39.1
	MICRONUTRIENT SUPPLEMENTATION AND DEWORMING						
12	Adolescent girls who ever received any Iron and Folic Acid (IFA) tablet (blue coloured) (%)	6.5	19.3	41.6	3.8	9.0	27.8
13	Adolescent girls who have consumed at least four IFA tablets in the last month/last three months preceding the survey ⁸ (%)	3.2	7.1	11.1	2.1	4.6	7.6
14	Adolescent girls who have taken any tablet for deworming in the last six months/one year preceding the survey ⁹ (%)	41.5	68.6	91.5	35.2	67.7	87.7
15	Adolescent girls living in households using adequately iodised salt ¹⁰ (%)	78.8	95.8	96.7	68.0	93.0	96.2
	DIETARY DIVERSITY¹¹(n)	782	488	503	825	459	515
16	Adolescent girls' mean Dietary Diversity Score (DDS) ¹² [Standard Deviation (SD)]	3.9[1.4]	4.9[1.7]	5.5[1.7]	4.0[1.5]	4.8[1.8]	5.2[1.8]
17	In the 24 hours preceding the survey, food groups consumed by adolescent girls						
17.01	Grains, white roots and tubers and plantains (%)	99.6	100.0	98.9	95.8	100.0	98.1
17.02	Pulses (beans, peas and lentils) (%)	69.6	56.7	59.0	58.9	53.9	48.8
17.03	Nuts or seeds (%)	4.7	9.7	16.6	2.9	8.8	9.7
17.04	Dairy (%)	33.0	38.8	56.0	28.5	38.9	45.5
17.05	Meat, poultry and fish (%)	28.6	43.8	53.8	42.4	46.2	50.2
17.06	Egg (%)	7.8	23.0	26.7	11.9	20.3	23.2
17.07	Dark green leafy vegetables (%)	29.8	50.6	61.7	43.8	51.2	55.0
17.08	Other vitamin A-rich fruits and vegetables (%)	35.3	47.9	80.6	23.3	38.5	83.9
17.09	Other vegetables (%)	75.3	85.9	81.1	79.5	86.9	81.1

	Key Indicators	Intervention Area			Control Area		
		Baseline 2016	Midline 2018	Endline 2021	Baseline 2016	Midline 2018	Endline 2021
		(N=863)	(N=493)	(N=567)	(N=841)	(N=470)	(N= 552)
17.10	Other fruits (%)	11.0	29.0	34.9	13.3	30.3	29.3
17.11	Any insects and other small protein foods (%)	0.9	0.4	5.3	0.4	1.1	4.6
17.12	Any sugar-sweetened beverages (%)	64.3	60.0	52.5	75.5	60.0	40.9
17.13	Any savoury and fried snacks (%)	18.5	47.6	60.6	15.6	50.7	55.6
18	Adolescent girls consuming food from specific food groups						
18.01	Animal-source food (meat, poultry, fish and egg) (%)	33.6	54.9	64.4	48.0	54.3	59.0
18.02	Pulses (beans, peas and lentils) and nuts or seeds (%)	70.3	58.5	65.2	59.9	55.9	52.9
18.03	Dark green leafy vegetables and other vitamin A-rich fruits and vegetables (%)	36.3	62.1	73.6	50.3	64.3	64.6
19	Adolescent girls by number of food groups consumed						
19.01	Only one food group (%)	1.0	0.1	0.7	2.7	1.4	0.6
19.02	Only two food groups (%)	14.3	7.4	2.2	12.4	9.5	4.0
19.03	Only three food groups (%)	25.6	15.6	5.6	24.0	16.7	11.3
19.04	Only four food groups (%)	27.8	20.2	16.4	26.5	17.8	21.2
19.05	Less than five food groups (%)	68.7	43.4	24.9	65.5	45.4	37.1
19.06	More than five food groups (%)	31.3	56.6	75.1	34.5	54.6	62.9
19.01	Adolescent girls with minimum DDS (6 or more out of 10) (%)	12.3	33.0	50.0	14.2	33.4	37.5
20	Adolescent girls who ate at least three meals in the last 24 hours including main and small meals	99.9	98.3	96.3	99.9	98.2	96.8
	Kishori Divas						
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 ¹³ (%)	2.3	15.7	37.6	1.1	12.6	19.9
22	Adolescent girls who have accessed adolescent health services (Kishori Divas) in the last six months preceding the survey ¹⁴ (%)	3.1	14.8	62.7	1.9	2.8	38.3
23	Adolescent girls who have attended any Kishori group meeting in the last six months preceding the survey ¹⁵ (%)	2.4	23.5	32.6	1.7	0.0	1.7
24	Adolescent girls who have attended at least two Kishori group meetings in the six months preceding the survey (%)	1.2	19.0	29.4	1.1	0.0	1.2
25	Number of Kishori group meetings attended in the six months preceding the survey						
25.01	Never attended (%)	97.6	76.5	78.5	98.3	100.0	98.4
25.02	Attended once (%)	1.3	3.7	5.9	0.6	0.0	0.1

	Key Indicators	Intervention Area			Control Area		
		Baseline 2016	Midline 2018	Endline 2021	Baseline 2016	Midline 2018	Endline 2021
		(N=863)	(N=493)	(N=567)	(N=841)	(N=470)	(N= 552)
25.03	Attended twice (%)	0.9	6.4	5.4	0.6	0.0	0.1
25.04	Attended thrice (%)	0.0	4.0	5.6	0.4	0.0	0.4
25.05	Attended more than three (%)	0.2	8.6	18.4	0.1	0.0	0.7
26	Knowledge of social protection scheme for adolescents						
26.01	Rashtriya Kishori Swasthya Karyakram (RKSK) (%)	1.6	1.3	10.1	1.1	0.3	5.2
26.02	Rajeev Gandhi Scheme for Empowerment of Adolescent Girls (Sabla) (%)	0.6	1.8	15.0	0.5	0.9	9.2
27	Adolescent girls who						
27.01	Ever received any vocational training (%)	8.5	12.0	21.4	8.6	13.1	25.9
27.02	Ever attended any school/community occasions (%)	21.1	22.0	18.4	18.4	11.8	12.6
	ACCESS TO HEALTH SERVICES AND WATER, SANITATION AND HYGIENE (WASH)						
28	Adolescent girls living in households having access to drinking water from						
28.01	Public tap/Stand pipe (%)	9.0	2.6	4.8	11.4	1.2	4.2
28.02	Tube well or Borehole (%)	90.8	96.4	93.4	88.2	98.5	93.9
28.03	Others ¹⁶ (%)	0.2	1.0	1.8	0.4	0.3	1.9
29	Adolescent girls living in households in which members practice open defecation (%)	74.5	59.9	37.3	84.3	57.0	27.6
30	Adolescent girls living in households in which members use soap for hand-washing after defecation (%)	69.9	86.0	96.1	75.7	83.8	92.1
	Personal hygiene¹⁷						
31	Adolescent girls who use safe pads or sanitary pads during periods (%)	30.3	39.9	74.7	26.2	41.1	57.0
32	Adolescent girls who use any cloth for protection during their periods (%)	73.3	60.2	33.7	79.3	58.5	45.7
	ABILITY TO MAKE CHOICES AND DECISIONS						
33	Adolescent girls taking decisions about their own health care (%)	26.2	32.3	29.3	25.1	25.6	28.8
34	Adolescent girls taking decisions about making major purchases for the household (%)	20.4	15.3	19.2	21.5	13.4	16.2
35	Adolescent girls taking decisions about making purchases for daily household needs (%)	37.9	23.0	24.4	41.5	26.4	23.1
36	Adolescent girls taking decisions about visits to family members or relatives (%)	18.5	9.1	17.6	20.9	10.2	16.7
37	Adolescent girls taking decisions about keeping/spending the money they currently have (%)	55.5	54.0	62.7	59.6	55.4	54.8
38	Adolescent girls who think that they can take decision regarding whom to marry (%)	7.2	6.8	19.4	6.5	6.3	7.8

