# *Impact Assessment of ITC's Maternal, Child Health & Nutrition Program (MCHN)*

**Prepared For- ITC Limited**

**Prepared By- Anahat For Change Solutions Foundation**

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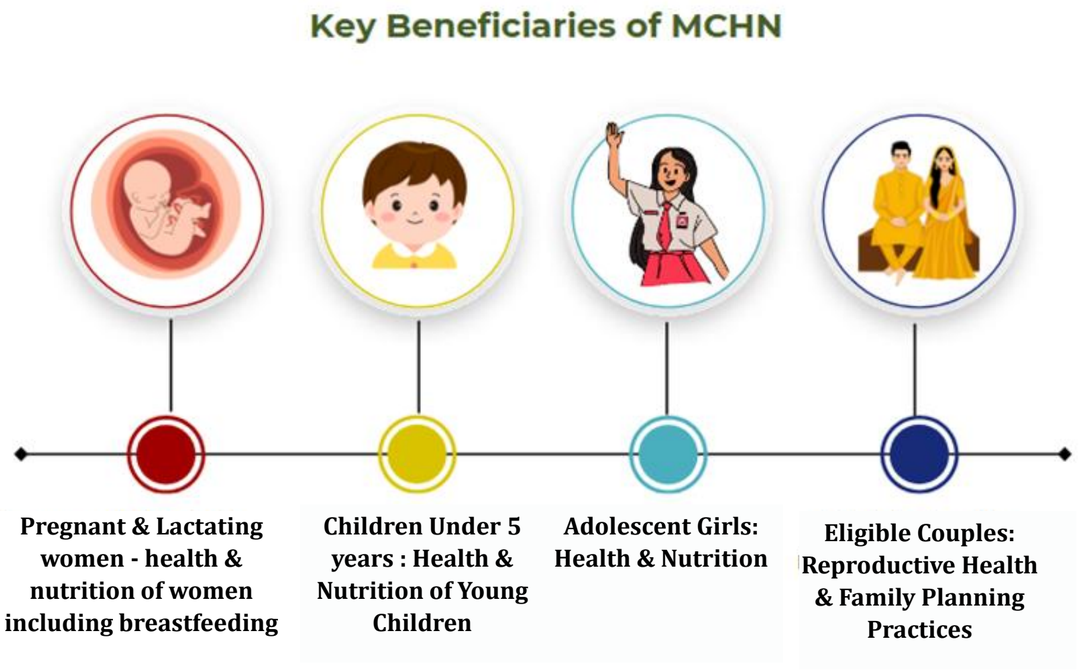
# About ITC's MCHN program under Assessment




*The program's approach to improving Infant and Young Child Feeding (IYCF) practices is grounded in a life-cycle framework with a strong emphasis on the first 1,000 days of life, a critical period for child growth and development. Using a 4E approach—Explore, Educate, Encourage, and Empower—and a Hub & Spoke model, the program strengthens breastfeeding and complementary feeding practices through government convergence. It promotes early initiation and exclusive breastfeeding, timely complementary feeding, dietary diversity, and responsive feeding practices. The program also strengthens WASH interventions, frontline worker capacities, and community-level behaviour change efforts to improve maternal and child nutrition outcomes sustainably.*

*ITC's Maternal and Child Health & Nutrition (MCHN) program under Mission Sunehra Kal addresses the twin challenges of child malnutrition and anaemia among women, children, and adolescents in ITC's core catchment areas. Anchored in national priorities such as Poshan Abhiyaan 2.0 and Anaemia Mukt Bharat and aligned with the Sustainable Development Goals (SDGs), it adopts a Public–Private Partnership (PPP) model that emphasizes replicability, cost-effectiveness, scalability, and sustainability. At the heart of the program is a life-cycle approach, with particular emphasis on the first 1,000 days of life, recognised globally as a critical window for securing long-term physical growth, cognitive development, and resilience against the double burden of malnutrition.*

**Study Area - Assam (Goalpara & Darrang), U.P (Saharanpur), Bihar (Munger), West Bengal (Hooghly), Telangana (Bhadradri Kothagudem).**

**Implementing Partners - YouthInvest Foundation, Institute for Global Development (IGD), National Institute For Rural Development, Education, Social Upliftment and Health (NIRDESH)**

**Project Implementation year: 23-24**

***The central objective of the program is to ensure that every household in the catchment area has healthy members consuming diverse diets, and that all children under five are on a normal growth trajectory, ultimately aspiring toward Zero Malnutrition.***

# Study Methodology

**Stage 1: Inception & Planning**

Initial consultations were conducted with ITC and implementing partners to understand program scope, align objectives, and map key stakeholders. Secondary research and beneficiary data review were undertaken to contextualise the intervention and define project and control populations.

**Stage 2: Methodology & Tool Design**

Sampling strategy and research tools were finalised, including structured questionnaires for quantitative surveys and guides for FGDs, KIIs, and case studies. The inception report outlining methodology, tools, and timelines was developed and refined based on feedback.

**Overall Methodology**

**Stage 3: Field Implementation**

Primary data collection was conducted using CAPI-based tools for household surveys, along with qualitative methods such as FGDs, KIIs, and case documentation. Anthropometric observations were also carried out to assess frontline worker skills in growth monitoring.

**Stage 4: Data Analysis & Reporting**

Analysis focused on baseline vs. program and program vs. control comparisons. Findings were triangulated with secondary data sources to ensure validity and reliability. Insights were synthesised into key findings, case studies, and actionable recommendations.

*The research methodology adopted **a mixed-methods approach, combining both quantitative and qualitative techniques to assess program impact.***

***Quantitative tools** included **structured questionnaires for program and control* participants.***

***Qualitative tools comprised FGDs, KIIs, case studies,** and anthropometric observations to assess the skills of Anganwadi Sevikas in growth monitoring.*

## Sampling Plan

**Quantitative Sampling:The sampling is calculated using Cochran's formula for large population study which is significant at 95% confidence level with 5% margin of error. The sampled population is divided across 5 project states.**

**Qualitative Sampling: The study utilizes a purposive sampling to ensure representation of diverse perspectives within the program groups based on project's objective.**

## Quantitative Sampling

| State | District/Block | Pregnant & Lactating Women | | Children (1-5 Years) | | Adolescent Girls | | Eligible Couple | | Overall | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | | Programme | Control | Programme | Control | Programme | Control | Programme | Control | Programme | Control |
| Assam | Darrang | 120 | | 130 | | 100 | | 100 | | 450 | |
| | Goalpara | 225 | | 225 | | 0 | | 0 | | 450 | |
| | Bongaigaon District | | 42 | | 45 | | 13 | | 0 | | 100 |
| Bihar | Munger | 132 | | 138 | | 98 | | 82 | | 450 | |
| | Bariyarpur | | 17 | | 13 | | 10 | | 10 | | 50 |
| Uttar Pradesh | Saharanpur | 120 | | 140 | | 95 | | 95 | | 450 | |
| | Shamli District | | 13 | | 17 | | 10 | | 10 | | 50 |
| Telangana | Bhadrachalam | 61 | | 59 | | 150 | | 180 | | 450 | |
| | Ashwapuram | | 12 | | 11 | | 14 | | 13 | | 50 |
| West Bengal | Hooghly | 110 | | 150 | | 70 | | 120 | | 450 | |
| | Pandua | | 13 | | 17 | | 10 | | 10 | | 50 |
| **Total** | | **768** | **97** | **842** | **103** | **513** | **57** | **577** | **43** | **2700** | **300** |

## Qualitative Sampling

| State | District/Block | Key Informant Interview (KII) | Focus Group Discussion (FGD) | Case Story |
|---|---|---|---|---|
| Assam | Darrang | 6 | 2 | 3 |
| | Goalpara | 5 | 2 | 3 |
| Bihar | Munger | 6 | 2 | 3 |
| Uttar Pradesh | Saharanpur | 6 | 3 | 3 |
| Telangana | Bhadrachalam | 6 | 2 | 3 |
| West Bengal | Hooghly | 6 | 3 | 3 |
| **Total** | | **35** | **14** | **18** |

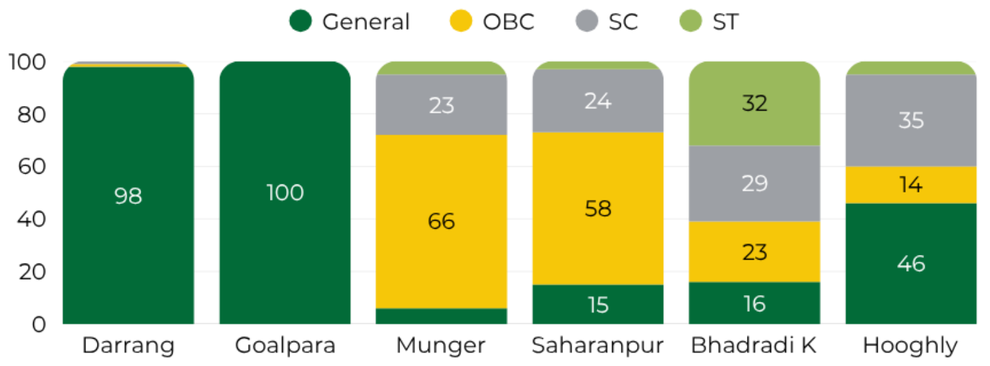
**Control questionnaire is asked to those, who are demographically similar to the program population, but have not received any program-based assistance.*

# Profile of the respondents

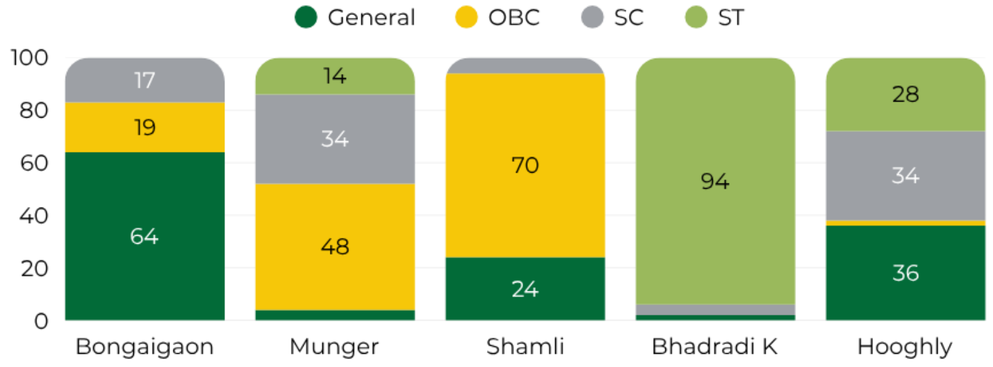
# Profile of the respondents

**This section illustrates the demographic and socio-economic profile of respondents across the program and control groups . Analysis has been done basis the interactions carried out with 2700 participants as part of the program group and 300 participants as part of the control group.**

**Caste of the Participants - program (%)**




**Caste of the Participants - Control (%)**




☑ **Religion:** Religion distribution varies significantly across districts: Muslim population is dominant in Darrang and Goalpara, while Hindu population is higher in Munger, Bhadradri Kothagudem, and Hooghly, with similar patterns observed across both program and control areas.

☑ **Education:**

**Lower education levels dominate across districts:** A large proportion of respondents have education below Class 10, especially in Darrang (65.3% program vs 60.0% control) and Goalpara (58.9% program), indicating limited educational attainment. In contrast, districts like Bhadradri Kothagudem show lower proportions (18.7% program vs 32.0% control), suggesting relatively better education levels.

**Higher education shows mixed but comparable trends between program and control:** Secondary and higher education (Class 11–12 and above) is relatively higher in districts like Bhadradri Kothagudem (Class 11–12: 30.9% program vs 20.0% control) and Hooghly (29.6% program vs 18.0% control), while overall differences between program and control groups remain moderate, indicating reasonable comparability across groups.

☑ **Livelihood:**

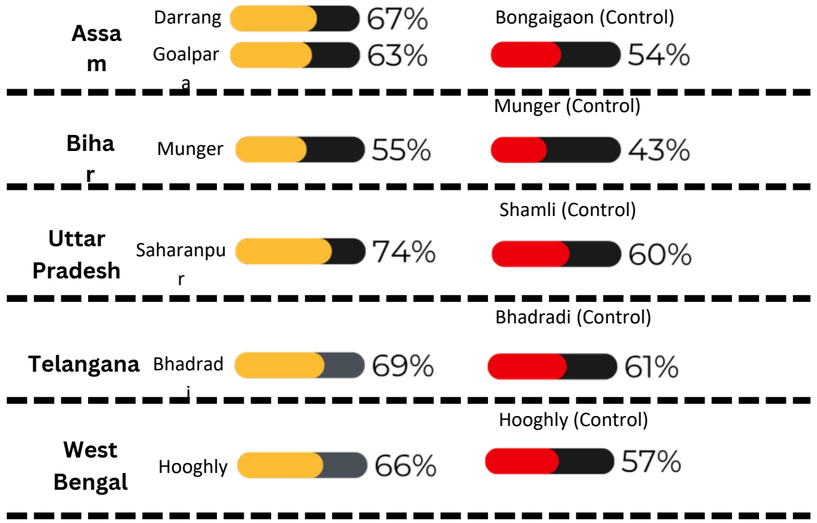
**Livelihoods are largely informal across districts,** with daily wage labour being the dominant occupation (overall 45.4%), especially high in Munger (74.4% program vs 72.0% control) and Saharanpur (56.2% vs 46.0%), while agriculture and farming are more prominent in Bhadradri Kothagudem (farmer: 16.2% program vs 46.0% control); overall, program and control areas show broadly similar occupational patterns.

