



# IMPACT EVALUATION REPORT



Women & Child  
Development  
and Health  
Sector



Impact Evaluation Report of Specialized Health, Nutrition,  
and Early Childhood Education Training & Medical  
Equipment Supply on Women & Child as well as Health  
Development Outcomes in Bokaro

Report Date: December 2024

**By PMU DMFT, Bokaro**



<https://dmftbokaro.com/>



## ACKNOWLEDGEMENT

We would like to express our sincere gratitude to all those who contributed to the successful completion of this Impact Evaluation Report.

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We acknowledge the collaborative effort of all stakeholders, whose contributions have been vital to the successful completion of this assessment. Their support has enabled us to gain valuable insights into the impact of our interventions and drive future improvements.

Thank you once again for your unwavering support and dedication.

**TEAM DMFT**



## DISCLAIMER

*This document has been prepared for DMFT, Bokaro, based on the field interviews and the information collected from the various stakeholders.*

*The views expressed in the report are advisory and accepts no financial liability whatsoever to anyone in using this report.*



## TABLE OF CONTENTS

EXECUTIVE SUMMARY .....	3
1 CHAPTER 1: ABOUT THE PROJECT .....	14
1.1 INTRODUCTION.....	14
1.2 TRAINING PROJECT DESIGN AND IMPLEMENTATION PHASES .....	28
2 CHAPTER 2: COMPREHENSIVE AND SPECIALIZED TRAINING CURRICULUM.....	31
2.1 HEALTH AND NUTRITION MODULES .....	31
2.2 CHILD DEVELOPMENT AND LEARNING MODULES .....	32
2.3 SAFETY, HYGIENE, AND HEALTH PRACTICES .....	32
2.4 GENDER EQUALITY AND PARENT COLLABORATION.....	32
2.5 COLLABORATION CURRICULUM ON USE OF TECHNOLOGY .....	33
2.6 TEACHING AIDS AND CLASSROOM MANAGEMENT .....	33
2.7 SPECIAL EVENTS AND COMMUNITY ENGAGEMENT .....	34
3 CHAPTER 3: KEY IMPACT ON WOMEN & CHILD DEVELOPMENT.....	35
3.1 BREASTFEEDING CHILDREN RECEIVING ADEQUATE DIET .....	37
3.2 ANC (ANTENATAL CARE) TABLE UTILIZATION.....	38
3.3 IMPACT ON ANTENATAL CARE REGISTRATION (FIRST TRIMESTER) .....	39
3.4 PREGNANT WOMEN REGISTERED FOR ANC .....	40
3.5 IMPACT ON INSTITUTIONAL DELIVERIES .....	41
3.6 IMPACT ON LIVE BABIES WEIGHED AT BIRTH .....	42
3.7 IMPACT ON LOW-BIRTH-WEIGHT BABIES (<2500g) .....	43
3.8 IMPACT ON NEWBORNS BREASTFED WITHIN ONE HOUR OF BIRTH .....	44
3.9 IMPACT ON UNDERWEIGHT CHILDREN .....	45
3.10 IMPACT ON STUNTED CHILDREN .....	48
3.11 IMPACT ON SEVERE ACUTE MALNUTRITION (SAM) .....	49
4 CHAPTER 4: KEY IMPACT ON OTHER INDICATORS.....	51
4.1 IMPACT ON ANEMIA IN CHILDREN.....	51
4.2 IMPACT ON IMMUNIZATION OF CHILDREN FULLY (9-11 MONTHS) .....	52
4.3 IMPACT ON TB TREATMENT SUCCESS RATE .....	53
4.4 INCREASED ATTENDANCE IN AWC SESSIONS.....	54
4.5 INCREASE IN DIGITAL LITERACY AND POSHAN TRACKER USAGE .....	54
4.6 IMPROVED OPERATIONAL EFFICIENCY OF AWCS .....	55
4.7 INCREASED TOTAL ENROLMENT OF AWC AND PRIMARY SCHOOLS.....	55
4.8 INCREASED OPERATIONAL EFFICIENCY IN AWCS.....	55
4.9 INCREASED ENROLMENT & ATTENDANCE OF GIRL CHILDREN .....	56
4.10 INCREASED SANITATION AMONG STUDENTS IN AWCS & SCHOOLS.....	56
4.11 INCREASED SANITATION AMONG FAMILY MEMBERS OF CHILDREN.....	56
5 CHAPTER 5: KEY OTHER FINDINGS OF STUDY .....	57
QUALITATIVE IMPACT FOUND BASED FGDs CONDUCTED.....	58
6 CHAPTER 6: RECOMMENDATIONS .....	61
CASE STUDIES FROM THE FIELD.....	63
7 CONCLUSION.....	65