	Key Indicators	Intervention Area			Control Area		
		Baseline 2016	Midline 2018	Endline 2021	Baseline 2016	Midline 2018	Endline 2021
		(N=863)	(N=493)	(N=567)	(N=841)	(N=470)	(N= 552)
39	Adolescent girls taking decisions about going to school or studying (%)	70.7	70.0	59.1	66.1	71.3	56.6
	NUTRITIONAL STATUS¹⁸						
	Early adolescence (10-14 years) (n)	549	198	290	526	202	272
40	Adolescent girls' mean weight (kg [SD])	31.4[7.6]	33.9[7.4]	34.3[8.4]	31.4[7.9]	35.2[11.0]	35.1[7.5]
41	Adolescent girls' mean height (cm [SD])	139.9[10.8]	143.6[8.8]	143.8[8.4]	139.6[10.3]	143.9[8.3]	144.5[8.2]
42.01	Adolescent girls' height for age < -2SD ¹⁹ (%)	34.8	19.8	17.6	33.4	20.6	22.1
42.02	Adolescent girls' height for age < -3SD ²⁰ (%)	13.1	1.6	6.3	14.5	3.2	6.9
43	Adolescent girls' mean Mid-Upper Arm Circumference (MUAC) ²¹ (cm [SD])	19.3[2.6]	20.5[2.5]	19.6[2.6]	19.1[2.6]	20.8[2.4]	20.0[2.4]
44.01	Adolescent girls with MUAC < 17 cm (%)	20.9	5	11.9	20.5	4.9	9.9
44.02	Adolescent girls with MUAC between 17-18.9 cm (%)	27.3	27.6	24.7	26.4	19.4	21.3
44.03	Adolescent girls with MUAC between 19-20.9 cm (%)	23.5	28.7	33.1	28.9	29	32.7
44.04	Adolescent girls with MUAC between 21-22.9 cm (%)	19.5	19	20.6	14.8	27.4	24
44.05	Adolescent girls with MUAC 23 cm and above (%)	8.7	19.7	9.8	9.3	19.3	12
45	Adolescent girls' mean Body Mass Index (BMI) ²² [SD]	15.8[2.5]	16.2[2.4]	16.7[2.5]	16.0[2.5]	16.6[2.8]	16.7[2.6]
46.01	Adolescent girls with BMI for age < -2SD ²³ (%)	27.1	18.5	24.7	24	15.5	24.1
46.02	Adolescent girls with BMI for age < -3SD ^{24,25} (%)	7.9	2.6	4.4	7.3	3.3	5.9
47	Adolescent girls experiencing both stunting and wasting ²⁶ (%)	17.7	7	6.3	12	5	9.5
48	Adolescent girls experiencing severe stunting and wasting ²⁷ (%)	3.8	0	0.9	1.5	1.3	2.3
	Late adolescence (15-19 years) (n)	314	193	272	311	188	278
49	Adolescent girls' mean weight (kg [SD])	40.3[7.0]	42.6[15.6]	42.6[6.1]	41.0[7.1]	41.9[6.5]	42.7[6.4]
50	Adolescent girls' mean height (cm [SD])	149.2[6.9]	149.6[6.4]	150.8[5.8]	149.8[6.3]	150.1[6.4]	151.0[5.9]
51.01	Adolescent girls' height for age < -2SD ¹⁹ (%)	45.2	40.1	32.8	45.4	46.3	31.6
51.02	Adolescent girls' height for age < -3SD ²⁰ (%)	15.3	9.4	6	11.5	9.2	7.3
52	Adolescent girls' mean Mid-Upper Arm Circumference (MUAC) ²¹ (cm [SD])	22.3[2.5]	23.0[3.2]	22.3[2.1]	22.0[2.3]	23.2[2.6]	22.2[2.2]
53.01	Adolescent girls with MUAC < 17 cm (%)	2.2	1.5	0.7	1.3	1.1	0.3
53.02	Adolescent girls with MUAC between 17-18.9 cm (%)	6.1	1.4	2.5	4.5	1.6	5.5
53.03	Adolescent girls with MUAC between 19-20.9 cm (%)	19.7	9.6	24.1	25.7	12.1	24.1

	Key Indicators	Intervention Area			Control Area		
		Baseline 2016	Midline 2018	Endline 2021	Baseline 2016	Midline 2018	Endline 2021
		(N=863)	(N=493)	(N=567)	(N=841)	(N=470)	(N= 552)
53.04	Adolescent girls with MUAC between 21-22.9 cm (%)	32.5	37.1	35.8	33.1	33.3	33.2
53.05	Adolescent girls with MUAC 23 cm and above (%)	39.5	50.4	40.1	35.4	52	36.9
54	Adolescent girls' mean Body Mass Index (BMI) ²² [SD]	18.1[2.4]	19.4[9.6]	18.7[2.2]	18.4[2.5]	18.6[2.4]	18.7[2.4]
55.01	Adolescent girls with BMI for age < -2SD ²³ (%)	20.7	12.3	11.2	19.3	10.9	10.4
55.02	Adolescent girls with BMI for age < -3SD ^{24,25} (%)	4.1	1.7	1.2	5.1	4.4	1.6
56	Adolescent girls experiencing both stunting and wasting ²⁶ (%)	10.4	6.6	3.3	9.2	4	2.4
57	Adolescent girls experiencing severe stunting and wasting ²⁷ (%)	1.6	1.4	0	1.6	0.5	0.8
	Total adolescents (10-19 years) (n)	863	391	562	841	390	550
58	Adolescent girls' mean weight (kg [SD])	34.6[8.7]	37.7[8.0]	38.3[8.4]	35.0[8.7]	38.4[9.7]	39.0[8.0]
59	Adolescent girls' mean height (cm [SD])	143.3[10.6]	146.8[8.3]	147.2[8.0]	143.4[10.3]	146.9[8.0]	147.8[7.8]
60.01	Adolescent girls' height for age < -2SD ¹⁹ (%)	38.3	29.9	24.9	37.5	33.4	26.8
60.02	Adolescent girls' height for age < -3SD ²⁰ (%)	13.5	5.5	6.1	12.9	6.1	7.1
61	Adolescent girls' mean Mid-Upper Arm Circumference (MUAC) ²¹ (cm [SD])	20.4[3.0]	21.7[3.1]	20.9[2.7]	20.2[2.8]	22.0[2.7]	21.1[2.6]
62.01	Adolescent girls with MUAC < 17 cm (%)	14.1	3	6.5	13.4	2.7	5.1
62.02	Adolescent girls with MUAC between 17-18.9 cm (%)	19.5	14	14.6	18.2	13.5	10.6
62.03	Adolescent girls with MUAC between 19-20.9 cm (%)	22.1	19.5	27.3	27.7	20.6	28.4
62.04	Adolescent girls with MUAC between 21-22.9 cm (%)	24.2	28	27.9	21.6	30.6	28.6
62.05	Adolescent girls with MUAC 23 cm and above (%)	19.9	34.8	24.3	19	35.4	24.4
63	Adolescent girls' mean Body Mass Index (BMI) ²² [SD]	16.6[2.7]	17.1[2.5]	17.5[2.8]	16.9[2.8]	17.5[2.8]	17.7[2.7]
64.01	Adolescent girls with BMI for age < -2SD ²³ (%)	24.7	15.4	18.2	21.8	13.2	17.3
64.02	Adolescent girls with BMI for age < -3SD ^{24,25} (%)	6.4	2.2	2.9	5.9	3.9	3.8
65	Adolescent girls experiencing both stunting and wasting ²⁶ (%)	15.1	6.8	4.9	10.9	4.5	6
66	Adolescent girls experiencing severe stunting and wasting ²⁷ (%)	3	0.7	0.5	1.6	0.9	1.5