# Maternal Health Outcome

# Maternal Health Outcomes

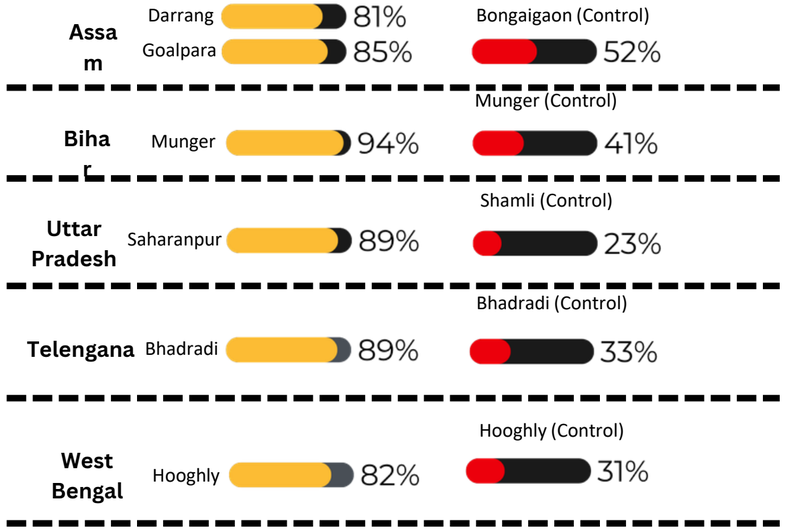
**This section illustrates the maternal health outcomes of respondents across the program and control groups based on the key impact indicators . These findings and analysis are based on the responses of 1,610 participants (n=1,610) from the case group and 200 participants (n=200) from the control group (wherever relevant) of the quantitative study along with information gathered during the interactions with key stakeholders.**

## Percentage of mothers whose age at first childbirth was 21 years or above




> *"Earlier there were some problems, but now Anganwadi sevikas, ASHA sevikas, and others work together to create awareness regarding delaying pregnancies... so things are much better now." - PRI member, Bihar*

## Mothers gaining 10kg or more weight during pregnancy




> *"We counselled the mother-in-laws separately for taking care of their pregnant daughter-in-laws and to provide them with good food and adequate rest" — ANM, Darrang*

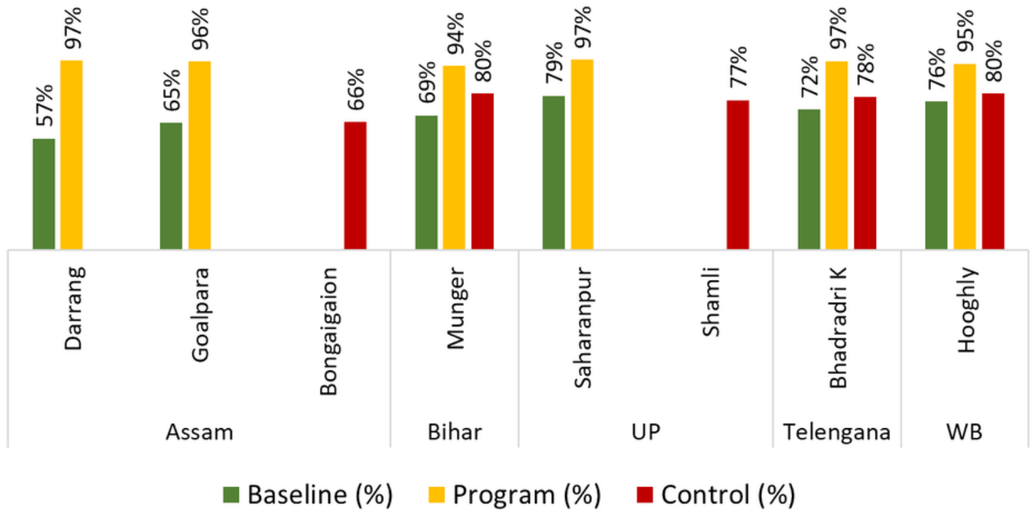
The program demonstrates stronger maternal health outcomes across intervention areas compared to control areas. The proportion of mothers aged ≥21 years at childbirth was consistently higher in program areas, ranging from 55% in Munger to 74% in Saharanpur, compared to 43%–61% in control areas. This indicates improved awareness regarding delayed pregnancy, reproductive decision-making, and maternal health planning through sustained counselling and community engagement.

Maternal nutrition outcomes were also notably better in program areas. Mothers gaining ≥10 kg during pregnancy ranged from 81% in Darrang to 94% in Munger, substantially higher than control figures of 23%–52%. These program–control gaps suggest stronger convergence between ANC follow-up, nutrition counselling, supplementation, and monitoring systems in intervention districts. Qualitative findings further indicate that repeated counselling by frontline workers, along with increased family support and awareness regarding maternal diet and rest, has contributed to healthier pregnancy weight gain patterns and improved maternal nutrition practices.

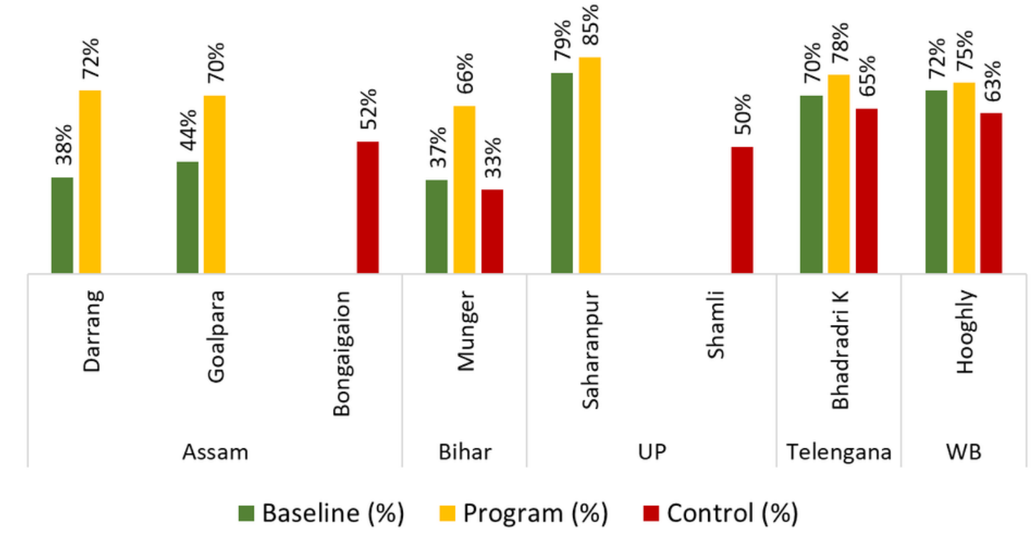
**Recommendation: Strengthen pre-marriage and early-adolescent counselling through ASHA/AWW and school platforms to delay age at first childbirth beyond 21 years, especially in lower-performing districts like Munger and Darrang where around 50% of adolescents have reported to receive such counselling.**

# Maternal Health Outcomes

**Percentage of mothers registered in the first trimester of pregnancy**




**Percentage of mothers who had taken 4 ANC* check ups**




**Key Insight**

- Early registration of pregnancy in the first trimester has improved substantially in program areas compared to both baseline and control groups, with registration increasing from 38% to 72% in Darrang, 44% to 70% in Goalpara, 69% to 94% in Munger, and 76% to 95% in Hooghly. Timely first-trimester registration is critical in field settings as it enables early identification of high-risk pregnancies, timely initiation of IFA and calcium supplementation, counselling on nutrition and danger signs, and improved continuity of ANC follow-up through ASHA, AWW, and ANM engagement.
- High uptake of 4 ANC* check-ups reflects strengthened service delivery, with frontline workers ensuring regular follow-ups, counselling, and coordination with health facilities.
- In the MCHN program implemented in collaboration with the Government of Assam in Darang district, 97% (baseline: 57%) pregnant women registered for Ante Natal Care (ANC) in the 1st trimester.
- While early registration in the first trimester shows some presence in control areas, the considerably lower uptake of 4 ANC* check-ups indicates gaps in follow-up, continuity of care, and reinforcement of maternal health practices and knowledge.

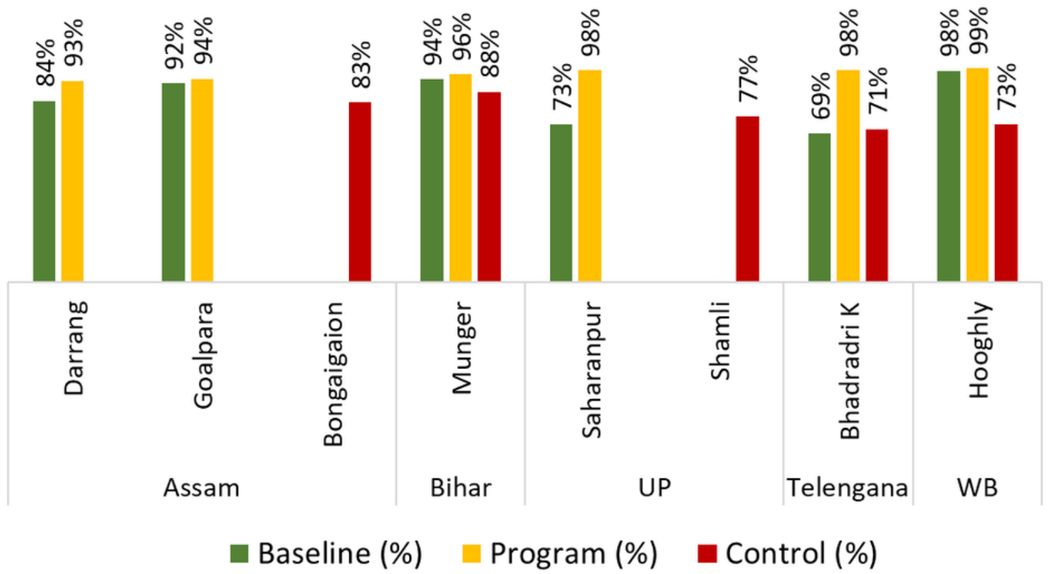
> *"If pregnancy is identified in the first three months, we can start IFA, monitor danger signs early, and ensure the mother completes all ANC check-ups on time."- ASHA, Hooghly*

> *"When pregnancy is confirmed, we visit every 8 to 12 days and ensure that she completes all 4 ANC* check-ups"- ASHA, Bhadradi K*

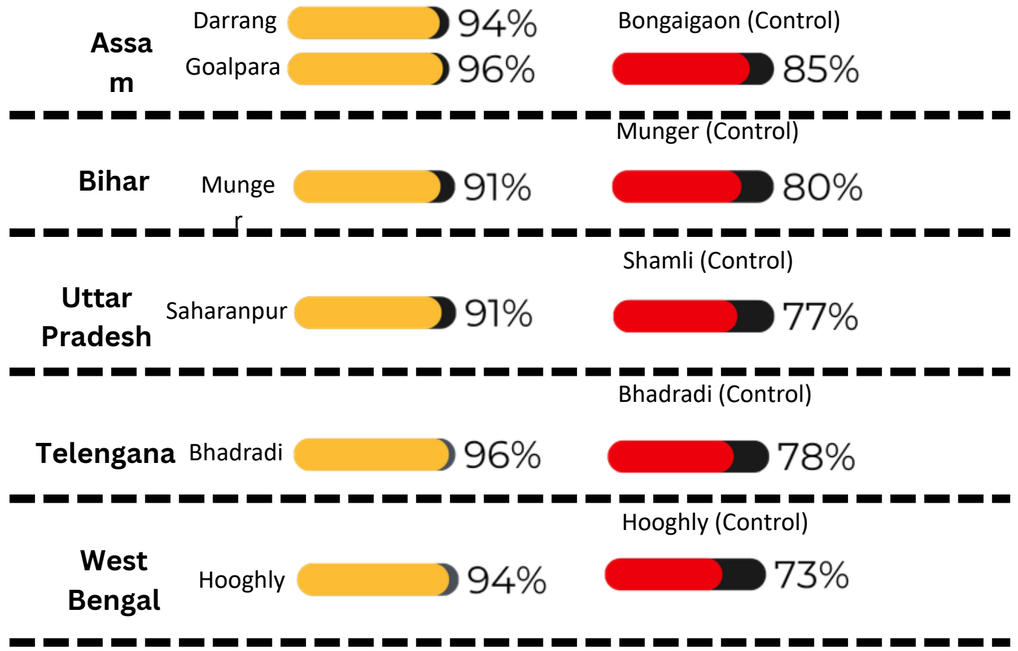
**Antenatal Care (ANC) refers to the care provided to pregnant women during pregnancy, and as per Government of India guidelines under NHM/RMNCH+A, a minimum of four ANC check-ups—os essential*

# Maternal Health Outcomes

### Percentage of mothers having institutional delivery




### Percentage of mothers receiving Post Natal Care (PNC)* after 48 hrs of delivery




**Key Insight**

- Institutional delivery rates remain consistently high across program areas, indicating strong adoption of safe delivery practices supported by sustained frontline mobilisation and health system linkages.
- The program has helped sustain and further strengthen already high baseline levels of institutional deliveries, ensuring that safe delivery practices are maintained across districts.
- PNC* (within 48 hours) shows significantly higher coverage in program areas (90–96%) compared to control areas (70–85%), highlighting stronger follow-up and continuity of care.
- The sharper program–control gap in PNC* (compared to institutional delivery) indicates that post-delivery follow-ups are largely driven by active frontline engagement, including home visits and counselling.
- Qualitative findings confirm that regular home visits, tracking, and counselling by ASHA and Anganwadi Sevikas ensure continuity of care from pregnancy to the postnatal stage, strengthening maternal health outcomes.