## List of Abbreviation

Abbreviations	Explanation
<b>AWW</b>	Anganwadi Worker
<b>AWH</b>	Anganwadi Helper
<b>BBBP</b>	Beti Bachao Beti Padhao
<b>BaLA</b>	Building as Learning Aid
<b>CDPO</b>	Child Development Project Officer
<b>DMFT</b>	District Mineral Foundation Trust
<b>ECCE</b>	Early Childhood Care and Education
<b>IEC</b>	Information, Education, and Communication
<b>MEPSC</b>	Management & Entrepreneurship and Professional Skills Council
<b>MSDE</b>	Ministry of Skill Development and Entrepreneurship
<b>NSQF</b>	National Skill Qualification Framework
<b>NCEVT</b>	National Council for Vocational Education and Training
<b>POSHAN</b>	Prime Minister's Overarching Scheme for Holistic Nutrition
<b>VHSND</b>	Village Health, Sanitation, and Nutrition Day
<b>Poshan Tracker</b>	Nutrition Monitoring App
<b>BP</b>	Blood Pressure
<b>NITI Aayog</b>	National Institution for Transforming India
<b>TB</b>	Tuberculosis
<b>ASHA</b>	Accredited Social Health Activist
<b>MCP</b>	Mother and Child Protection Card
<b>WCD</b>	Women and Child Development
<b>Hemoglobin Meter</b>	Device for Measuring Hemoglobin Levels
<b>IMR</b>	Infant Mortality Rate
<b>CMAM</b>	Community-based Management of Acute Malnutrition
<b>LBS</b>	Low Birth Weight



## EXECUTIVE SUMMARY

The project, launched in FY 2024-25 under the leadership of the Deputy Commissioner (DC) cum Chairman of District Mineral Foundation Trust (DMFT) Bokaro, aimed at enhancing early childhood care and education (ECCE) services while improving health outcomes for women and children in mining-affected areas of Bokaro. The initiative involved the training of 4,000 Anganwadi Workers (AWWs) and Anganwadi Helpers (AWHs) and the distribution of critical medical equipment to improve maternal and child health services.

### **District Mineral Foundations Trust (DMFT)**

In 2015, the Government of India introduced an amendment to the Mines & Minerals (Development & Regulation) (MMDR) Act, which mandated the establishment of District Mineral Foundations (DMFs) in all mining-affected districts. Section 9(B) of the MMDR Act provides the framework for DMFs, specifying their status as non-profit organizations and granting the State Government the authority to define their composition and functions.

The primary objective of the District Mineral Foundation is to promote the welfare and protect the interests of individuals and areas affected by mining operations. The precise manner in which the DMF carries out its responsibilities is determined by the State Government through prescribed regulations. As per the regulations, in any district impacted by mining operations, the State Government is obligated to establish a non-profit trust known as the District Mineral Foundation through an official notification.

The District Mineral Foundation Trust (DMFT), Bokaro has the following objectives:

**Welfare of mining-affected communities:** DMFT aims to ensure the welfare and development of areas affected by mining operations, focusing on improving the quality of life for local communities.



**Inclusive growth:** DMFT aims to promote inclusive growth by providing opportunities for livelihood enhancement, infrastructure development, healthcare, education, and environmental conservation in mining-affected areas.



**Sustainable development:** DMFT promotes sustainable development by utilizing funds collected from mining activities for projects and programs that address the social, economic, and environmental needs of mining-affected regions.



**Empowering local communities:** DMFT emphasizes community participation in decision-making processes, empowering local communities to have a say in how the funds are utilized for their own development.