Note:

(SD): Denotes the standard deviation of proportion

1. In baseline survey adolescent girls attending Madarsa were considered as formal education but in Midline survey Madarsa were not considered as formal education

2. Others include Christians Buddhists, Sikhs and Jains.
3. The given percentages of Scheduled Caste (SC) include Mahadalit. The most socially and economically disadvantaged castes from the SC category have been designated as Mahadalits by the Bihar state government.
4. Others include those who have reported others, can't say or don't know.
5. 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.
6. Dry ration is provided from the AWC to those adolescent girls who visited AWC for services and who weigh less than 35 kg Baseline (n): Intervention Area=9; Control Area=13, Midline (n): Intervention Area=31 Control Area=1, and Endline (n): Intervention area =72 and Control area= 45. In midline and endline surveys reference period for availing AWC services was one year.
7. 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.
8. In baseline survey the information on the consumption of IFA and deworming tablets was collected based on the reference period of 'last month', in midline the reference period was last 'three months' and in endline the reference period was last 'one month prior to the date of interview.
9. In baseline and endline survey the information on the consumption of deworming tablets was based on the reference period of 'last six months' and in midline reference period was 'last one year' 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 and endline 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=314; Control Area=313, Midline (n): Intervention Area=245; Control Area=218 and Endline (n): Intervention Area= 274, Control area= 280.
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', in midline the reference period was last three months' and endline the reference period is 'one year' prior to the date of interview.
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. Includes only those adolescent girls who had given their consent for taking their anthropometric measurements.
19. 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 a total of 13 flagged cases in baseline, 5 flagged cases in midline and 1 case in endline.
20. 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 a total of 13 flagged cases in baseline, 5 flagged cases in midline and 1 case in endline.
21. The measurement of MUAC is commonly used as a potential indicator of nutritional status.
22. 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).

23. 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 a total of 14 flagged cases in baseline, 9 flagged cases in midline and 2 cases in endline.
24. 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 a total of 14 flagged cases in baseline, 9 flagged cases in midline and 2 cases in endline.
25. 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.
26. Includes those 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.
27. Includes those 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	Intervention Area			Control Area		
		Baseline 2016	Midline 2018	Endline 2021	Baseline 2016	Midline 2018	Endline 2021
		(N=468)	(N=322)	(N=212)	(N=468)	(N=306)	(N=231)
	SOCIO-DEMOGRAPHIC INDICATORS						
1	Estimated sample of pregnant women (n)	374	300	374	374	300	374
2	Pregnant women interviewed (n)	468	322	212	468	306	231
3	Distribution of pregnant women by age groups (years)						
3.01	15-19 (%) [n]	9.4 [44]	16.8 [50]	15.8 [34]	6.6 [31]	19.6 [63]	12.3 [33]
3.02	20-29 (%) [n]	68.8 [322]	68.6 [222]	67.6 [142]	71.8 [336]	66.0 [203]	64.8 [154]
3.03	30-39 (%) [n]	20.1 [94]	12.6 [44]	16.3 [35]	18.8 [88]	13.1 [38]	22.1 [42]
3.04	40-49 (%) [n]	1.7 [8]	1.9 [6]	0.4 [1]	2.8 [13]	1.3 [2]	0.8 [2]
	Educational status of pregnant women						
4	Never attended school (%)	49.8	52.4	45.5	50.2	51.0	49.0
5	Completed 10 or more years of schooling ¹ (%)	25.1	26.6	32.8	22.3	17.5	43.1
	Self Help Groups (SHGs)						
6	Pregnant women who are members of SHGs (%)	27.6	34.3	32.6	17.7	25.0	29.8
7	SHG members among the pregnant women who attended three or more Poshan Sakhi meetings in the 12 months preceding the survey ² (%)	3.9	4.3	40.3	0.0	0.2	5.5
	Religion of the head of household						
8.01	Hindu (%)	52.8	48.8	38.8	40.6	33.5	30.8
8.02	Muslim (%)	47.0	51.2	57.8	59.4	66.5	67.8
8.03	Others ³	0.2	0.0	3.3	0.0	0.0	1.5
	Caste/Tribe of the head of household						
9.01	Scheduled Caste (SC) (%)	21.8	16.6	23.3	14.5	16.3	16.1
9.02	Scheduled Tribe (ST) (%)	9.2	6.1	15.2	2.1	5.2	10.8
9.04	Other Backward Classes (OBCs) (%)	57.3	29.5	38.3	73.5	33.5	45.9
9.05	Others ⁴ (%)	11.8	47.8	23.2	9.8	45.0	27.3
10	Pregnant women who consumed alcohol and/or tobacco during pregnancy (%)	2.1	7.1	1.3	2.6	5.1	1.6