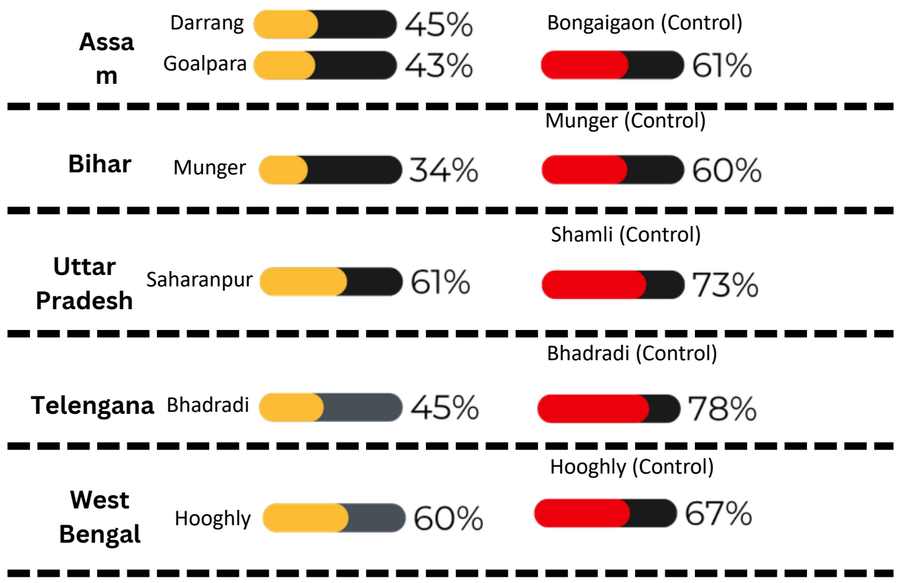
> *"Earlier it was different, but now we prefer delivery in hospitals as it is safer for both the mother and the child." —Lactating Mother, West Bengal*

> *"After delivery, they visit our homes soon after and guide us about our health and checks the baby... it gives us confidence that someone is checking on us."" - Lactating Mother, Darrang*

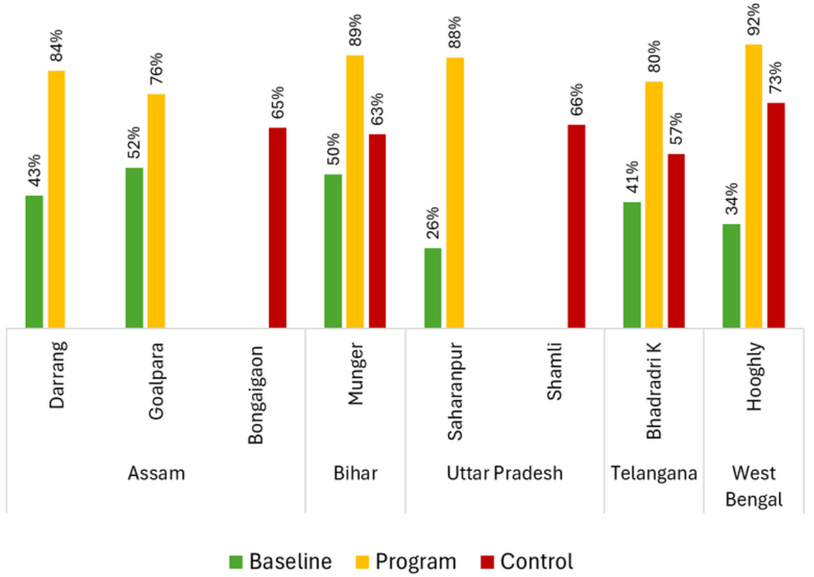
**Postnatal care (PNC) refers to the care provided to the mother and newborn immediately after childbirth. As per Government of India guidelines under NHM/RMNCH+A, postnatal care is considered essential, particularly within the first 48 hours after delivery, along with continued follow-up visits to monitor recovery, support breastfeeding, and identify any complications. Coverage of postnatal care is also tracked as a key indicator in the National Family Health Survey (2015–16 and 2019–21).*

# Maternal Health Outcomes

### Prevalence of anaemia* in pregnant women




### Percentage of Mothers who consumed Iron Folic acid** for 100 days or more when they were pregnant




**Key Insight**

- Mild anaemia* is highest in Saharanpur (41%) and Hooghly (38%), followed by Darrang (35%), Goalpara (26%) and Munger (24%), while moderate anaemia* is highest in Bhadradri Kothagudem (24%) and Hooghly (22%), followed by Saharanpur (20%), Goalpara (17%) and lower in Darrang and Munger (10% each).
- Higher consumption of iron folic acid** for 100 days or more reflects strengthened frontline engagement, where consistent follow-ups and personalised counselling have improved adherence among pregnant women.
- Qualitative findings suggest that increased awareness around anaemia*—shifting it from a "normal condition" to a preventable health issue—has led to stronger behavioural adoption of IFA consumption and nutrition practices.
- While some level of awareness and supplementation exists in control areas, lower adherence and weaker follow-up mechanisms highlight gaps in continuity of care, limiting the overall impact on anaemia reduction.

> *"We thought weakness during pregnancy is normal. Now we know it is anaemia, and it can be prevented." — Pregnant woman, Saharanpur*

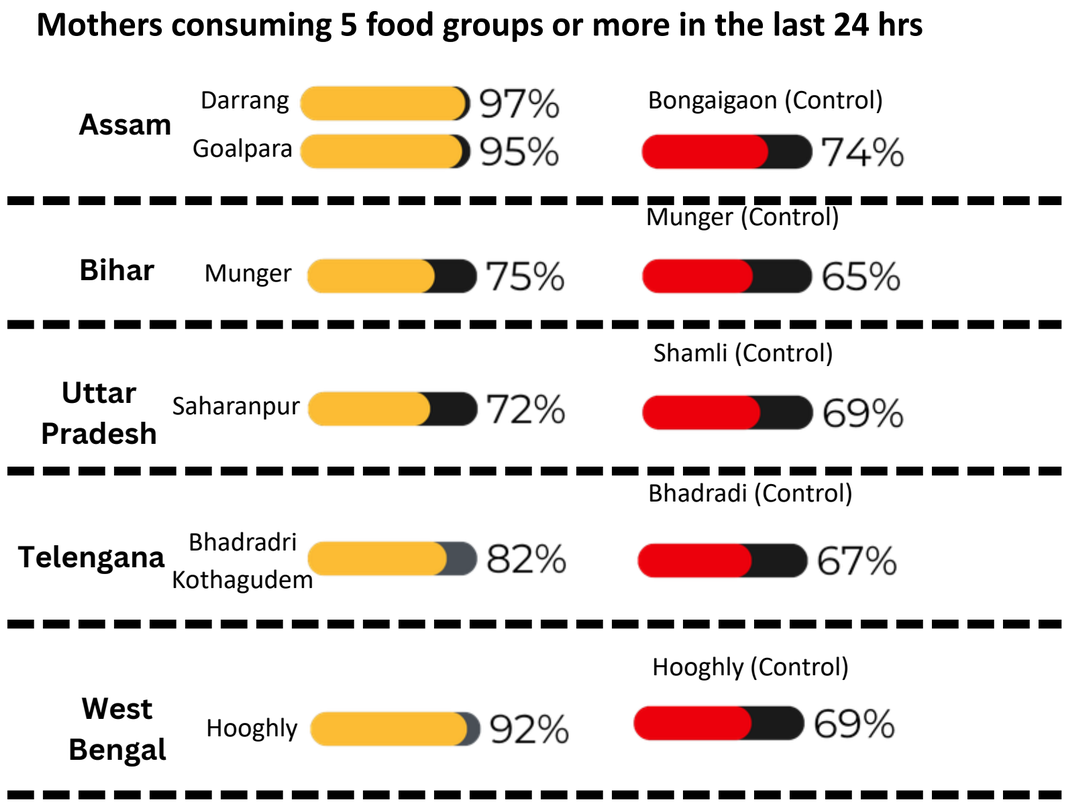
> *"Once women understand anaemia, they start taking Iron Folic Acid seriously—it's not just a tablet, it's their strength." — ASHA Sevika, Saharanpur*

Recommendation: Introduce a blister-pack based IFA tracking system—combined with weekly ASHA follow-ups—to monitor adherence and ensure pregnant women complete the full 100-day course.

**Anaemia classification is based on World Health Organization (WHO) guidelines (2023), which define anaemia in pregnant women as haemoglobin levels below 11.0 g/dL, with severity classified into mild (10.0–10.9 g/dL), moderate (7.0–9.9 g/dL), and severe (<7.0 g/dL); these thresholds are also adopted in the National Family Health Survey (NFHS-4, 2015–16; NFHS-5, 2019–21) for estimating anaemia prevalence in India.*

***Iron Folic Acid (IFA) supplementation guidelines are based on the Government of India's Anemia Mukt Bharat strategy (2018) and aligned with WHO recommendations (2016), which advise daily IFA supplementation for pregnant women for at least 100–180 days to prevent and reduce anaemia.*

# Maternal Health Outcomes




*(n= 1,610 for program group, n =200 control group )*

> *"The Anganwadi didi used to visit me often and insisted me in having 5 food groups daily which helped my baby to remain healthy —" — Lactating mother, Bhadradi K*

> *""I eat dal, green vegetables, and eggs regularly so that my breastmilk is healthy for my baby." — Lactating mother, Goalpara*

## Key Insights

- Minimum dietary diversity among lactating mothers remained consistently high in program areas, compared to lower in control group indicating strong influence of sustained nutrition counselling, household-level behaviour change, and frontline worker engagement on maternal dietary practices.
- Across districts, the alignment of improved dietary diversity with higher exposure to counselling, nutrition sessions, and frontline worker engagement suggests that regular follow-ups and behaviour change communication are enabling sustained improvements in maternal nutrition practices, rather than one-time shifts.
- However, comparatively lower performance in control areas highlights gaps in awareness, access, and continuity of counselling, reinforcing that sustained frontline engagement and system strengthening are critical to maintaining and deepening dietary diversity outcomes.
- Grains are the most commonly consumed food group across districts, followed by pulses and vegetables, while eggs and flesh foods remain the least consumed—often influenced by intra-household food norms, as noted by an Anganwadi Sevika in West Bengal where eggs provided through Anganwadi Centres are frequently prioritised for husbands, along with higher vegetarian dietary patterns observed in states like Saharanpur and Bihar.
- A high proportion of lactating mother are achieving minimum dietary diversity*, indicating improved access to and inclusion of multiple food groups in daily diets.

Recommendation: Integrate gender-transformative counselling into AWW/ASHA home visits—engaging mothers, husbands, and in-laws to prioritise pregnant and lactating women's consumption of protein-rich foods (e.g., eggs/pulses) rather than reallocating them within the householdto address intra-household food distribution gaps despite high dietary diversity levels

*Minimum Dietary Diversity refers to the proportion of women who consume foods from at least 5 out of 10 defined food groups in the previous 24 hours, as per the Food and Agriculture Organization and FHI 360 (2016) guidelines for Minimum Dietary Diversity for Women; it is used as a proxy indicator for adequate micronutrient intake among women of reproductive age.*
*The 5 food groups assessed for Minimum Dietary Diversity included:*

1. *Grains, roots & tubers*
2. *Pulses, beans & nuts*
3. *Dairy products*
4. *Eggs/Flesh foods*
5. *Fruits & vegetables*

# Case Story

## Case Study : Rekha Devi – From High-Risk Pregnancy to Safe Motherhood – A Journey Towards Safe Motherhood

Rekha Devi, a 22-year-old pregnant woman from a remote village in Munger district, lived in a low-income household dependent on daily wage labour. During her first pregnancy, she had limited awareness of maternal health practices and delayed accessing healthcare services.

**Challenges faced:**

Rekha faced multiple barriers, including lack of awareness about antenatal care, irregular health check-ups, and poor nutrition. Social norms and distance from health facilities further limited her access to timely care. She was also unaware of the importance of IFA consumption and early registration for ANC.

**Support received:**

After being identified by frontline workers under the program, Rekha received the following support:

- Health Counselling: Regular home visits by ASHA and AWW on ANC, nutrition, and danger signs.
- Service Linkages: Support for early ANC registration and completion of check-ups.
- Nutrition Support: Guidance on consuming iron-rich foods and adherence to IFA tablets.
- Behaviour Change Communication: IEC-based counselling on institutional delivery and breastfeeding practices.

With consistent follow-up, Rekha completed her ANC visits, regularly consumed IFA tablets, and improved her diet during pregnancy.

**Impacts:**

Earlier, Rekha had no structured access to maternal healthcare. With program support, she completed 4 ANC visits, opted for institutional delivery, and initiated breastfeeding within the first hour. Her improved awareness enabled her to recognize danger signs and seek timely care. Post-delivery, she continued exclusive breastfeeding and adopted better nutrition practices. Rekha now actively shares her experience with other women in the village, encouraging them to seek early care and institutional delivery.

## Case Study : Sunita Devi – From Delayed Care to Safe Institutional Delivery

Sunita Devi, a 20-year-old pregnant woman from Darrang district, lives in a low-income household dependent on agricultural labour. During her first pregnancy, she had minimal awareness about maternal healthcare and delayed seeking antenatal services.

**Challenges faced:**

Sunita did not register her pregnancy in the first trimester and had no prior understanding of the importance of regular ANC visits. She was not consuming IFA tablets, had limited knowledge of anaemia, and followed inadequate dietary practices. Due to social norms and lack of counselling, she was also considering home delivery.

**Support received:**

After identification by frontline workers, Sunita received structured support under the program:

- Early Registration & ANC Support: Facilitated registration and follow-up for antenatal check-ups.
- Counselling on Maternal Health: Regular home visits by ASHA/AWW on IFA, nutrition, danger signs, and birth preparedness.
- Nutrition & IFA Adherence: Guidance on iron-rich diet and consistent IFA consumption.
- Institutional Delivery Promotion: Counselling for safe delivery practices and linkage to nearest health facility.

With continuous engagement, Sunita completed her ANC visits and adopted improved health behaviour during pregnancy.

**Impacts:**

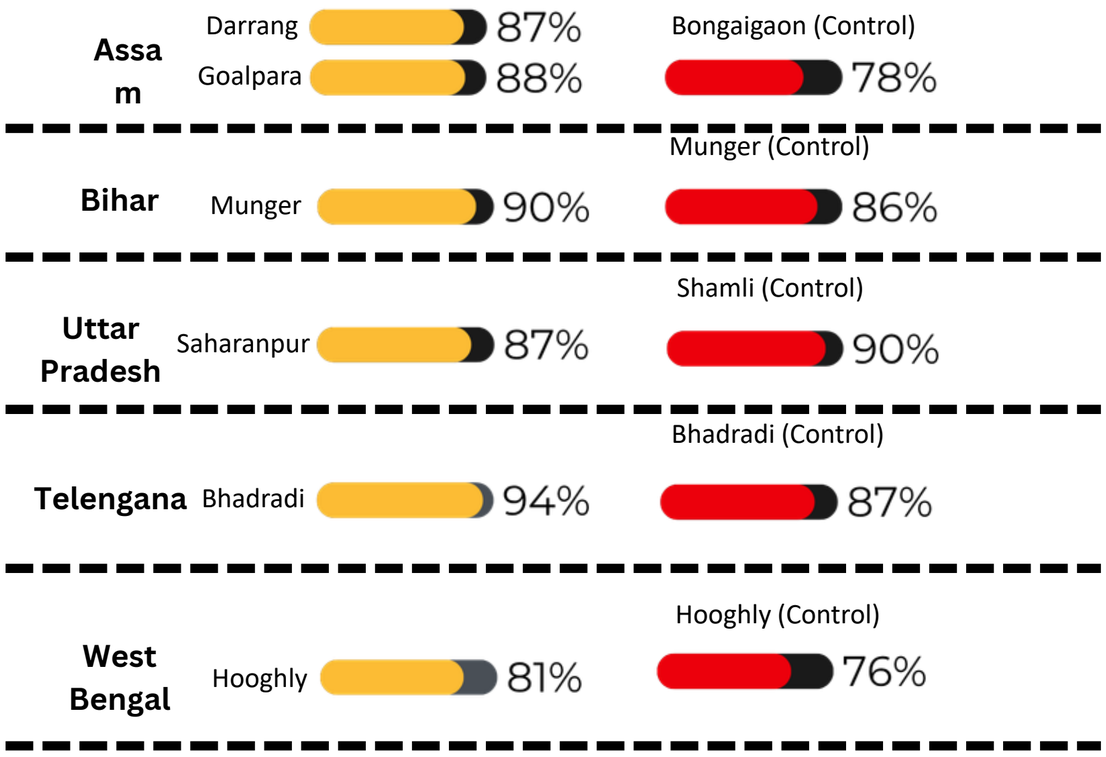
Earlier, Sunita's child showed signs of poor nutrition. With improved feeding practices and regular monitoring, the child's growth indicators stabilized over time. Sunita now ensures that her child receives balanced meals with adequate consistency and diversity. She also actively participates in mothers' group meetings and encourages other caregivers to adopt similar practices. Her journey reflects how knowledge and sustained support can lead to improved child health outcomes.