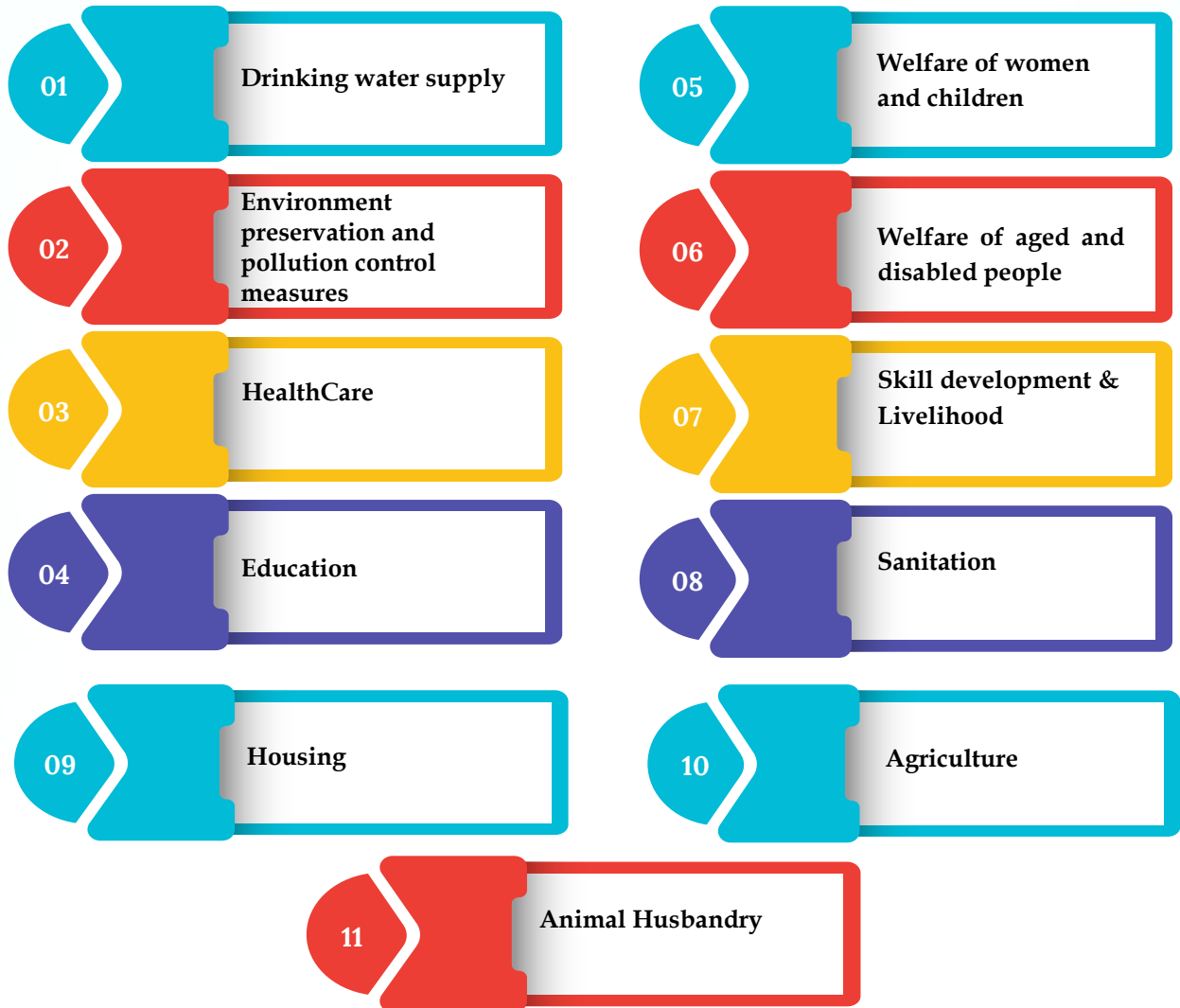
### **Pradhan Mantri Khanij Kshetra Kalyan Yojna (PMKKKY)**

After careful consideration, the Central Government has determined that it is in the national interest for all District Mineral Foundations to establish a development program for areas affected by mining. This program should include specific provisions to address the social and infrastructure needs of the local population. To facilitate this, the Central Government has introduced the Pradhan Mantri Khanij Kshetra Kalyan Yojana, which is being implemented by the District Mineral Foundations using funds acquired through the MMDR Act of 1957. The primary objective of the PMKKKY scheme is threefold: (a) to execute various developmental and welfare projects in areas affected by mining, which will complement the ongoing schemes and projects of the State and Central Government; (b)

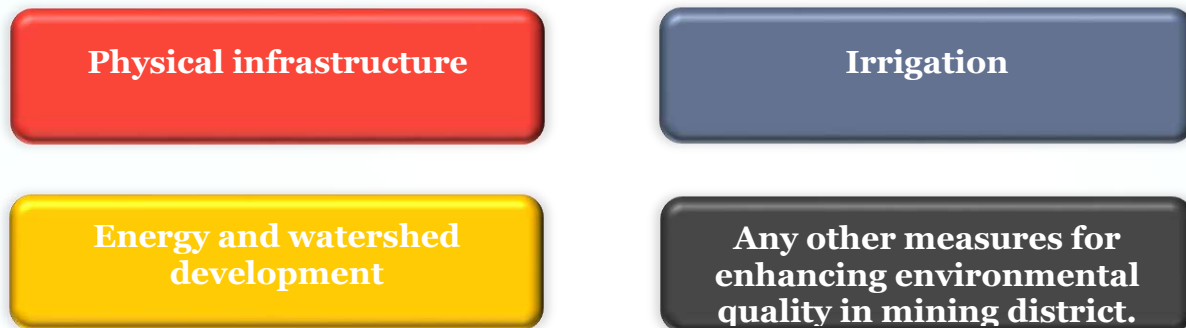
to mitigate the adverse impacts on the environment, health, and socio-economic conditions of the people residing in mining districts, both during and after mining activities; and (c) to secure sustainable livelihoods in the long term for those affected by mining in these areas.