	Key Indicators	Intervention Area			Control Area		
		Baseline 2016	Midline 2018	Endline 2021	Baseline 2016	Midline 2018	Endline 2021
		(N=468)	(N=322)	(N=212)	(N=468)	(N=306)	(N=231)
	FOOD SECURITY						
	Ration Card						
11	Pregnant women living in households having						
11.01	No ration card (%)	51.7	48.9	45.9	55.1	43.7	45.6
11.02	Above Poverty Line (APL) card (%)	12.8	14.9	8.3	13.7	19.8	9.6
11.03	Below Poverty Line (BPL) card ⁵ (%)	32.1	33.2	45.2	29.5	34.3	41.9
11.04	Antyodaya Anna Yojana (AAY) card ⁶ (%)	3.4	2.9	0.6	1.7	2.2	2.9
	Public Distribution System (PDS) and Integrated Child Development Services (ICDS)						
12	Pregnant women living in households with access to PDS in the month preceding the survey ⁷ (%)	58.4	96.2	98.6	71.4	99.1	97.2
13	Pregnant women receiving ICDS entitlement for supplementary food ⁸ (%)	16.2	34.3	34.2	26.1	22.6	25.6
14	Pregnant women living in households with a kitchen garden ⁹ (%)	18.8	10.7	41.2	14.3	2.8	31.8
	FOOD INSECURITY¹⁰						
15	Pregnant women who experienced food insecurity in the 12 months preceding the survey						
15.01	Worried about insufficient food (%)	67.1	64.2	65.6	70.5	63.0	67.3
15.02	Unable to eat healthy and nutritious food (%)	68.2	62.2	68.9	70.1	69.5	63.8
15.03	Had to eat limited variety of food (%)	66.2	67.0	67.6	68.8	71.9	65.1
15.04	Had to skip a meal (%)	50.0	35.8	30.0	51.3	43.1	30.9
15.05	Had to eat less meals (%)	45.7	45.2	45.3	42.3	49.8	43.9
15.06	Household ran out of food (%)	41.7	31.8	28.1	38.0	27.7	25.8
15.07	Had no food to eat at any time (%)	11.8	8.9	4.8	11.1	7.1	5.3
15.08	Had to go an entire day without food (%)	10.0	8.7	1.9	6.2	6.1	2.5
	Food Insecurity Experience Scale (FIES)						
16.01	Pregnant women living in food secure households (%)	24.4	25.5	22.7	25.0	24.5	26.3
16.02	Pregnant women living in mildly food insecure households (%)	17.9	25.2	21.2	20.3	20.7	23.7
16.03	Pregnant women living in moderately food insecure households (%)	45.3	37.5	51.3	43.6	46.6	43.3
16.04	Pregnant women living in severely food insecure households (%)	12.4	11.8	4.8	11.1	8.1	6.8

	Key Indicators	Intervention Area			Control Area		
		Baseline 2016	Midline 2018	Endline 2021	Baseline 2016	Midline 2018	Endline 2021
		(N=468)	(N=322)	(N=212)	(N=468)	(N=306)	(N=231)
	Coping mechanism to manage shortfall of food						
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) (%)	25.0	48.2	48.2	29.1	42.8	45.5
17.02	Unlike earlier, now female(s) of household start working outside home (%)	16.9	18.1	22.3	9.8	12.1	14.7
17.03	Unlike earlier, now children of household start working outside home (%)	4.5	7.0	6.5	1.9	3.5	6.1
17.04	Migration of a family member to another city to earn money and send it back to the family (%)	43.8	65.4	47.6	47.6	64.8	51.3
17.05	Borrowing money to meet household expenses (%)	55.1	73.4	50.8	61.8	64.5	55.9
17.06	Resort to low-cost food grains/items available (%)	50.9	59.7	50.9	60.0	64.1	49.9
17.07	Borrowing grains to meet food requirements (%)	51.3	60.0	48.1	56.8	61.1	50.7
17.08	Sold household articles or possessions (%)	9.4	11.7	19.4	9.6	6.8	14.0
	MICRONUTRIENT SUPPLEMENTATION AND DEWORMING						
18	Pregnant women (in 2nd and 3rd trimester) who received any Iron and Folic Acid (IFA) tablet ¹¹ (%)	46.7	83.9	79.8	63.0	69.9	72.4
19	Pregnant women (in 2nd and 3rd trimester) who consumed at least 25 IFA tablets ¹² (%)	42.3	44.6	62.9	51.1	44.9	56.7
20	Pregnant women (in 2nd and 3rd trimester) who received any calcium tablet ¹¹ (%)	11.8	69.0	63.1	13.7	61.4	46.6
21	Pregnant women (in 2nd and 3rd trimester) who consumed any tablet for deworming ¹¹ (%)	5.9	15.4	23.7	3.1	11.5	13.3
22	Pregnant women living in households using adequately iodised salt ¹³ (%)	79.9	95.6	97.9	66.5	91.5	94.6
	DIETARY DIVERSITY¹⁴(n)	420	319	189	458	304	205
23	Pregnant women's mean Dietary Diversity Score (DDS) ¹⁵ [SD]	4.0 [1.4]	4.7 [1.7]	5.7 [1.9]	4.0 [1.4]	4.4 [1.7]	5.2 [1.9]
24	In the 24 hours preceding the survey, food groups consumed by pregnant women						
24.01	Grains, white roots and tubers, and plantains (%)	100	99.7	100	96.1	100	97.4
24.02	Pulses (beans, peas and lentils) (%)	68.6	55.5	57.5	65.1	53.4	54.8
24.03	Nuts or seeds (%)	4.3	10.5	16.7	2.4	5.5	14.3
24.04	Dairy (%)	35.0	40.3	61.3	30.1	34.6	49.7
24.05	Meat, poultry and fish (%)	22.9	49.4	49.4	41.7	48.1	53.1
24.06	Egg (%)	7.4	19.4	26.6	9.8	13.8	17.2
24.07	Dark green leafy vegetables (%)	48.3	57.0	57.3	52.0	57.3	51.1

	Key Indicators	Intervention Area			Control Area		
		Baseline 2016	Midline 2018	Endline 2021	Baseline 2016	Midline 2018	Endline 2021
		(N=468)	(N=322)	(N=212)	(N=468)	(N=306)	(N=231)
24.08	Other vitamin A-rich fruits and vegetables (%)	24.8	48.1	83.7	20.5	23.5	84.3
24.09	Other vegetables (%)	77.6	85.6	86.5	77.3	86.9	74.4
24.10	Other fruits (%)	10.0	32.0	32.4	15.7	23.1	30.2
24.11	Any Insects and other small protein source	1.0	3.5	5.4	0.4	0.8	3.2
24.12	Any sweets	43.8	64.6	59.6	65.9	59.2	50.8
24.13	Savoury / Fried snacks	9.1	31.9	63.0	3.9	26.9	55.5
25	Pregnant women consuming food from specific food groups						
25.01	Animal-source food (meat, poultry, fish and egg) (%)	27.4	55.7	60.6	46.3	51.8	57.7
25.02	Pulses (beans, peas and lentils) and nuts or seeds (%)	69.0	58.3	63.0	65.9	54.7	59.3
25.03	Dark green leafy vegetables and other vitamin A-rich fruits and vegetables (%)	53.3	64.1	65.1	60.3	64.5	62.2
26	Pregnant women by number of food groups consumed						
26.01	Only one food group (%)	1.4	0.3	0.5	1.3	1.1	2.7
26.02	Only two food groups (%)	12.9	11.7	3.2	10.9	10.3	3.8
26.03	Only three food groups (%)	24.3	12.8	4.9	22.9	20.2	9.6
26.04	Only four food groups (%)	30.2	20.7	15.3	29.7	26.8	17.0
26.05	Less than six food groups (%)	86.4	67.3	47.2	83.4	78.4	57.8
26.06	Pregnant women with high dietary diversity score (6 or more out of 10) (%)	13.6	32.7	52.8	16.6	21.6	42.2
27	Pregnant women having at least three meals in a day	90.2	93.4	98.2	93.9	93.4	88.5
	ACCESS TO HEALTH SERVICES AND WATER, SANITATION AND HYGIENE (WASH)						
	Registration in Antenatal Care (ANC) services						
28	Pregnant women who have registered their pregnancy (%)	60.9	74.6	69.5	70.3	63.9	62.2
29	Pregnant women who have registered in the first trimester (%)	28.8	40.0	53.5	29.5	34.3	34.6
30	Pregnant women who have received a Mother and Child Protection (MCP) card ¹⁶ (%)	74.7	77.7	77.8	78.4	71.4	69.4
	ANC services received during pregnancy						
31	Pregnant women who have sought ANC services (%)	70.1	71.2	81.9	78.4	63.0	75.5
32	Pregnant women who have had ANC check-up in the first trimester (%)	36.3	39.5	52.6	33.5	35.1	36.6