# Child Health Outcome

# Child Health Outcomes

**This section illustrates the child health outcomes of respondents across the program and control groups based on the key impact indicators . These findings and analysis are based on the responses of 1,610 participants (n=1,610) from the case group and 200 participants (n=200) from the control group (wherever relevant) of the quantitative study along with information gathered during the interactions with key stakeholders.**

**Percentage of newborn weighing 2.5kg or more**




## Key Insights

- Strong newborn outcomes in program areas—with Bhadradri at 94%, Munger at 90%, and Assam districts at 87–88%—reflect the positive impact of improved ANC coverage, maternal nutrition, and sustained counselling, linking closely with improvements in dietary diversity and service uptake.
- Program areas outperform controls in key geographies, such as Assam (87–88% vs 78%) and Telangana (94% vs 87%), demonstrating that consistent frontline engagement and behaviour change efforts are translating into better birth outcomes.
- Comparatively lower outcomes in some control areas, such as Assam (78%) and West Bengal (76%), highlight gaps in awareness, continuity of care, and maternal nutrition practices, reinforcing the importance of sustained system strengthening.

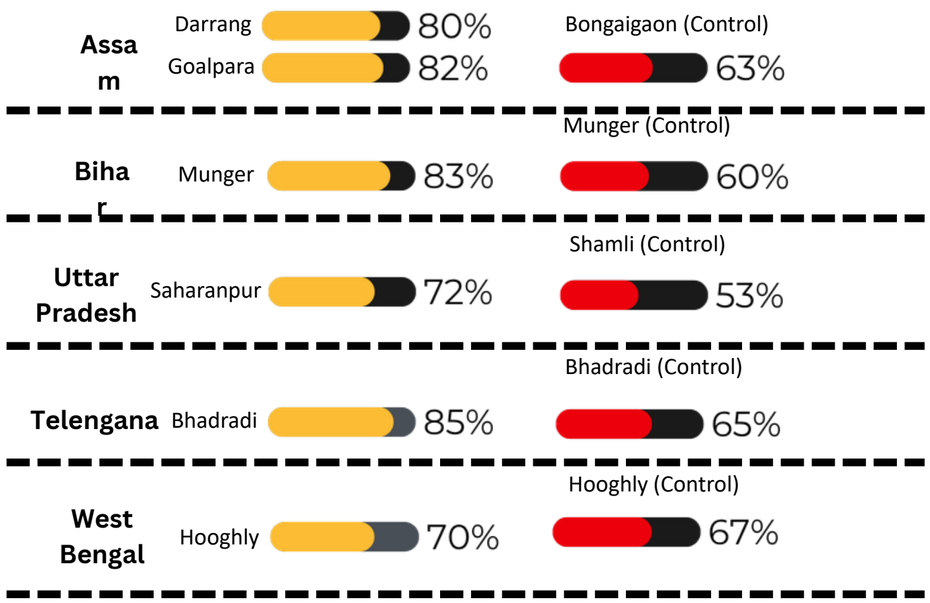
> *"The didi kept checking on me during pregnancy and told me what to eat and when to go for check-ups—this time my baby was born healthy and stronger."*
> *— Lactating mother, Bhadradri*

Recommendation: While the current intervention is performing well, it can be further strengthened by introducing conditional nutrition incentives (e.g., protein baskets/egg or pulse kits) linked to trimester-wise weight gain and ANC compliance—by using community health workers to provide targeted nutrition support and small incentives tied to maternal health milestones—to improve and sustain high normal birth weight outcomes (81–94%), especially in districts like West Bengal (81%).

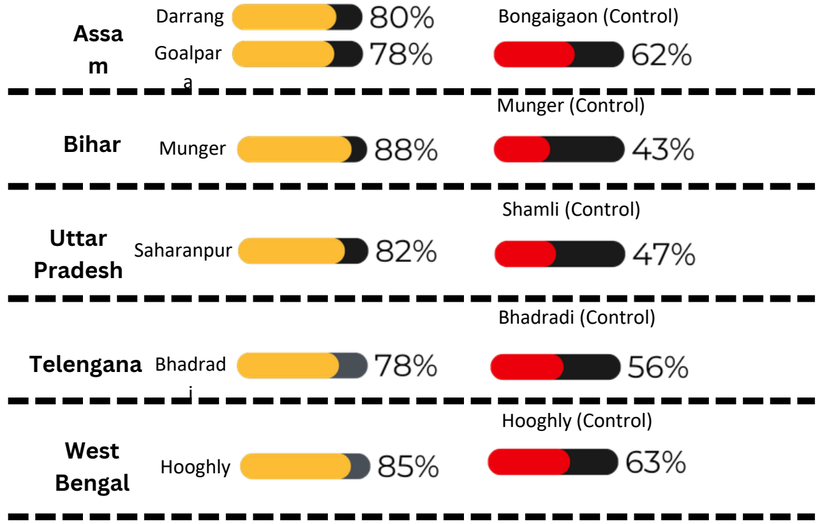
# Child Health Outcomes

*(n= 1610, for program group, n =200 control group )*

### Breastfeeding within 1hr of birth




### Exclusive breastfeeding* till 6 months




## Key Insights

- Compared to the baseline data, exclusive breastfeeding* increased from baseline 35% to 80% in Darrang, 35% to 78% in Goalpara, 76% to 88% in Munger, 53% to ~82% in Saharanpur, 47% to 78% in Bhadradri, and 69% to 85% in Hooghly, indicating strong improvement from baseline to program across all districts.
- High rates of early initiation of breastfeeding and exclusive breastfeeding across program districts reflect strong continuum of care, where improved antenatal care coverage, higher iron and folic acid consumption, and timely postnatal visits have collectively strengthened maternal practices from birth onwards.
- Districts such as Munger, Bhadradri, and Darrang show consistently strong performance across both breastfeeding indicators, aligning with better outcomes in antenatal check-ups and postnatal care, indicating effective translation of counselling into sustained behavioural adoption.
- In some control areas, traditional beliefs continue to influence feeding practices, with families perceiving colostrum as “dirty” or insufficient for the newborn and preferring to give honey or other prelacteal feeds to protect the child from cold and cough, contributing to lower exclusive breastfeeding practices.

> *“They told me to start feeding immediately after birth, and now I know that the first milk is very important for my baby.” — Lactating woman, West Bengal*

> *“Because we keep visiting even after delivery, mothers follow both early feeding and continue only breast milk for six months.” — ASHA Sevika, Darrang*

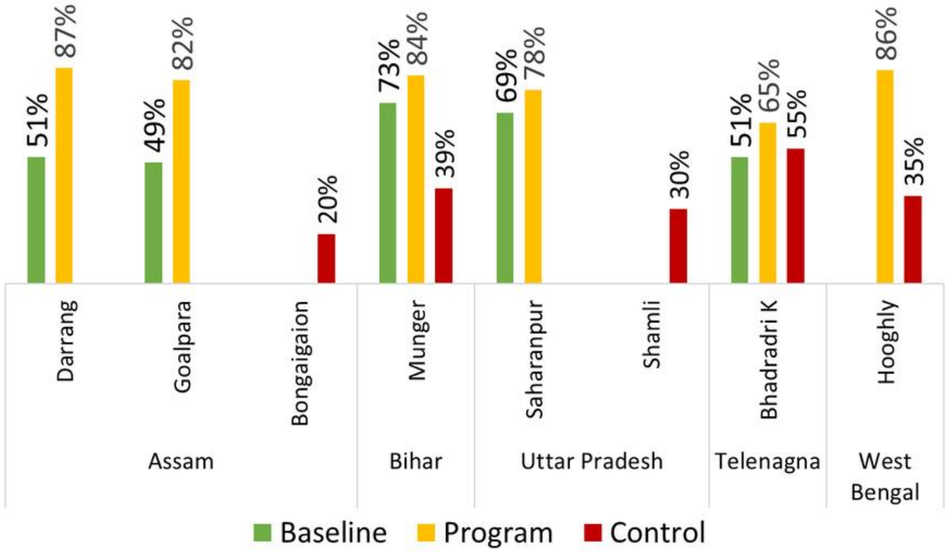
Recommendation: Institutionalise WHO-aligned postnatal contacts (within 24 hrs, day 3, 7–14 days, and 6 weeks) through ASHA/AWW home visits to sustain high early initiation (70–85%) and exclusive breastfeeding levels (78–88%) across districts.

*Exclusive breastfeeding means no other food or drink, not even water, except breastmilk (including milk expressed or from a wet nurse) for the first 6 months of life, with the exception of rehydration solution (ORS), drops and syrups (vitamins, minerals and medicines).*

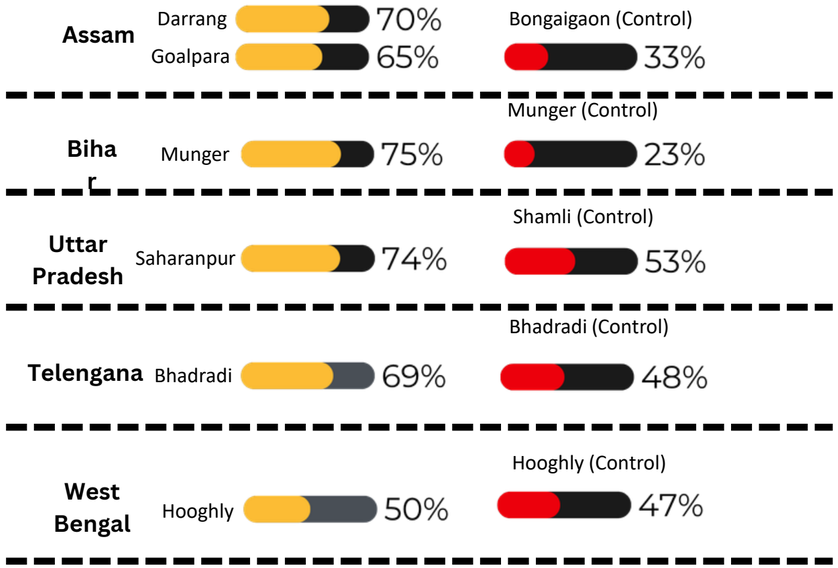
# Child Health Outcomes

*(n= 1610, for program group, n =200 control group )*

### Children (6 -8 months) receiving semi solid food along with breast milk




### Percentage of children with continued breastfeeding till 2yrs




## Key Insights

- Practical demonstrations by frontline workers—on preparing nutrient-rich complementary foods and achieving the correct thickness/consistency—have enabled mothers to move beyond diluted feeds to age-appropriate semi-solid diets. Assam districts (Darrang and Goalpara) show relatively strong outcomes (70% and 65%), suggesting that intensive home visits and community-based platforms like VHNDs are enabling continuity of breastfeeding practices beyond infancy.
- Use of flip books during counselling has helped mothers better understand what to feed, when to feed, and how often, strengthening alignment with recommended feeding practices.
- Community platforms like rice ceremonies at Anganwadi Centres have played a critical role in reinforcing behaviour change—making demonstrations culturally relatable and easier for families to understand and adopt.
- In contrast, control areas showed limited exposure to such demonstrations and community events, leading to lower percolation of knowledge from frontline workers to mothers.
- Variation in food consistency was evident in control areas, where mothers were often unable to demonstrate the appropriate thickness of complementary foods—highlighting gaps in practical, hands-on learning.

> *"At the Anganwadi, they showed us how to make thick khichdi and mashed foods for babies. I learned what to cook for my 8-month-old daughter, and now I feed her properly along with breastfeeding."*
> *— Lactating mother, Munger*

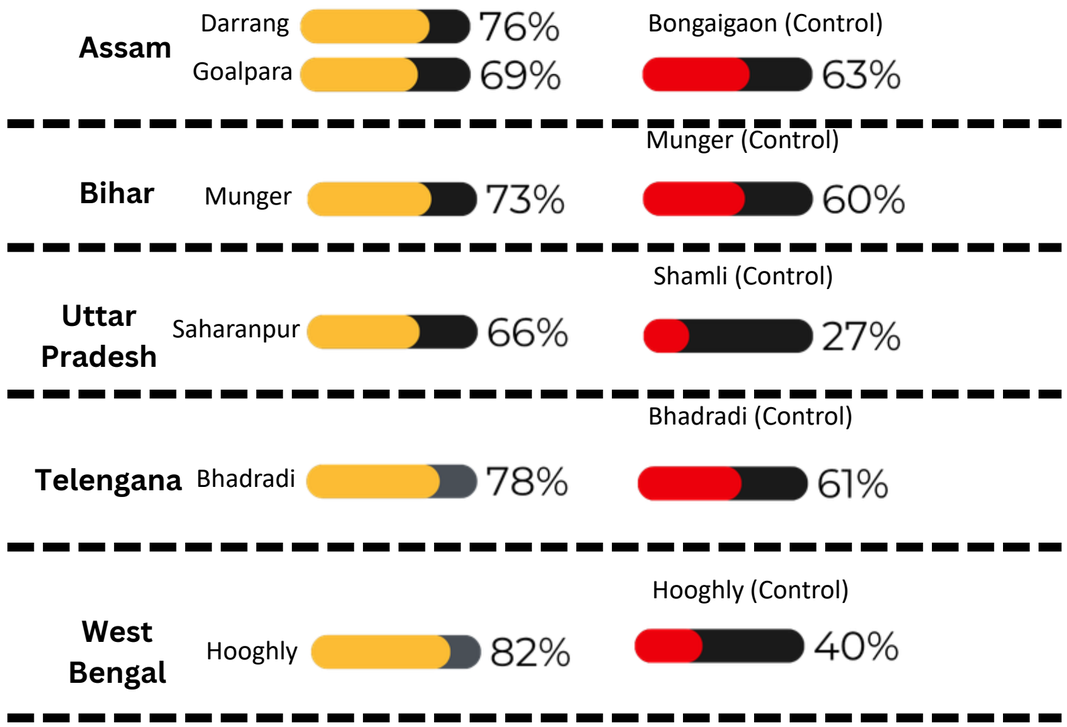
> *"Regular home visits and counselling have helped mothers understand the importance of continued breastfeeding, and now they follow it more consistently."*
> *— Anganwadi Sevika , West Bengal*
> *r*

Recommendation: Introduce workplace and family-support counselling for continued breastfeeding (including expressing and storing breastmilk for working mothers), , which combines frontline counselling, family engagement, and behaviour change communication to support mothers in continuing breastfeeding despite work and social constraints—to improve continuation rates beyond infancy, especially in districts like West Bengal (50%).