	Key Indicators	Intervention Area			Control Area		
		Baseline 2016	Midline 2018	Endline 2021	Baseline 2016	Midline 2018	Endline 2021
		(N=468)	(N=322)	(N=212)	(N=468)	(N=306)	(N=231)
33	Pregnant women who have received Tetanus Toxoid (TT) injection (%)	83.1	66.8	81.4	91.7	59.0	77.7
34	Pregnant women who have received counselling on birth preparedness by a frontline health worker ¹⁷ (%)	36.8	58.6	61.8	47.6	42.6	57.5
	Monitoring of nutritional status during pregnancy						
35	Pregnant women whose weight was monitored (%)	62.0	62.2	78.1	65.8	44.4	58.4
36	Pregnant women whose height was recorded (%)	3.6	35.3	26.4	2.8	12.8	13.5
37	Pregnant women whose Mid-Upper Arm Circumference (MUAC) was measured ¹⁸ (%)	4.9	40.3	41.9	4.3	8.4	12.5
	Village Health, Sanitation and Nutrition Day (VHSND)						
38.01	Pregnant women who attended VHSND meeting(s) in the six months preceding the survey ¹⁹ (%)	9.2	49.1	57.9	7.3	38.8	45.3
38.02	Pregnant women who attended at least three VHSND meetings in the six months preceding the survey (%)	3.2	9.9	32.6	1.9	4.4	17.7
	Water, Sanitation and Hygiene						
39	Pregnant women living in households having access to drinking water from						
39.01	Public tap/Stand pipe (%)	18.4	0.9	0.4	21.2	0.2	0.9
39.02	Tube well or Borehole (%)	81.6	98.0	98.4	78.4	99.4	95.8
39.03	Others ²⁰ (%)	0.0	1.2	1.2	0.4	0.4	3.3
40	Pregnant women living in households in which members practice open defecation (%)	78.6	58.9	39.3	91.2	67.5	35.4
41	Pregnant women living in households in which members use soap for hand-washing after defecation (%)	71.6	83.9	95.6	75.4	77.3	89.0
	KNOWLEDGE AND EVER USE OF FAMILY PLANNING METHODS AS REPORTED BY PREGNANT WOMEN						
42	Knowledge of family planning methods (%)	29.7	90.8	98.2	31.8	87.8	94.0
43	Used any method to delay or avoid getting pregnant before first pregnancy (%)	2.1	12.6	20.1	1.1	7.6	8.4
44	Adopted family planning methods to keep space between pregnancies ²¹ (%)	3.5	14.4	19.1	2.5	9.2	8.0
	ABILITY TO MAKE CHOICES AND DECISIONS						
45	Pregnant women taking decisions about their own health care (%)	59.4	75.6	74.7	55.3	69.8	68.8
46	Pregnant women taking decisions about making major purchases for household (%)	51.5	68.2	73.8	54.1	60.7	67.8
47	Pregnant women taking decisions about visits to family members or relatives (%)	40.0	64.4	71.7	34.8	56.1	64.7

	Key Indicators	Intervention Area			Control Area		
		Baseline 2016	Midline 2018	Endline 2021	Baseline 2016	Midline 2018	Endline 2021
		(N=468)	(N=322)	(N=212)	(N=468)	(N=306)	(N=231)
	NUTRITIONAL STATUS²² (n)	467	197	212	465	202	230
48	Pregnant women's mean MUAC (cm [SD])	23.1 [2.2]	23.8 [2.3]	23.2 [2.3]	22.6 [2.1]	23.9 [2.7]	23.4 [2.2]
49.01	Pregnant women with MUAC between 17-18.9 cm (%)	1.9	0.6	0.4	1.5	0.0	1.3
49.02	Pregnant women with MUAC between 19-20.9 cm (%)	11.6	5.1	15.4	19.6	7.2	7.9
49.03	Pregnant women with MUAC between 21-22.9 cm (%)	36.8	30.7	33.3	36.6	29.3	34.0
49.04	Pregnant women with MUAC 23 cm and above (%)	49.7	63.6	50.9	42.4	63.5	56.9
50	Pregnant women experiencing severe wasting (%)	13.5	0.6	15.8	21.1	0.0	9.2

Notes:

SD: Denotes the standard deviation of proportion

1. Considered only those pregnant women who have ever attended school (Baseline (n): Intervention Area - 235; Control Area – 233; Midline (n): Intervention Area - 142; Control Area – 223 and Endline (n): Intervention Area - 117; Control Area – 130).
2. Considered only those pregnant women who have are member of SHGs (Baseline (n): Intervention Area - 129; Control Area – 83; Midline (n): Intervention Area - 127; Control Area – 185 and Endline (n): Intervention Area - 69; Control Area – 62).
3. Others include Christians and others.
4. Others include those who have reported others, can't say or don't know.
5. 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>.
6. 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>.
7. Includes only those households which possessed a ration card (Baseline (n): Intervention Area - 226; Control Area – 210 and Midline (n): Intervention Area - 224; Control Area – 287 and and Endline (n): Intervention Area - 120; Control Area – 136).
8. Supplementary nutrition is provided to pregnant women and lactating mothers under ICDS.
9. 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.
10. 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.

11. Includes those pregnant women who are in their 2nd and 3rd trimester of pregnancy (Baseline (n): Intervention Area - 390; Control Area – 227 and Midline (n): Intervention Area - 186; Control Area – 272 and Endline (n): Intervention Area - 169; Control Area – 190).
12. Includes those pregnant women who are in their 2nd and 3rd trimester and received any IFA tablet (Baseline (n): Intervention Area - 182; Control Area - 143; and Midline (n): Intervention Area - 173; Control Area – 197 and Endline (n): Intervention Area - 136; Control Area – 134.).
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 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.
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 (0 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 pregnant women who have registered their current pregnancy.
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. 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.
20. Others include those households which have other source of drinking water (Cart with small tank/drum and Packaged /bottled water).
21. Includes only those pregnant women who had two or more pregnancies (Baseline (n): Intervention Area – 344; Control Area – 2366 and Midline (n): Intervention Area – 167; Control Area – 240 and Endline (n): Intervention Area – 165; Control Area – 172).
22. Includes only those pregnant women who had given consent for anthropometric measurements.