# Child Health Outcomes

***(n= 1610, for program group, n =200 control group )***

**Children consuming 5 food groups or more in the last 24hrs**




## Key Insights

- Children consuming 5 or more food groups improved across program areas, ranging from 66% in Saharanpur to 82% in Hooghly, compared to lower control levels of 27%–63%, indicating stronger complementary feeding practices and dietary diversity driven by sustained counselling and frontline worker engagement.
- Program areas consistently outperform control areas across all districts, highlighting that sustained behaviour change efforts—especially around complementary feeding and food diversity—are translating into improved child nutrition practices.
- Across districts, grains and pulses dominate children's diets, forming the core of daily consumption, with relatively better inclusion of dairy and vegetables in some districts—supporting improved minimum dietary diversity.
- Eggs and flesh foods remain among the least consumed, particularly in Munger and Saharanpur, largely reflecting vegetarian dietary patterns rather than access constraints, which continues to influence overall protein intake and dietary diversity.
- Vegetable intake is relatively higher in Bhadradri, Goalpara, and Hooghly, indicating better inclusion of micronutrient-rich foods and contributing positively to dietary diversity among children.

> *"My child earlier refused to eat vegetables and would only insist on dal–chawal. Through the Anganwadi didi, I understood the importance of including at least five food groups. Now, I am slowly adding variety to her meals."*
> *— Mother of a 2-year-old, Saharanpur*

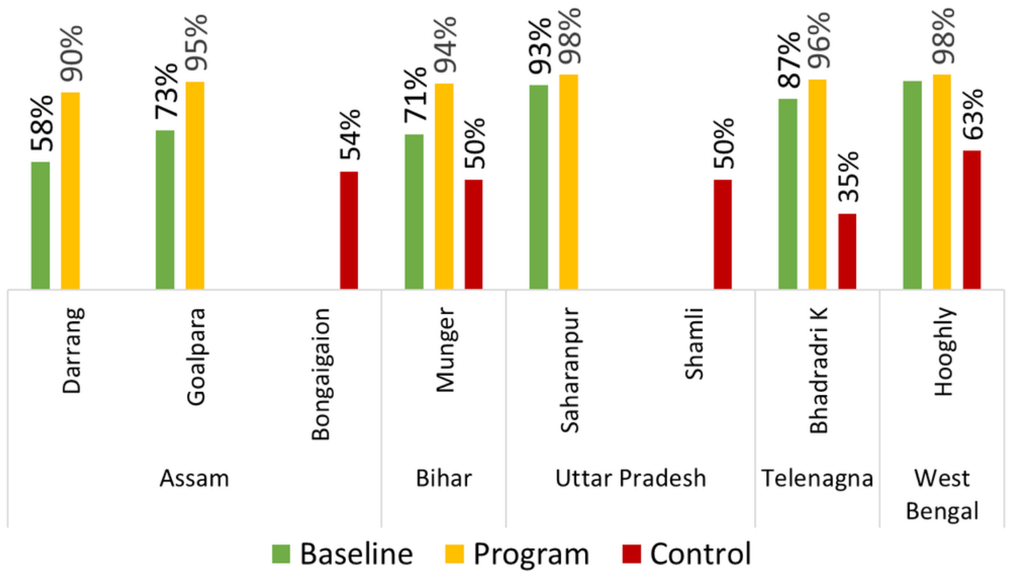
> *"We explain to mothers that children need at least five food groups daily for proper growth. During sessions, we show them how to combine local foods like dal, green vegetables, eggs, and fruits to make balanced meals."*
> *— Anganwadi Sevika, Bihar*

Recommendation: Introduce "taste exposure feeding sessions" where mothers are trained to repeatedly introduce small quantities of vegetables in child-friendly forms (mashed/mixed foods) over 8–10 attempts—to address children's refusal and improve dietary diversity (currently 66–82% across districts).

*Minimum Dietary Diversity (MDD) for children is defined as the proportion of children aged 6–23 months who receive foods from at least five out of eight food groups in the previous 24 hours, as per WHO/UNICEF Infant and Young Child Feeding (IYCF) guidelines.*

# Child Health Outcomes

**Children age 12-23 months fully vaccinated based on information from vaccination card only**




***(n= 1610, for program group, n =200 control group )***

> *"Earlier, many families feared vaccination because children would develop fever. But with repeated counselling and reassurance, we have been able to largely overcome this hesitation."*
> *— ANM, Darrang, Assam*

> *"We are now well aware of the vaccination schedule. Even if my child gets a fever, I understand it is normal and not a reason to avoid vaccination." – Mother of a 2-year-old, Munger*

## Key Insights

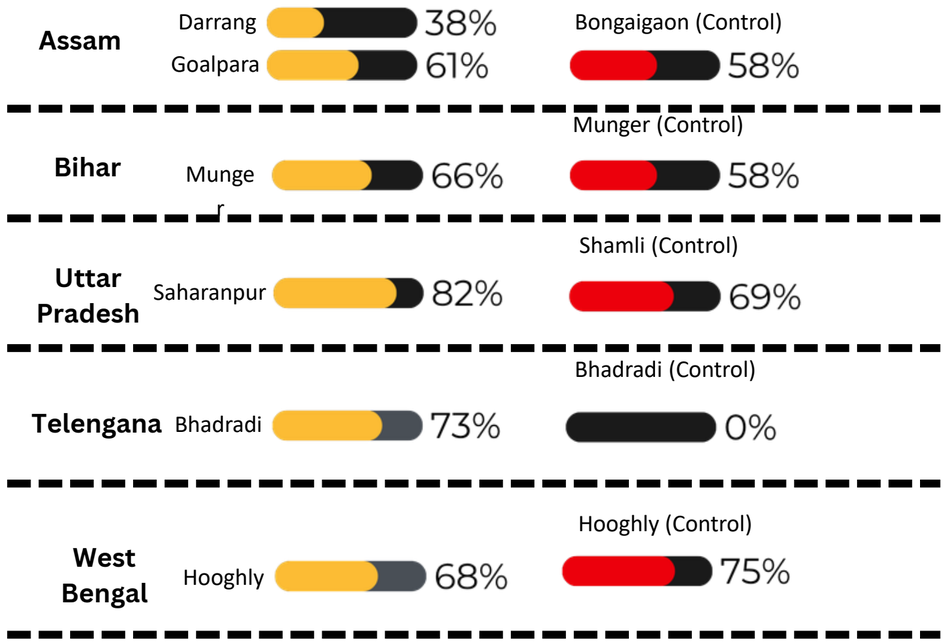
- Improvements in full immunization coverage reflect stronger continuity of care from pregnancy to early childhood, aligning with higher ANC registration, institutional deliveries, and early postnatal contact, which ensure children are linked to vaccination services on time.
- Full immunization coverage improved substantially across program areas, increasing from 58% to 90% in Darrang, 73% to 95% in Goalpara, 71% to 94% in Munger, and 87% to 96% in Bhadradri, while control areas remained considerably lower at 35%–63%, indicating stronger tracking, counselling, and continuity of care through frontline worker engagement and VHND platforms.
- Frontline worker engagement—especially through home visits and VHND platforms—has improved awareness and tracking of due vaccines, supported by better use of vaccination cards and follow-ups, leading to higher completion rates.
- The integration of immunization messaging with other services such as nutrition counselling and growth monitoring has strengthened caregiver awareness, resulting in better adherence to vaccination schedules.
- In contrast, gaps in control areas point to weaker last-mile tracking, lower awareness of vaccination schedules, and missed follow-ups, indicating the critical role of sustained frontline engagement in ensuring full immunization.
- Overall, the findings highlight that system strengthening—through regular counselling, tracking tools, and service convergence—drives consistent improvements in child health outcomes, rather than one-time service delivery.

# Child Health Outcomes

## Percentage of children (< 5 years) who are underweight or wasted or stunted

| Indicators | Uttar Pradesh | | | Assam | | | Bihar | | | Telengana | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | Baseline (%) | Program (%) | Control (%) | Baseline (%) | Program (%) | Control (%) | Baseline (%) | Program (%) | Control (%) | Baseline (%) | Program (%) | Control (%) |
| Children underweight | 7 | 1 | 10 | 25 | 11 | 36 | 33 | 15 | 28 | 25 | 9 | 32 |
| Children wasting | 5 | 0 | 11 | 8 | 3 | 15 | 8 | 6 | 21 | 18 | 6 | 28 |
| Children stunting | 23 | 12 | 20 | 46 | 21 | 38 | 37 | 36 | 45 | 27 | 21 | 30 |

## Children age 6–59 months who received iron supplements in the last 7 days




## Key Insights

- Reductions in underweight, wasting, and stunting across program areas reflect meaningful improvements in child nutrition outcomes, particularly in Assam and Bihar, indicating that sustained counselling, improved feeding practices, and stronger service delivery are translating into measurable anthropometric gains.
- In Darrang, in case of children (< 5 years), there was reduction in prevalence of under-weight children to 11% (baseline: 25%) and reduction in prevalence of stunting to 21% (baseline: 46%)
- While wasting has reduced across most districts, the relatively lower baseline levels and moderate decline indicate that acute malnutrition is being addressed, though continued focus on illness management and timely feeding remains critical.
- Stunting shows comparatively slower reduction (e.g., Bihar: 37% to 36%; Telangana: 27% to 21%). This reinforces that chronic undernutrition requires sustained, long-term interventions, including improvements in maternal nutrition, early child feeding practices, and household food security.
- Iron supplementation coverage among children shows strong performance in program areas such as Saharanpur (82%), Bhadradri (73%), and Munger (66%). This reflects effective frontline worker engagement, improved tracking, and better utilisation of platforms such as Village Health and Nutrition Days (VHNDs) and home visits.
- However, in districts like Darrang (38%), where supplementation levels are comparatively lower, qualitative findings point to intermittent supply gaps of IFA syrup, suggesting that while awareness and counselling may be in place, inconsistent supply-side availability is limiting uptake and impacting overall nutrition outcomes.

Recommendation: Introduce a simple IFA adherence tracking mechanism (e.g., blister-pack checklists or digital registers) with weekly ASHA-led follow-ups and missed-dose alerts—aligned with systems used by WHO , which combine tracking with proactive counselling to manage side effects and ensure completion of the full course—to improve uptake, especially in areas like Darrang (38%) and Hooghly (68%).

# Case Story

## Case Study : Timely Care, Transformed Life: Rohit's Recovery Story

Rohit Kumar, a 20-month-old child from Mohli village in Bohar Panchayat, Jamalpur block (Munger district), was identified with severe acute malnutrition (SAM) during a Village Health Sanitation and Nutrition Day (VHSND), showing visible signs of weakness and undernutrition. His condition required urgent attention and structured care.

**Challenges faced:**

Rohit was severely underweight and weak, with clear signs of severe acute malnutrition. Discussions with his mother revealed poor complementary feeding practices and limited awareness of appropriate child nutrition, breastfeeding, and timely healthcare seeking. Delayed identification and lack of knowledge increased the risk of further health complications.

**Support received:**

Through the program, Rohit and his caregiver received comprehensive support:

- Early Identification: Screening during VHSND at the Anganwadi Centre helped identify Rohit as severely malnourished.
- Caregiver Counselling: His mother was counselled on breastfeeding, complementary feeding, and the importance of medical care.
- Referral to NRC: After continuous follow-up, Rohit was admitted to the Nutrition Rehabilitation Centre (NRC) on 20 March 2025.
- Therapeutic Care: He received medical treatment, therapeutic nutrition, and close monitoring for 21 days at the NRC.
- Caregiver Training: His parents were trained on proper feeding practices and home-based care during the NRC stay.
- Post-discharge Follow-up: Regular home visits reinforced counselling and monitored his progress after discharge.

**Impacts:**

Earlier, Rohit was severely malnourished with visible health risks. Following timely referral and NRC-based care, his weight and overall health improved significantly. His caregiver adopted improved feeding and care practices, ensuring continued recovery at home. This case demonstrates how early identification, timely referral, and sustained follow-up can effectively support recovery from severe malnutrition and prevent relapse at the community level.

## Case Study : Turning the Tide: Muzamil's Path to Better Nutrition

Muzamil Hoque, a 21-month-old child from Sialmarigaon village in Darrang district, was initially on a normal growth path but later became severely underweight due to inadequate complementary feeding practices. His declining nutritional status raised concerns about his health and development.

**Challenges faced:**

Muzamil became severely underweight in his early months, with his weight dropping to around 3.5 kg at three months. His mother had limited awareness of appropriate complementary feeding, dietary diversity, and meal frequency. Feeding practices did not include sufficient nutrients or the recommended number of meals, which led to poor weight gain. Additionally, underlying health challenges faced by his mother further affected consistent caregiving and feeding.

**Support received:**

Through the program, Muzamil and his caregiver received consistent, targeted support:

- Home-based Counselling: The Anganwadi sevika conducted regular home visits to guide the mother on appropriate complementary feeding practices.
- Nutrition Education: Counselling focused on including all five food groups, improving dietary diversity, and ensuring age-appropriate meal frequency.
- Feeding Demonstrations: Practical guidance on preparing nutritious meals using locally available foods.
- Continued Breastfeeding Support: Emphasis on combining breastfeeding with three nutritious meals daily.
- Regular Monitoring: Ongoing tracking of the child's weight and growth to ensure progress.

With continuous counselling and support, the family gradually improved Muzamil's diet and feeding practices.

**Impacts:**

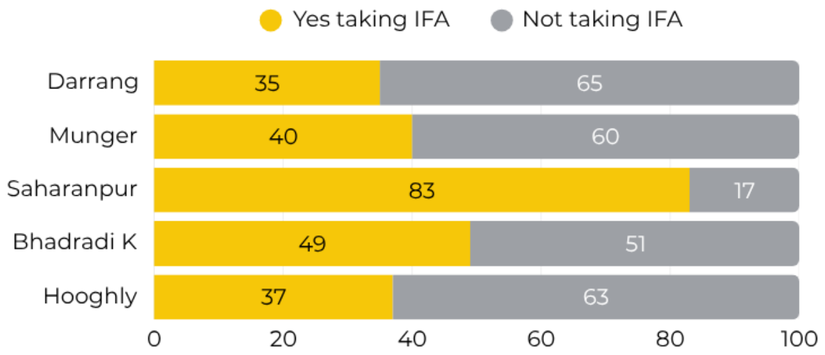
Earlier, Muzamil was severely underweight with poor feeding practices affecting his growth. Following sustained program support, his weight improved significantly—from 3.5 kg at three months to 7.8 kg at eleven months, and further to 9.7 kg at 21 months—bringing him into the normal growth category. His improved nutritional status reflects consistent adoption of better feeding practices by the caregiver. This case highlights how timely counselling, regular home visits, and improved feeding behaviours can successfully restore healthy growth in young children.