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

	Key Indicators	Intervention Area			Control Area		
		Baseline 2016	Midline 2018	Endline 2021	Baseline 2016	Midline 2018	Endline 2021
		(N=1400)	(N=532)	(N=564)	(N=1212)	(N=510)	(N=598)
	SOCIO-DEMOGRAPHIC INDICATORS						
1	Estimated sample of mothers ¹ (n)	1424	500	1424	1424	500	1424
2	Mothers interviewed (n)	1400	532	564	1212	510	598
	Distribution of mothers by age groups (years)						
3.01	15-19 (%) [n]	2.9 [41]	9.4 [51]	9.7 [53]	1.2 [14]	8.0 [41]	7.7 [46]
3.02	20-29 (%) [n]	64.6 [905]	69.8 [373]	70.0 [407]	61.9 [750]	64.5 [349]	63.7 [382]
3.03	30-39 (%) [n]	27.3 [382]	17.7 [91]	16.0 [85]	30.4 [368]	24.9 [107]	25.8 [155]
3.04	40-49 (%) [n]	5.1 [72]	3.2 [17]	4.3 [19]	6.6 [80]	2.7 [13]	2.8 [15]
	Educational status of mothers						
4.01	Never attended school (%)	56.4	54.9	44.4	64.8	58.1	47.4
4.02	Completed 10 or more years of schooling ² (%)	24.9	26.8	33.8	25.3	33.2	31.2
	Self Help Groups (SHGs)						
5.01	Mothers who are members of SHGs (%)	35.4	43.7	34.7	24.1	26.6	29.1
5.02	SHG members among the mothers who attended three or more Poshan sakhi meetings in the 12 months preceding the survey ³ (%)	3.4	17.4	41.7	0.7	0.8	6.0
	Religion of the head of household						
6.01	Hindu (%)	49.2	51.4	45.0	29.1	36.5	29.3
6.02	Muslim (%)	50.7	48.6	53.8	70.9	63.5	68.2
6.03	Others ⁴	0.1	-	1.2	0.0	-	2.6
	Caste/Tribe of the head of household						
7.01	Scheduled Caste (SC) ⁵ (%)	26.3	19.5	17.9	11.1	14.8	18.7
7.02	Scheduled Tribe (ST) (%)	7.4	11.5	16.7	2.1	8.5	10.7
7.03	Other Backward Classes (OBCs) (%)	55.1	30.3	37.2	79.8	29.0	43.4
7.04	Others ⁶ (%)	11.1	38.7	28.1	7.1	47.7	27.3
8	Mothers who consumed alcohol and/or tobacco during pregnancy (%)	3.6	4.7	3.4	3.3	2.2	1.0

	Key Indicators	Intervention Area			Control Area		
		Baseline 2016	Midline 2018	Endline 2021	Baseline 2016	Midline 2018	Endline 2021
		(N=1400)	(N=532)	(N=564)	(N=1212)	(N=510)	(N=598)
	FOOD SECURITY						
	Ration Card						
9	Mothers living in households having						
9.01	No ration card (%)	47.9	48.5	46.2	46.3	43.8	38.6
9.02	Above Poverty Line (APL) card (%)	14.4	15.7	6.6	13.7	21.8	11.2
9.03	Below Poverty Line (BPL) card ⁷ (%)	35.1	34.5	46.1	38.0	32.6	49.1
9.04	Antyodaya Anna Yojana (AAY) card ⁸ (%)	2.6	1.3	1.1	2.1	1.9	1.1
	Public Distribution System (PDS) and Integrated Child Development Services (ICDS)						
10	Mothers living in households with access to PDS in the month preceding the survey ⁹ (%)	64.2	93.7	98.0	72.5	96.4	96.4
11	Mothers receiving ICDS entitlement for supplementary food ¹⁰ (%)	17.3	45.0	54.4	27.8	32.5	49.8
12	Mothers living in households with a kitchen garden ¹¹ (%)	16.2	8.5	44.3	14.2	2.7	35.3
	FOOD INSECURITY¹²						
13	Mothers who experienced food insecurity in the last 12 months preceding the survey						
13.01	Worried about insufficient food (%)	74.1	70.2	73.0	74.2	71.0	71.7
13.02	Unable to eat healthy and nutritious food (%)	69.6	69.6	74.2	72.0	72.7	71.2
13.03	Had to eat limited variety of food (%)	72.4	72.1	72.9	70.3	72.5	72.7
13.04	Had to skip a meal (%)	57.4	47.3	36.0	55.5	46.7	29.3
13.05	Had to eat less meals (%)	50.5	52.6	51.1	47.8	52.5	48.6
13.06	Household ran out of food (%)	45.6	36.4	27.6	43.2	34.3	25.0
13.07	Had no food to eat at any time (%)	12.0	8.8	7.9	11.4	7.4	6.3
13.08	Had to go an entire day without food (%)	9.3	7.3	4.3	7.3	7.5	3.1
	Food Insecurity Experience Scale (FIES)						
14.01	Mothers living in food secure households (%)	20.4	23.0	18.8	22.6	20.4	18.8
14.02	Mothers living in mildly food insecure households (%)	17.0	20.3	24.1	16.7	22.8	28.2
14.03	Mothers living in moderately food insecure households (%)	50.1	46.8	48.8	49.0	47.6	46.1
14.04	Mothers living in severely food insecure households (%)	12.5	9.9	8.4	11.7	9.2	6.8