# Adolescent Health

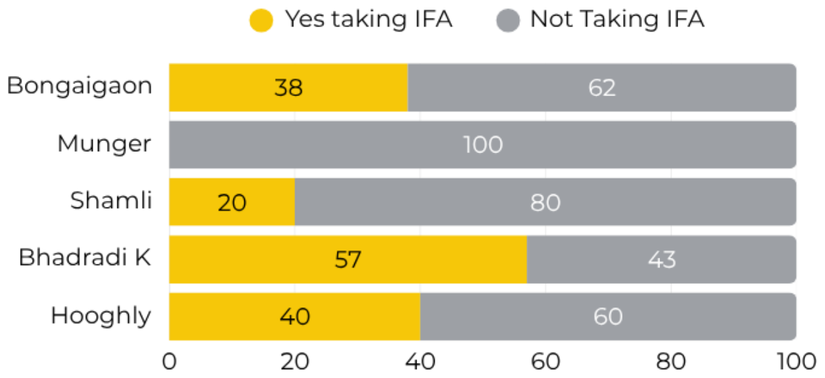
# Adolescent Health

**This section illustrates adolescent health outcomes, focusing on their knowledge and practices, with a particular emphasis on nutrition behaviours, dietary practices, and existing gaps in awareness and adherence. Adolescent data collection was carried out with a total of 513 participants in the program group and 57 participants in the control group.**

### IFA Consumption by Adolescent girls - Program




### IFA Compliance by Adolescent girls - Control




### Awareness regarding signs and symptoms of anaemia by adolescents*

| State | District | Weakness | Dizziness | Tire Easily | Nausea | Poor working capacity | Pale eye and nail | Don't know |
|---|---|---|---|---|---|---|---|---|
| **Assam** | Darrang | 19.0% | 21.5% | 12.1% | 20.4% | 7.0% | 17.9% | 40.9% |
| **Bihar** | Munger | 20.5% | 21.7% | 18.0% | 15.9% | 24.9% | 23.1% | 13.6% |
| **Uttar Pradesh** | Saharanpur | 17.7% | 18.3% | 17.6% | 13.3% | 11.3% | 18.5% | 18.2% |
| **Telangana** | Bhadrachalam | 31.4% | 24.4% | 39.9% | 28.3% | 29.4% | 31.8% | 13.6% |
| **West Bengal** | Hooghly | 11.4% | 14.1% | 12.4% | 22.1% | 7.6% | 8.7% | 13.6% |

** Percentage do not add up to 100 percent as this is a multiple-choice question.*

*"At first, I also used to throw away IFA tablets, but with repeated counseling I understood the importance. Now I regularly take it and advice my friends the same."- Adolescent girl from Bhadradi K*

### Key Insights

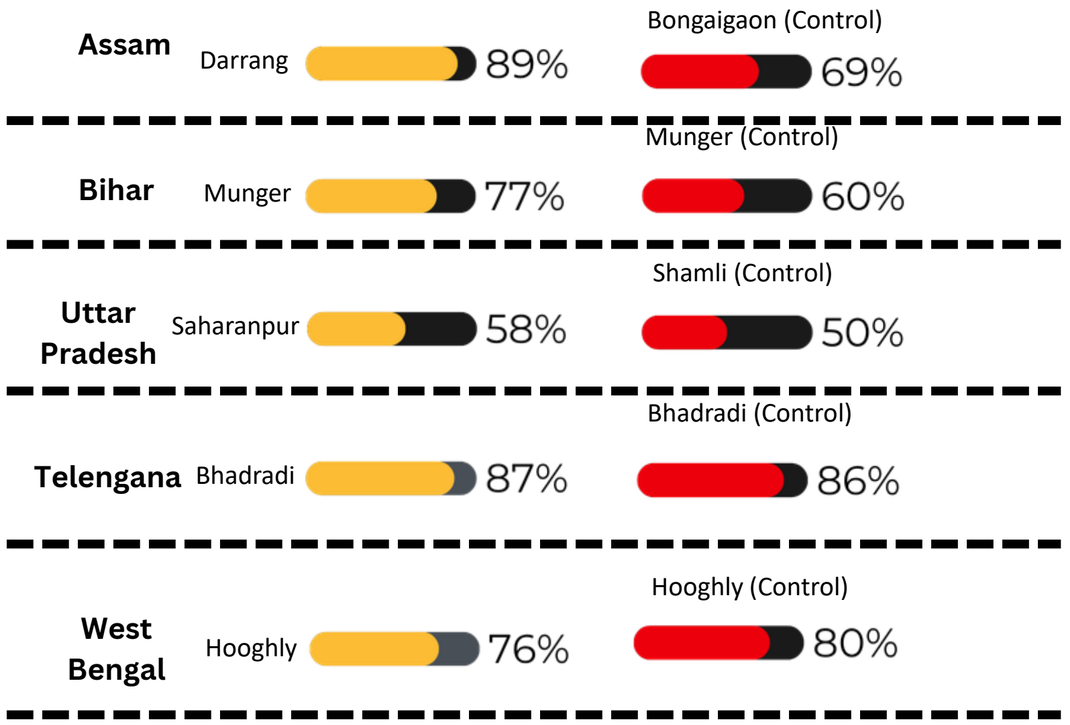
Adolescent health outcomes reflect improving awareness on nutrition and anaemia; however, this is not consistently translating into practice, with gaps in regular IFA* consumption driven by both supply-side constraints and behavioural factors—in districts like Darrang, limited availability of IFA supplements has directly affected uptake, while adolescents across locations reported side effects from the tablets as a key deterrent, highlighting the need for stronger counselling, follow-up, and consistent supply to improve adherence.

The table highlights varying levels of awareness regarding anaemia symptoms among adolescents across program districts. While common symptoms such as weakness, dizziness, and fatigue are relatively well recognised—particularly in Bhadradri where awareness of "tiring easily" reaches 39.9%—a considerable proportion of adolescents, especially in Darrang (40.9%), still reported not knowing any symptoms, indicating persistent gaps in anaemia awareness and the need for continued nutrition and IFA counselling.

*Iron and Folic Acid (IFA)* supplementation refers to tablets provided to adolescent girls to prevent and reduce anaemia by improving haemoglobin levels, as per national health guidelines.*

# Adolescent Health

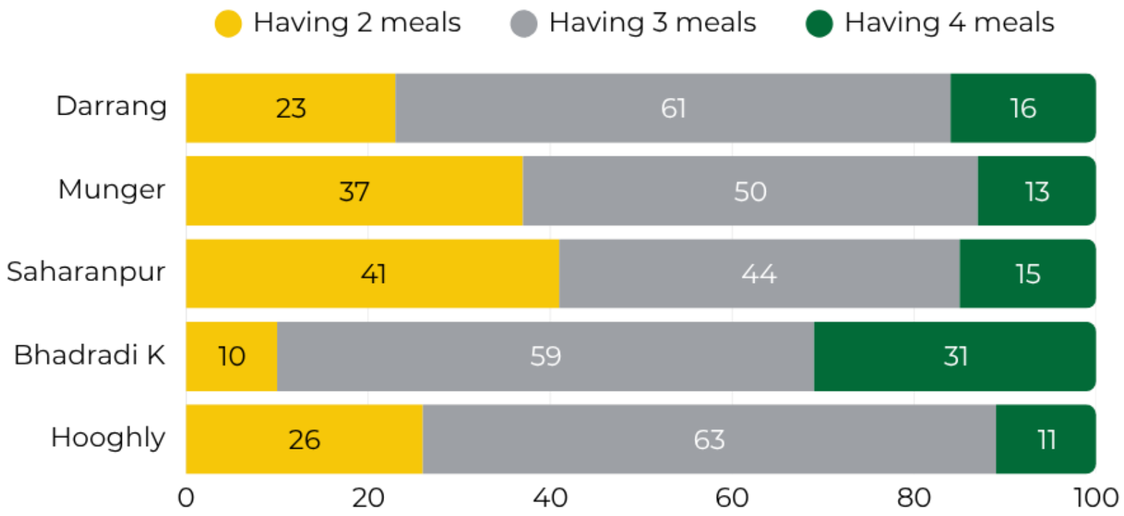
## Adoelscent consuming 5 food groups or more in the last 24hrs




> *"Now I make sure to eat different foods and not skip meals, because I understand it helps me stay healthy and active." — Adolescent girl, Saharanpur*

Recommendation: Institutionalise a structured adolescent engagement calendar with monthly school/community sessions on menstruation, teenage pregnancy, and delayed marriage—ensuring fixed ASHA-led follow-ups—to strengthen knowledge and consistency, especially given gaps in session frequency and low awareness highlighted in FGDs.

## Meal Frequency of Adolescent girls (%)- Program area




## Key Insights

- Adolescents in program areas are consistently achieving higher dietary diversity compared to control groups, indicating that nutrition counselling and behaviour change efforts are effectively translating into improved food choices.
- A larger proportion of adolescents in program areas are consuming three or more meals daily, reflecting better adherence to recommended meal frequency and improved daily nutritional intake.
- The clear program–control advantage across both diet diversity and meal frequency highlights strong program influence, suggesting that sustained frontline engagement and awareness sessions are driving healthier and more consistent nutrition practices among adolescents.
- In program areas, lunch emerges as the most commonly skipped meal in districts like Darrang (~69%) and Hooghly (~67%), indicating that mid-day meal patterns are the most inconsistent. While breakfast is skipped in some districts (e.g., Goalpara ~31% and Munger ~36%), dinner skipping is notably higher in districts like Munger (~56%) and Saharanpur (~50%), indicating that evening meals are the most commonly missed in program areas. In Darrang, adolescents who have passed class 8, mostly eat packet of chips as their lunch.

# Case Story

## Case Study : From Anemia to Agency: Khushi's Journey to Health and Leadership

Khushi, a 17-year-old Class 12 student from Kashiram Colony in Saharanpur, was previously struggling with severe anemia, low body weight, and related health issues that affected her daily life and wellbeing. Her condition also impacted her confidence and regular participation in activities.

**Challenges faced:**

Khushi was diagnosed with severe anemia, with hemoglobin levels around 7–8 g/dl and a body weight of only 35 kg. She frequently experienced weakness, fatigue, and irregular menstruation. There was limited awareness initially about the importance of iron-rich diets, regular supplementation, and preventive health practices for adolescent girls. Social norms and lack of consistent health-seeking behaviour further delayed timely improvement.

**Support received:**

Through the program, Khushi received continuous support from frontline workers and her family:

- Nutrition & Health Counselling: Regular sessions at the Anganwadi centre on balanced diets, iron-rich foods, and menstrual health.
- IFA Supplementation: Guidance and follow-up to ensure regular intake of iron and folic acid tablets.
- Behaviour Change Support: Continuous encouragement from ASHA sevika and family members, especially her mother, to adopt healthier practices.
- Peer Engagement Platforms: Participation in adolescent group meetings that built awareness and motivation.

**Impacts:**

Following program support, her hemoglobin levels improved to around 11 g/dl, along with better overall health and wellbeing. Motivated by her own recovery, Khushi now actively encourages other adolescent girls in her community to attend sessions and adopt healthy practices. She has become a peer influencer, contributing to increased awareness and participation among girls. She is currently focused on completing her education and aspires to pursue a Bachelor's degree and build a career in banking, reflecting both improved health and strengthened future aspirations.

## Case Study : From Detection to Recovery: Anjali's Journey Out of Severe Anemia

Anjali Kumari, a 12-year-old girl from M.C. Diwanpur in Jamalpur block, Munger district, was identified with severe anemia during a routine screening, affecting her health, energy levels, and ability to concentrate in school. Her condition had gone unnoticed prior to the intervention.

**Challenges faced:**

Anjali had severe anemia with a hemoglobin level of 6.5 g/dl. She experienced persistent weakness, fatigue, dizziness, pale appearance, and difficulty concentrating on her studies. There was limited awareness within the family about anemia, its symptoms, and the importance of iron-rich nutrition and timely treatment. Without early identification, her condition could have worsened, impacting both her health and education.

**Support received:**

Through the program, Anjali received timely and structured support:

- Screening & Early Identification: Hemoglobin testing during an adolescent health screening helped detect severe anemia.
- Referral Services: She was referred to the Primary Health Centre (PHC), Jamalpur for further medical care.
- IFA Supplementation: Under medical guidance, she received iron and folic acid supplementation.
- Nutrition Counselling: Counselling for Anjali and her family on consuming iron-rich foods such as green leafy vegetables, pulses, and balanced meals.
- Follow-up Monitoring: Regular follow-up by field staff to track improvements and reinforce practices.

With consistent treatment and dietary improvements, Anjali's condition began to improve rapidly.

**Impacts:**

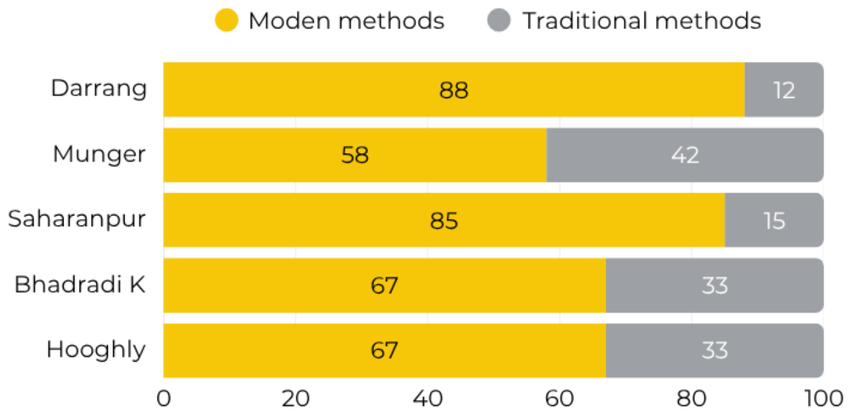
Earlier, Anjali suffered from severe anemia with multiple health symptoms affecting her daily life and studies. Within just 15 days of intervention, her hemoglobin levels increased significantly to 11.4 g/dl, indicating strong recovery. She regained energy, improved her concentration in school, and experienced better overall health. This case highlights how early screening, timely referral, and continuous follow-up can lead to rapid and effective recovery from anemia among adolescents.