	Key Indicators	Intervention Area			Control Area		
		Baseline 2016	Midline 2018	Endline 2021	Baseline 2016	Midline 2018	Endline 2021
		(N=1400)	(N=532)	(N=564)	(N=1212)	(N=510)	(N=598)
	Coping mechanism to manage shortfall of food						
15	Coping strategies of the households as reported by mothers						
15.01	Household head now spends extra hours at work to earn more money (overtime) (%)	29.1	44.8	52.5	28.4	37.8	51.2
15.02	Unlike earlier, now female(s) of household start working outside home (%)	22.0	22.1	22.5	22.0	17.5	19.6
15.03	Unlike earlier, now children of household start working outside home (%)	4.1	5.5	7.1	4.3	6.2	6.9
15.04	Migration of a family member to another city to earn money and send it back to the family (%)	45.9	65.6	49.3	49.8	63.9	51.2
15.05	Borrowing money to meet household expenses (%)	63.7	75.7	61.9	60.8	70.3	57.7
15.06	Resort to low-cost food grains/items available (%)	61.6	60.6	54.9	59.2	59.0	53.0
15.07	Borrowing grains to meet food requirements (%)	56.6	66.2	50.9	57.1	59.3	49.3
15.08	Sold household articles or possessions (%)	8.6	12.2	22.1	11.6	8.8	16.1
	MICRONUTRIENT SUPPLEMENTATION AND DEWORMING						
16	Mothers who received any Iron and Folic Acid (IFA) tablet during the last pregnancy (%)	49.9	68.8	93.2	44.1	64.7	83.7
17	Mothers who consumed at least 100 IFA tablets during the last pregnancy ¹³ (%)	10.7	5.8	27.0	14.2	3.4	15.6
18	Mothers who received any calcium tablet during the last pregnancy (%)	13.2	50.3	88.9	9.7	44.2	78.2
19	Mothers who have consumed any tablet for deworming during the last pregnancy (%)	7.9	17.2	39.6	5.2	14.2	39.0
20	Mothers living in households which use adequately iodised salt ¹⁴ (%)	82.3	95.8	98.4	71.0	90.2	94.6
	DIETARY DIVERSITY¹⁵(n)	1293	523	483	1191	507	534
21	Mothers mean Dietary Diversity Score (DDS) ¹⁶ [SD]	3.6 [1.4]	4.9 [1.9]	5.6 [1.8]	3.9 [1.5]	4.4 [1.7]	5.2 [1.7]
22	In the 24 hours preceding the survey, food groups consumed by mothers						
22.01	Grains, white roots and tubers and plantains (%)	99.1	100.0	99.3	96.2	100.0	99.5
22.02	Pulses (beans, peas and lentils) (%)	62.8	63.6	58.1	59.1	53.0	48.3
22.03	Nuts or seeds (%)	3.9	8.1	13.5	1.6	6.1	9.9
22.04	Dairy (%)	29.5	35.8	52.9	22.1	28.3	43.0
22.05	Meat, poultry and fish (%)	30.0	42.1	51.2	38.9	45.7	53.6
22.06	Egg (%)	8.4	17.7	23.7	11.9	17.0	22.2
22.07	Dark green leafy vegetables (%)	30.2	58.8	68.0	47.4	55.0	64.7

	Key Indicators	Intervention Area			Control Area		
		Baseline 2016	Midline 2018	Endline 2021	Baseline 2016	Midline 2018	Endline 2021
		(N=1400)	(N=532)	(N=564)	(N=1212)	(N=510)	(N=598)
22.08	Other vitamin A-rich fruits and vegetables (%)	18.6	41.0	79.5	23.0	31.7	78.0
22.09	Other vegetables (%)	72.9	89.1	80.5	80.4	85.4	78.2
22.10	Other fruits (%)	9.0	23.2	29.4	7.5	17.6	24.3
22.11	Any insects and other small protein foods (%)	0.5	2.0	4.8	1.5	1.2	4.7
22.12	Any sugar-sweetened beverages (%)	60.5	63.7	50.5	77.5	56.5	44.0
22.13	Any savoury and fried snacks (%)	7.7	27.2	52.9	6.5	17.5	45.2
23	Mothers consuming food from specific food groups						
23.01	Animal-source food (meat, poultry, fish and egg) (%)	35.5	49.5	61.9	45.0	51.0	61.1
23.02	Pulses (beans, peas and lentils) and nuts or seeds (%)	63.7	66.5	63.9	59.5	54.5	53.1
23.03	Dark green leafy vegetables and other vitamin A-rich fruits and vegetables (%)	35.8	64.2	72.5	51.9	61.8	68.7
24	Mothers by number of food groups consumed						
24.01	Only one food group (%)	3.4	4.2	0.4	3.7	3.1	0.6
24.02	Only two food groups (%)	16.6	7.2	1.9	13.4	9.4	4.0
24.03	Only three food groups (%)	30.2	17.5	9.8	23.7	20.5	10.3
24.04	Only four food groups (%)	25.7	18.5	15.8	28.5	25.9	18.8
24.05	Less than five food groups (%)	75.9	47.4	27.9	69.3	58.8	33.8
24.06	Five or more food groups (%)	24.1	52.6	72.1	30.7	41.2	66.2
25.01	Mothers with minimum dietary diversity score (6 or more out of 10) (%)	9.2	32.5	50.0	12.6	23.4	41.9
25.02	Mother who ate atleast three meals in the last 24 hours including main and small meals	91.3	43.5	95.5	95.6	45.2	95.4
	ACCESS TO HEALTH SERVICES AND WATER, SANITATION AND HYGIENE (WASH)						
	Registration in Antenatal Care (ANC) services during last pregnancy						
26	Mothers who have registered their pregnancy (%)	71.4	91.1	93.5	73.3	88.9	88.7
27	Mothers who have registered in the first trimester (%)	35.1	56.6	67.6	32.0	41.3	53.9
28	Mothers who have received a Mother and Child Protection (MCP) card ¹⁷ (%)	84.9	92.1	91.3	78.0	91.6	91.4
	ANC services received during last pregnancy						
29	Mothers who sought ANC services (%)	78.2	79.4	93.5	68.7	74.6	82.7
30	Mothers who had ANC check-up in the first trimester (%)	36.3	42.7	56.1	27.7	33.1	42.7
31	Mothers who had at least four ANC check-ups (%)	16.4	19.3	31.8	14.5	13.4	18.3
32	Mothers who have received Tetanus Toxoid (TT) injection (%)	94.9	78.9	99.8	96.6	74.3	98.6
33	Mothers who had received counselling on birth preparedness by a frontline health	42.6	72.8	92.7	37.8	64.0	86.3

	Key Indicators	Intervention Area			Control Area		
		Baseline 2016	Midline 2018	Endline 2021	Baseline 2016	Midline 2018	Endline 2021
		(N=1400)	(N=532)	(N=564)	(N=1212)	(N=510)	(N=598)
	worker ¹⁸ (%)						
	Monitoring of nutritional status during pregnancy						
34	Mothers whose weight was monitored (%)	64.9	70.7	91.3	54.5	64.9	82.1
35	Mothers who were weighed at least four times (%)	6.2	12.1	20.8	3.5	5.7	8.8
36	Mothers whose height was recorded (%)	3.6	38.8	34.0	0.9	17.8	18.0
37	Mothers whose Mid-Upper Arm Circumference (MUAC) was measured ¹⁹ (%)	3.8	57.0	50.3	3.0	24.5	16.9
	Delivery and Post-Natal Care (PNC)						
38	Mothers who had an institutional delivery ²⁰ (%)	78.9	81.9	90.2	76.2	63.9	75.2
39	Mothers who received IFA tablets after delivery (%)	24.1	67.4	73.7	17.9	54.3	61.1
40	Mothers who received calcium tablets after delivery	18.8	63.5	80.0	13.6	47.2	64.2
41	Mothers who received maternity entitlement payment (JSY) from government ²¹ (%)	58.8	56.5	55.6	59.5	43.9	39.4
	Village Health, Sanitation and Nutrition Day (VHSND)²²						
42.01	Mothers who attended VHSND meeting(s) in the six months preceding the survey (%)	7.1	51.5	62.6	6.4	40.8	53.5
42.02	Mothers who attended at least three VHSND meetings in the six months preceding the survey (%)	2.1	20.7	43.2	2.2	14.0	33.9
43.01	Mothers who attended Maitri Baithak (s) in the six months preceding the survey (%)	3.9	20.2	50.4	0.5	0.6	4.1
43.02	Mothers who attended at least two Maitri Baithak in the 12 months preceding the survey (%)	2.4	16.1	44.3	0.2	0.6	3.0
	Water, Sanitation and Hygiene						
44	Mothers living in households having access to drinking water from						
44.01	Public tap/Stand pipe (%)	15.5	0.6	1.1	20.5	0.2	1.6
44.02	Tube well or Borehole (%)	84.3	96.8	95.3	79.2	99.1	92.8
44.03	Others ²³ (%)	0.2	2.6	3.6	0.3	0.6	5.5
45	Mothers living in households in which members practice open defecation (%)	79.6	69.9	34.5	90.7	63.0	35.4
46	Mothers living in households in which members use soap for hand-washing after defecation (%)	72.0	92.5	96.6	69.3	90.0	91.0
	CURRENT USE OF FAMILY PLANNING METHODS AS REPORTED BY MOTHERS						
47.01	Currently use any family planning method (%)	10.3	16.4	26.5	8.8	13.7	15.6
47.02	Currently use any modern contraceptive ²⁴ (%)	9.2	13.5	23.3	7.7	10.7	13.7
48	Number of pregnancies including last birth (mean [SD])	3.4 [2.27]	3.2 [1.9]	2.9 [2.5]	3.7 [2.2]	3.3 [2.1]	3.3 [2.3]