# Eligible Couple

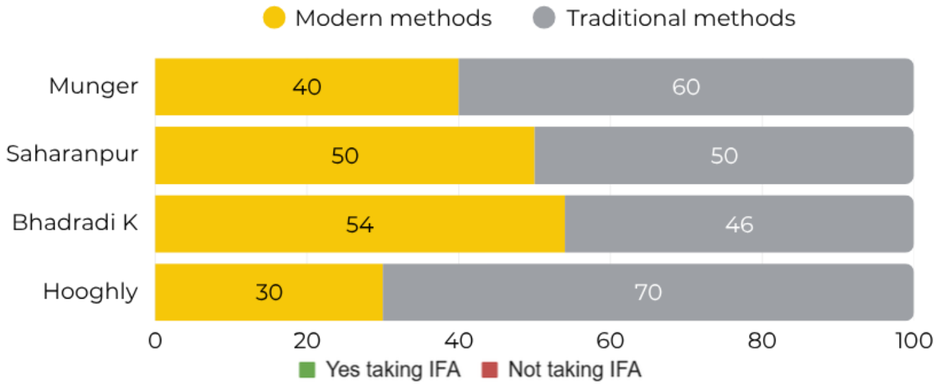
# Eligible couples

**This section illustrates eligible couples' health outcomes, focusing on their contraceptive choices and decision-making practices, with particular emphasis on awareness, access, and use of family planning methods, as well as the extent of shared decision-making between partners. Data collection for eligible couples was carried out with a total of 577 participants in the program group and 43 participants in the control group.**

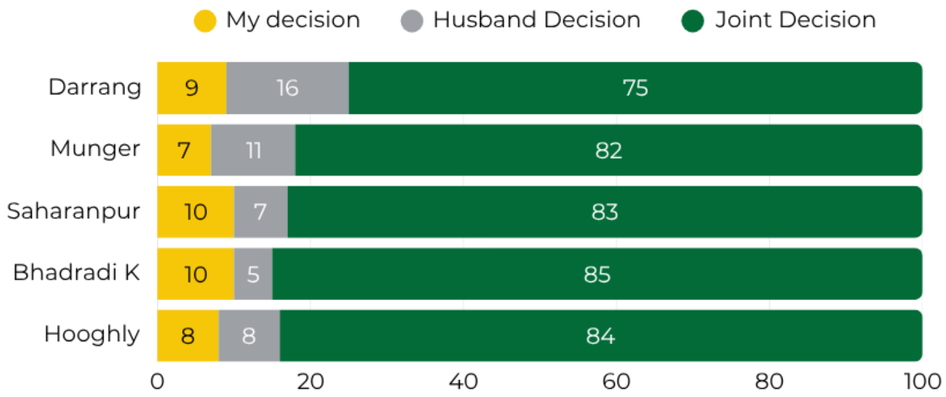
## Contraceptive choices for eligible women - Program




## Contraceptive choices for eligible women - Control




## Decision making for taking contraceptives




*"Earlier, we never discussed family planning openly, but now we sit together and decide what is best for our family. Still, we are hesitant to try new methods because of fear and lack of clear information."*
*— Eligible woman, Hooghly*

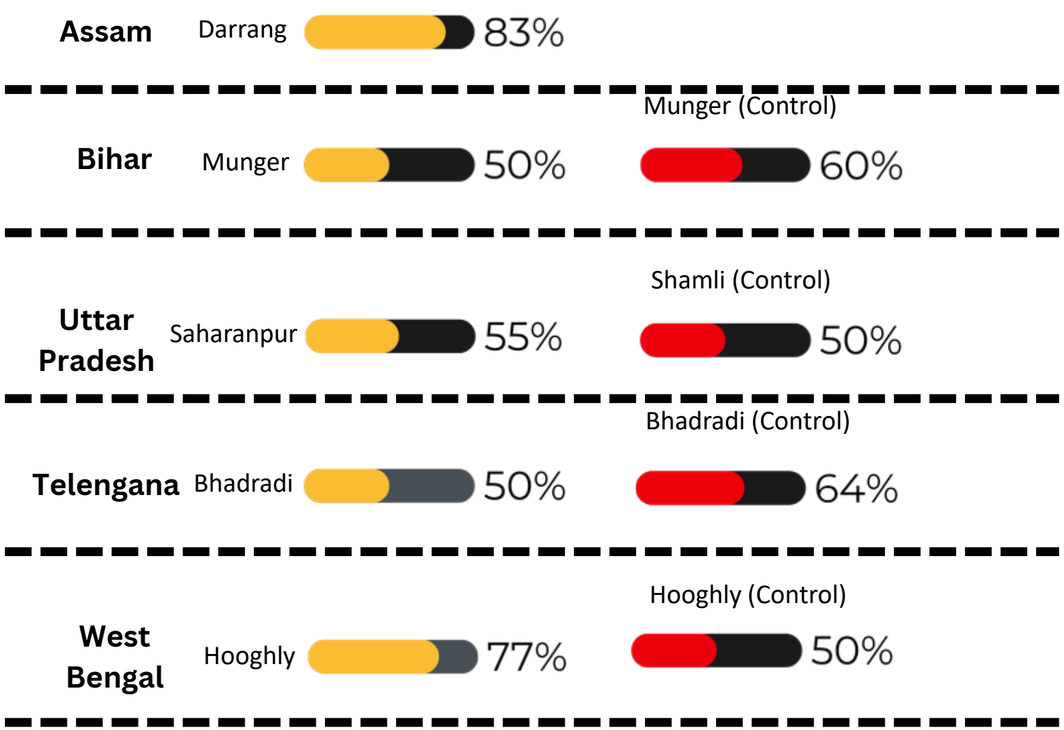
## Key Insights

While joint decision-making on contraception is notably high across districts—indicating improved spousal communication and reduced gender barriers—it does not consistently translate into informed or diversified contraceptive use. A significant reliance on traditional methods, particularly withdrawal (around 65%), reflects persistent behavioural and informational gaps, despite relatively high awareness of access points and the strong role of frontline workers as primary sources of methods. Limited exposure to structured family planning counselling (about 50%) and low male participation in such interactions further constrain informed choice, especially in the pre-pregnancy stage. Additionally, gaps in accurate fertility awareness—with only a small proportion correctly identifying the fertile window—highlight the need for deeper, more targeted counselling to enable couples to make timely and effective reproductive health decisions.

*Modern contraceptive methods include female/male sterilization, condoms, oral contraceptive pills, IUCDs, injectables, implants, emergency contraception, while traditional methods include withdrawal and rhythm/safe-period methods, as per WHO classification.*

# Eligible couples

**Women having 3yrs or more gaps between her first born and the second born**




***(n= 335, for program group, n =26 control group ) Only women having 2 child are considered here.***

Recommendation: Institutionalise couple-centred family planning counselling—ensuring scheduled engagement with men across pre-marriage, pre-pregnancy, and post-partum stages (not just during pregnancy)—through ASHA outreach—to address gaps in male involvement and improve informed, shared contraceptive decision-making.

## Case Study : From Anemia to Agency: Khushi's Journey to Health and Leadership

Sweta Kumari, a young mother from Diwanpur village in Jamalpur block, Munger district (Bihar), was pregnant with her second child within a short interval after her first delivery, with her first child only 4 months old. Limited awareness and delayed health-seeking behaviour placed her at risk of maternal and child health complications.

**Challenges faced:**

Sweta had conceived again without adequate spacing between pregnancies, increasing health risks for both mother and child. She had not completed her antenatal care (ANC) check-ups and had missed essential maternal vaccinations. There was limited awareness about anemia prevention, appropriate nutrition during pregnancy, and the importance of rest and care. Additionally, she had limited knowledge about family planning methods and the risks associated with closely spaced pregnancies.

**Support received:**

Through the program, Sweta and her family received targeted counselling and support during a home visit:

- Maternal Health Counselling: Guidance on the importance of ANC and PNC check-ups, safe pregnancy practices, and institutional care.
- Nutrition Education: Advice on consuming a balanced diet including green leafy vegetables, pulses, and protein-rich foods, along with adequate rest.
- Anemia Prevention: Promotion of regular intake of Iron–Folic Acid (IFA) tablets and supplements.
- Vaccination Linkages: She was mobilized to visit the Anganwadi Centre, where she received TT vaccination and IFA supplementation.
- Family Planning Awareness: Counselling on the importance of birth spacing and information on methods such as Antara, Chhaya, and other contraceptive options.
- Follow-up Encouragement: Motivated to attend regular health check-ups and continue healthy practices.

**Impacts:**

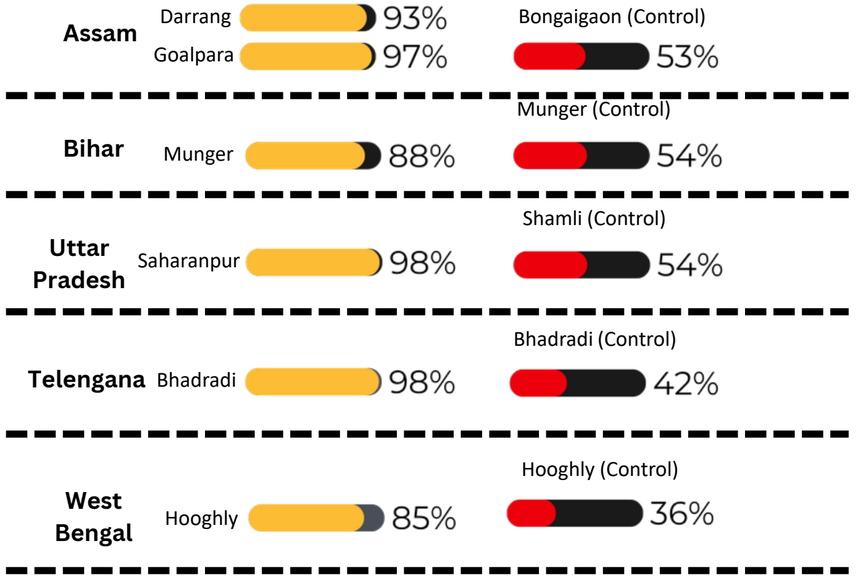
Following program support, she began attending the Anganwadi Centre, received required vaccinations and supplements, and adopted improved nutrition and care practices. She also gained awareness about family planning and the importance of spacing between pregnancies. This case highlights how timely home visits, counselling, and community-based support can improve maternal health awareness, increase service uptake, and promote healthier outcomes for both mother and child.

# System Strengthening

# System Strengthening

**This section illustrates the impact of system strengthening interventions on frontline workers, with a focus on capacity building through ITC-led trainings and their influence on service delivery practices. It examines how strengthened knowledge, skills, and supportive supervision have translated into improved counselling, outreach, and engagement with beneficiaries. The section also highlights the consistency and quality of service delivery by Anganwadi Workers , ASHAs, and ANMs as key outcomes of the program's system strengthening approach.**

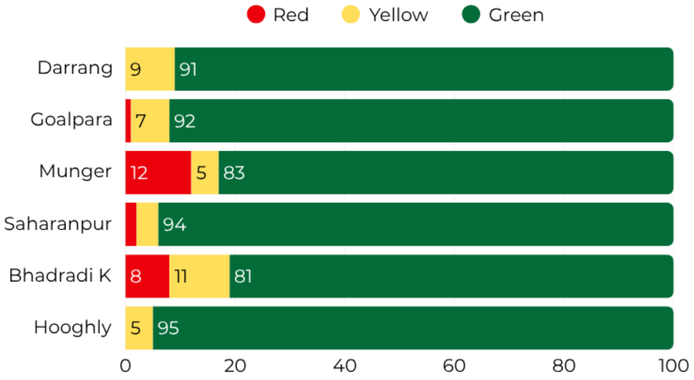
### Mother received counselling on child growth by Anganwadi sevikas




*n=842 (Program) and n=103 (Control), Children*

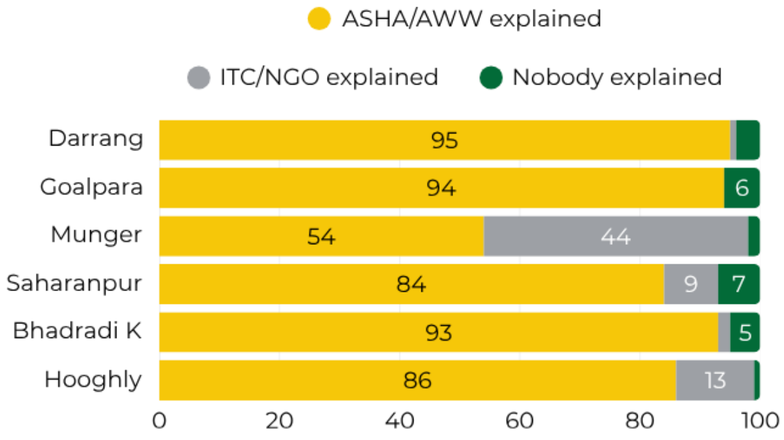
> *"Because of the way the didi explains—with examples and pictures—we can now identify if our child is healthy or needs attention." — Mother, Darrang*

### Children in different colour zones according to their nutrition - mothers recall




*n=658 (Program), Children*

### Source of Information on Community Growth Chart (%)




*n=658 (Program), Children*

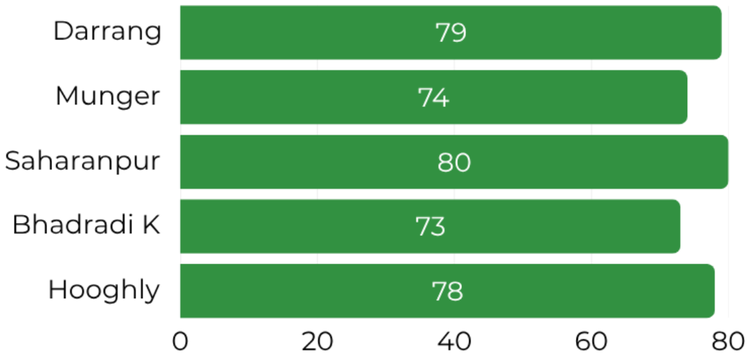
## Key Insights

System strengthening efforts have translated into strong improvements in frontline service delivery, particularly in counselling and community-level knowledge transfer. A consistently high proportion of mothers (ranging from ~85% to 98%) reported receiving counselling on child growth from Anganwadi Sevikas in program areas, significantly outperforming control areas where coverage remains notably lower. This strengthened engagement is further reflected in mothers' ability to recall growth chart indicators and understand nutrition zones, indicating not just exposure but effective comprehension. The dominant role of ASHA and AWWs as primary sources of explanation across districts highlights the success of capacity-building interventions in improving last-mile communication. Notably, it was found that 100% of frontline workers trained under the program reported increased confidence in delivering knowledge and counselling, reinforcing the direct impact of training on service quality

In the community growth chart, the green zone represents children with normal nutritional status (weight-for-age above −2 SD), the yellow zone indicates moderate underweight or nutritional risk (between −2 SD and −3 SD), and the red zone represents severe underweight or severe malnutrition (below −3 SD). Mothers' recall showed that a large proportion of children were perceived to be in the green zone (81%–95%) across program districts, while comparatively smaller proportions were recalled in the yellow and red zones, indicating improved awareness of child growth monitoring and nutrition status through Anganwadi-based counselling and community growth chart discussions.

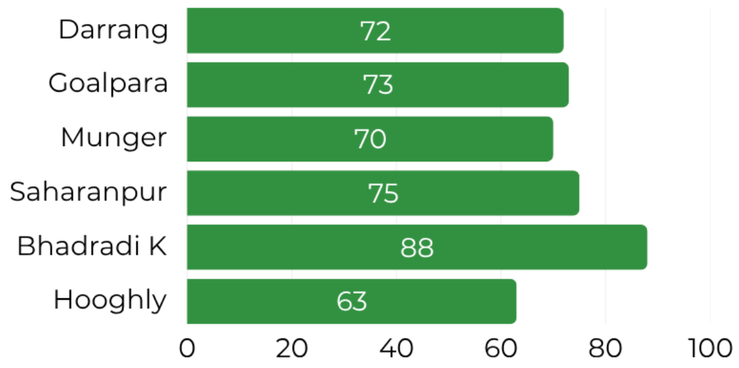
# System Strengthening

**Mothers confirming 7 day home visit or more by Anganwadi Sevika (%)**




*n=1,610 (Program), Mothers and Children*

**Mothers confirming IEC shown by Anganwadi sevikas during home visit (%)**




*n=1,610 (Program), Mothers and Children*

**Topics explained by Anganwadi Sevika during home-visits -Mother's Recall (%)**

| State | District | Increasing quantity of food | Five minimum food groups | Institutional delivery | Exclusive breastfeeding without alteration | Explaining breastfeeding position | Complementary food | Consistency of food | Growth monitoring | IYCF Practices | Making supplement powder at home |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Assam | Darrang | 94.6% | 41.9% | 29.3% | 3.6% | 32.0% | 45.9% | 30.6% | 50.9% | 60.8% | 15.3% |
| Assam | Goalpara | 85.0% | 58.1% | 32.2% | 27.2% | 27.7% | 79.7% | 42.1% | 75.6% | 71.1% | 4.3% |
| Bihar | Munger | 84.1% | 37.9% | 21.5% | 34.9% | 49.7% | 55.4% | 31.3% | 19.5% | 60.0% | 3.1% |
| Uttar Pradesh | Saharanpur | 87.9% | 48.5% | 16.9% | 43.7% | 47.2% | 44.6% | 51.9% | 34.2% | 55.4% | 2.2% |
| Telangana | Bhadrachalam | 93.2% | 23.9% | 7.7% | 44.4% | 64.1% | 33.3% | 23.9% | 15.4% | 48.7% | 19.7% |
| West Bengal | Hooghly | 78.3% | 50.7% | 52.0% | 54.3% | 63.8% | 64.7% | 57.9% | 49.8% | 75.6% | 11.3% |

> *"'Earlier I used to hesitate while explaining nutrition but after the trainings, I feel confident to counsel mothers clearly and answer their questions." — Anganwadi Sevika, Munger*

## Key Insights

- A high proportion of mothers across program districts (ranging from ~73% to 80%) reported receiving 7 or more home visits by Anganwadi Sevikas, indicating strong adherence to mandated service delivery protocols and improved last-mile outreach.
- The dominance of AWW/ASHA-led counselling over NGO/other sources highlights a successful shift towards system-owned knowledge dissemination, indicating sustainability of program interventions within government platforms.
- Mothers' recall of multiple topics during home visits—including breastfeeding practices, complementary feeding, growth monitoring, and dietary diversity—suggests that counselling is not only frequent but also multi-dimensional and behaviour-oriented.
- The integration of visual tools such as growth charts and IEC materials into counselling processes is strengthening comprehension, enabling mothers to better understand child nutrition indicators and apply them in practice.
- Overall, the convergence of high home-visit coverage, strong frontline-led counselling, and improved recall reflects that system strengthening efforts are translating into enhanced service delivery quality and more effective behaviour change communication at the community level.
- A substantial proportion of mothers across districts (63%–88%) reported being shown IEC materials during home visits, indicating strong integration of visual tools into frontline counselling, though variability suggests differences in consistency across locations.
- Flipcharts are the most widely used IEC tool across districts (ranging from ~76% to 95%), significantly higher than posters (ranging from ~22% to 44%), indicating a strong preference for more detailed, interactive visual aids in frontline counselling.

# Anthropometric Measurements (Child 0-5)

**Growth monitoring, Skills of Anganwadi Sevikas were assessed through structured observation checklists across Anganwadi Centres in six districts: Darrang, Goalpara, Munger, Saharanpur, Bhadradri, and Hooghly. The checklist captured five domains: preparation and equipment, weighing technique, height/length measurement, recording and growth chart use, and hygiene and interaction with caregivers. Observations were conducted during routine growth monitoring sessions to understand adherence to standard procedures. A 10% sample of children present during the monitoring sessions was observed, resulting in 85 children across 24 Anganwadi Centres being included in the assessment.**

## Observation : Anthropometric Measurements Skills of Anganwadi Sevika

| State | Weighing scale placed on flat surface | Scale set to zero before weighing | Correct weighing technique followed | Correct height measurement technique | Measurement recorded immediately | Growth chart updated |
|---|---|---|---|---|---|---|
| Darrang | 90% | 100% | 89% | 87% | 80% | 90% |
| Goalpara | 85% | 90% | 80% | 90% | 85% | 95% |
| Munger | 100% | 89% | 100% | 88% | 79% | 75% |
| Saharanpur | 92% | 85% | 82% | 88% | 97% | 85% |
| Bhadrachalam | 100% | 100% | 85% | 100% | 100% | 100% |
| Hooghly | 100% | 100% | 95% | 89% | 100% | 90% |

*n=85 (Program), Children*

## Key Insights

- Strong foundational practices: Most Anganwadi Sevikas correctly followed basic procedures such as scale placement, calibration, and height measurement, indicating a functional system across districts.
- High coverage of measurement & recording: The majority of centres recorded measurements and maintained growth charts, showing that core monitoring processes are in place.
- Gaps in measurement accuracy: Inconsistent child positioning and variation in weighing techniques were observed, which may affect the accuracy of anthropometric data.
- Documentation inconsistencies remain: Delays in recording and incomplete updating of growth charts in some centres highlight the need for stronger data discipline.
- Missed opportunity for counselling: Growth status was not consistently explained to caregivers, limiting the use of monitoring as a tool for behaviour change and early action on malnutrition.

## Case Study :From Program Participant to ASHA: Kaushal's Journey to Leadership

Kaushal, a mother of three from Kashiram Colony in Saharanpur, faced severe financial hardship after her husband, a rickshaw driver, fell ill and was unable to work, leaving the family without a stable source of income. Her circumstances limited both economic security and access to health awareness.

**Challenges faced:**

Kaushal struggled to manage household responsibilities and care for her children in the absence of a steady income. With limited exposure to health and nutrition information, there was low awareness around essential practices such as immunization, maternal care, child nutrition, and anemia prevention. Social and financial constraints also restricted her mobility and participation in community-level activities.

**Support received:**

Through the program, Kaushal received continuous encouragement and opportunities to engage:

- Community Engagement: Initial involvement began through visits to the Anganwadi Centre, where she started assisting the Anganwadi sevika and program staff.
- Capacity Building: She was gradually trained on key topics including vaccination, iron and calcium supplementation, maternal and child health, nutrition, menstrual hygiene, and anemia awareness.
- Livelihood Support: She received a small monthly stipend for supporting program activities, helping ease financial stress.
- Hands-on Experience: Over five years, she actively worked with adolescent girls, pregnant women, and mothers, promoting health-seeking behaviours and awareness.
- Motivation & Guidance: Continuous mentoring by frontline workers encouraged her to apply for formal community health roles.

**Impacts:**

Earlier, Kaushal faced financial instability and limited awareness of health practices. Through sustained engagement with the program, she developed confidence, knowledge, and leadership skills. She successfully secured a position as an ASHA sevika, improving her family's financial stability, enabling debt repayment, and supporting her children's education. At the community level, her efforts contributed to increased awareness and uptake of vaccination and nutrition services. Kaushal's journey reflects a transformation from a program beneficiary to a frontline health leader, creating lasting impact for both her family and community.

## Case Study: From Peer Leader to Health Worker: Kamala's Journey to a Private Healthcare Career

S. Kamala, an 18-year-old from Srirampur ST Colony in Sarapaka Panchayat, actively participated in the ITC Maternal, Child Health and Nutrition (MCHN) program and developed a strong interest in pursuing a career in the healthcare sector. Coming from a modest background, she sought opportunities to build her skills and continue her education.

**Challenges faced:**

Kamala completed her schooling up to Class 10 in a government school but was unable to continue Classes 11 and 12 due to financial constraints. Limited economic resources and lack of access to higher education opportunities restricted her career pathway. Additionally, like many adolescents in her community, she had limited exposure to structured health education and career guidance.

**Support received:**

Through the program, Kamala received continuous exposure, learning opportunities, and encouragement:

- Adolescent Group Participation: She attended multiple sessions including peer leader meetings, maternal and child nutrition awareness, menstrual health and hygiene, and child marriage prevention.
- Peer Leadership Role: As part of a group of 12 girls, she actively shared health and nutrition information with other adolescents in her community.
- Awareness & Capacity Building: The sessions improved her knowledge of health, nutrition, and social issues affecting adolescents.
- Motivation for Career Pathways: Engagement with program staff and activities inspired her to pursue a career in healthcare.
- Skill Development Opportunity: With family support, she enrolled in a two-year Multi-Purpose Health Worker (MPHW) course.

**Impacts:**

Through her engagement with the program, she gained confidence, knowledge, and motivation to pursue further training. After completing her MPHW course, she began working as a nursing assistant in Bhadrachalam, earning a monthly income and gaining practical experience in healthcare. She now aspires to continue her education and become a doctor in the future. Kamala's journey highlights how adolescent engagement, awareness, and skill-building opportunities can open pathways to livelihoods and long-term aspirations.

# Annexure

| Sl No. | RF Indicators | ASSAM | | | | | BIHAR | | | UTTAR PRADESH | | | TELANGANA | | | WEST BENGAL | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | Darrang | | Goalpara | | Bongaigaon | Munger | | | Saharanpur | | Shamli | Bhadradi K | | | Hooghly | | |
| | | Baseline | Program | Baseline | Program | Control | Baseline | Program | Control | Baseline | Program | Control | Baseline | Program | Control | Baseline | Program | Control |
| 1 | Pregnant Women registered for Ante Natal Check-up in the 1st trimester | 57% | 97% | 65% | 96% | 66% | 69% | 94% | 80% | 79% | 97% | 77% | 72% | 97% | 78% | 76% | 95% | 80% |
| 2 | Pregnant Women received 4 Ante Natal Check-up | 38% | 72% | 44% | 70% | 52% | 37% | 66% | 33% | 79% | 85% | 50% | 70% | 78% | 65% | 72% | 75% | 63% |
| 3 | Institutional deliveries | 84% | 93% | 92% | 94% | 83% | 94% | 96% | 88% | 73% | 98% | 77% | 69% | 98% | 71% | 98% | 99% | 73% |
| 4 | Maternal Age (more than 21 years) | NA | 67% | NA | 63% | 54% | NA | 55% | 43% | NA | 74% | 60% | NA | 69% | 61% | NA | 66% | 57% |
| 5 | Continued breastfeeding at 2 years | NA | 70% | NA | 65% | 33% | NA | 75% | 23% | NA | 74% | 53% | NA | 69% | 48% | NA | 50% | 47% |
| 6 | Married couple adopted modern methods of contraception | NA | 88% | NA | ** | ** | NA | 58% | 40% | NA | 85% | 54% | NA | 67% | 54% | NA | 67% | 30% |
| 7 | Pregnant women consuming IFA for 100 days or more | 43% | 84% | 52% | 76% | 65% | 50% | 89% | 63% | 26% | 88% | 66% | 41% | 80% | 57% | 34% | 92% | 73% |
| 8 | Pregnant women consuming Calcium tablets | NA | 99% | NA | 92% | 98% | NA | 90% | 88% | NA | 100% | 100% | NA | 95% | 100% | NA | 98% | 100% |
| 9 | Prevalence of anaemia in pregnant women | NA | 45% | NA | 43% | 61% | NA | 34% | 60% | NA | 61% | 73% | NA | 45% | 78% | NA | 60% | 67% |
| 10 | Children age 6–59 months who received iron supplements in the last 7 days | NA | 38% | NA | 61% | 58% | NA | 66% | 58% | NA | 82% | 69% | NA | 73% | NA | NA | 68% | 75% |
| 11 | New-born having weight more than 2.5 kgs | NA | 87% | NA | 88% | 78% | NA | 90% | 86% | NA | 87% | 90% | NA | 94% | 87% | NA | 81% | 76% |
| 12 | Prevalence of underweight in <5 yrs children. | 25% | 11% | NA | NA | 45% | 33% | 15% | 28% | 7% | 1% | 36% | 25% | 9% | 48% | NA | NA | NA |
| 13 | Prevalence of stunting in <5 yrs children. | 46% | 21% | NA | NA | 20% | 37% | 36% | 25% | 23% | 12% | 13% | 27% | 21% | 15% | NA | NA | NA |
| 14 | Prevalence of wasting in <5 yrs children. | 8% | 3% | NA | NA | 15% | 8% | 6% | 5% | 5% | 0% | 10% | 18% | 6% | 17% | NA | NA | NA |
| 15 | % SAM and MAM children <5 yrs | NA | NA | NA | NA | NA | NA | 65% | 30% | NA | 5% | 28% | NA | 25% | 15% | NA | NA | NA |
| 16 | % of children weighed monthly at AWC | NA | 73% | NA | 88% | 89% | NA | 56% | 54% | NA | 82% | 65% | NA | 88% | 82% | NA | 59% | 65% |
| 17 | Every child under 2 years receiving at-least 7 mandatory visits by AWW | NA | 78% | NA | 74% | 67% | NA | 70% | 65% | NA | 80% | 67% | NA | 62% | 50% | NA | 79% | 67% |
| 18 | Anaemia (Any Anaemia) | 91% | 66% | NA | NA | NA | 76% | 61% | NA | 77% | 73% | NA | 76% | 63% | NA | NA | NA | NA |

# Thank you