	Key Indicators	Intervention Area			Control Area		
		Baseline 2016	Midline 2018	Endline 2021	Baseline 2016	Midline 2018	Endline 2021
		(N=1400)	(N=532)	(N=564)	(N=1212)	(N=510)	(N=598)
	ABILITY TO MAKE CHOICES AND DECISIONS						
49	Mothers taking decisions about their own health care (%)	59.3	76.7	70.8	66.7	74.4	69.6
50	Mothers taking decisions about making major purchases for the household (%)	55.1	73.4	70.3	62.5	71.9	68.7
51	Mothers taking decisions about visits to family members or relatives (%)	43.4	66.9	69.1	48.5	67.3	68.7
	NUTRITIONAL STATUS²⁵ (n)	1400	373	559	1186	351	598
52	Mothers' mean weight (kg [SD])	42.3 [8.9]	43.2 [7.0]	45.2 [8.6]	42.6 [7.5]	44.1 [7.0]	45.7 [11.3]
53	Mothers' mean height (cm [SD])	146.9 [21.7]	149.6 [5.2]	150.9 [5.4]	148.8 [15.9]	151.0 [5.5]	151.3 [5.5]
53.01	Mothers with height<145 cm [% (SD)]	18.1	19.3	10.2	12.9	12.7	9.4
54	Mothers' mean Body Mass Index (BMI) ²⁶ [SD]	19.2 [2.6]	19.2 [2.8]	19.8 [3.5]	19.0 [2.5]	19.3 [2.6]	19.9 [2.9]
54.01	Mothers who are underweight (BMI<18.5) [% (SD)]	44.8	43.6	36.4	45.0	43.1	37.3
54.02	Mothers who are normal weight (BMI between 18.5-24.9) [% (SD)]	52.0	51.5	58.1	52.4	53.7	57.0
54.03	Mothers who are overweight (BMI between 25.0-29.9) [% (SD)]	2.8	4.2	4.9	2.5	2.7	5.3
54.04	Mothers who are obese (BMI >29.9) [% (SD)]	0.4	0.7	0.6	0.2	0.5	0.4
55	Mothers' mean MUAC (cm [SD])	22.4 [2.5]	23.5 [3.0]	23.3 [2.5]	22.1 [2.3]	23.6 [2.7]	23.0 [2.5]
55.01	Mothers with MUAC between 17-18.9 cm [% (SD)]	3.0	2.6	0.5	2.8	2.5	1.9
55.02	Mothers with MUAC between 19-20.9 cm [% (SD)]	17.5	7.3	14.0	21.8	10.2	11.8
55.03	Mothers with MUAC between 21-22.9 cm [% (SD)]	36.7	31.7	32.2	37.8	24.6	36.4
55.04	Mothers with MUAC 23 cm and above [% (SD)]	42.8	58.4	53.3	37.6	62.7	49.9
56	Mothers experiencing double burden of stunting and wasting ²⁷ [% (SD)]	11.0	10.9	5.2	9.1	6.3	5.9

Notes

SD: Denotes the standard deviation of proportion

- Mothers refer to women who have children under two years of age.
- Considered only those mothers who have ever attended school (Baseline (n): Intervention Area - 611; Control Area - 427, Midline (n): Intervention Area - 250; Control Area - 241 and Endline (n): Intervention Area - 330; Control Area - 314).
- Considered only those mothers who have are member of SHGs (Baseline (n): Intervention Area - 496; Control Area - 292, Midline (n): Intervention Area - 228; Control Area - 149 and Endline (n): Intervention Area - 198; Control Area - 175).
- Others include Christians, Buddhists, Sikhs and Jains.
- The given percentages of Scheduled Caste (SC) include Mahadalit. The most socially and economically disadvantaged castes from the SC category have been designated as Mahadalits by the Bihar state government.
- Others include those who have reported others, can't say or don't know.

7. Below Poverty Line (BPL) cards are distributed to those households living below the poverty line, which includes households with a Monthly Per Capita Expenditure less than Rs. 971.26 (Bihar). 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 (<http://www.pdsportal.nic.in/main.aspx>).
8. 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 (<http://www.pdsportal.nic.in/main.aspx>).
9. Includes only those households which possessed a ration card. (Baseline (n): Intervention Area=729; Control Area=651, Midline (n): Intervention Area=273; Control Area=279 and Endline (n): Intervention Area – 306; Control Area – 382).
10. Supplementary Nutrition is provided to mothers and lactating mothers under ICDS.
11. 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.
12. 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.
13. Among those mothers who received IFA tablets during the last pregnancy. (Baseline (n): Intervention Area=698; Control Area=534, Midline (n): Intervention Area=372; Control Area=351 and Endline (n): Intervention Area - 528; Control Area – 504).
14. 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.
15. 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.
16. 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).
17. 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 - 1000; Control Area – 889, Midline (n): Intervention Area - 485; Control Area – 452 and Endline (n): Intervention Area - 522; Control Area – 536).
18. Frontline health workers include Auxiliary Nurse Midwives (ANMs), Accredited Social Health Activist (ASHA) and Anganwadi Workers (AWW).
19. The measurement of MUAC is commonly used as a potential indicator of nutritional status.
20. Institutional delivery refers to last birth(s), which took place in a health facility/institution.
21. 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.
22. 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.
23. Others include those households which have other source of drinking water (Cart with small tank/drum and Packaged /bottled water).
24. Modern contraceptives include female and male sterilizations, Intra-Uterine Devices (IUDs), injectables, pills, condoms and diaphragms.
25. Includes only those mothers who had given consent for taking anthropometric measurements. Women who gave birth in the preceding two months of the survey were excluded.
26. 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).
27. Double burden of stunting and wasting is defined as mothers whose height is <145 cm and MUAC<23cm.

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