### Sectors of DMF/PMKKKY

Under the Pradhan Mantri Khanij Kshetra Kalyan Yojana (PMKKKY), a minimum of 70% of the funds are designated for allocation to high-priority areas, including:



Additionally, up to 30% of the funds can be utilized for other priority areas, which include:



In summary, PMKKKY ensures that a significant portion of the funds is directed towards crucial sectors such as women & Child Development, healthcare, education, and welfare, while a portion is allocated for infrastructure, irrigation, energy, and environmental improvement projects in mining-affected districts.

### **Governance and Organizational Structure of DMF Trust**

The DMF Trust is headed by the Deputy Commissioner (DC) who also acts as the Chairperson of the Managing Committee and Governing Council. Deputy Development Commissioner (DDC) acts as the Secretary of both committees. The managing committee is presided over by D.C. Other members will be the D.D.C, superintendent of police (SP), senior forest officer, civil surgeon (C.S), district mining officer (D.M.O) and district Panchayati Raj Officer (D.P.R.O) and the committee should meet at least once in two months or at least 6 times in a year.

The governing council is also presided over by DC, DDC will be the member secretary, and the members from various depts, Hon. Member of Parliament (MP), Members of Legislative Assembly (MLAs) of the district or their representatives, members of Gram Panchayats (GPs), Zila Parishads, Urban Local Bodies (ULBs) from the affected (directly and indirectly) area or their representatives are the members. The governing council meeting should convene at least 4 times a year.

### a. Governing council

The governing council constitutes of Deputy Commissioner, Deputy Development Commissioner, and members from various depts., Hon.MP, MLAs of the district or their representatives, Members of GPs, Zila Parishads, ULBs from the affected (directly and indirectly) area or their representatives as per the trust deed agreement book no-IV, Volume -4, Deed No- 853/72, Year-2016.

The Governing Council for the District Mineral Foundation Trust, Bokaro is presented in the table below.

Sl. No.	Official Designation	Committee Designation
1	Deputy Commissioner, Bokaro	Chairman
2	Deputy Development Commissioner, Bokaro	Member-Secretary
3	Superintendent of Police (SP), Bokaro	Member
4	Senior Most Divisional Forest Officer, Bokaro	Member
5	District Education Officer, Bokaro	Member
6	Civil Surgeon, Bokaro	Member
7	District Panchayati Raj Officer	Member
8	Deputy Director / Geology, Bokaro	Member
9	District / Assistant Mining Officer, Bokaro	Member
10	Representative of Chairman Zila Parishad	Member
11	Representative, Jharkhand Small Industries Association	Member
12	Hon'ble Member of Legislative Assembly or Representative of all Hon'ble MLAs	Member
13	Representative of Hon'ble Parliamentarian	Member
14	Two Major Pattadhari (Lessee) Nominated by Governing Council	Member
15	Elected Pramukhs and Up-Pramukhs from Directly Affected Areas	Member
16	Elected Mukhiya and Up-Mukhiya from Directly Affected Areas	Member

## b. Managing Committee

The Managing Committee constitutes of Deputy Commissioner, Deputy development Commissioner and SP, senior forest officer, C.S, D.M.O, and D.P.R.O as per the trust deed agreement book no-IV, Volume -4, Deed No- 853/72, Year-2016.

The Managing Committee for the District Mineral Foundation Trust, Bokaro is presented in the table below.

SI No	Official Designation	Committee Designation
1	Deputy Commissioner (DC), Bokaro	Chairman
2	Deputy Development Commissioner (DDC), Bokaro	Member-Secretary
3	Superintendent of Police (SP), Bokaro	Member
4	Secretary of the Regional Forest Division/ Senior Forest Divisional Officer (DFO), Bokaro	Member
5	District / Assistant Mining Officer (DMO), Bokaro	Member
6	Surgeon Cum Chief Medical Officer (CS), Bokaro	Member
7	District Panchayati Raj Officer (DPRO), Bokaro	Member

## Project Activities by DMFT covered for Impact Evaluation

Following were the key activities done by DMFT in Women & Child as well as Health Sector in FY 2024-25:

### 1. Training & Capacity Building of Anganwadi Workers (AWWs) and Helpers:

- A comprehensive three-month training program was initiated, focusing on early childhood education, health, nutrition, and gender equality.
- The training adhered to the National Skill Qualification Framework (NSQF) standards and integrated modules from NEP 2020 and NIPUN 2021.
- AWWs were trained in using digital tools like the Poshan Tracker app for tracking children's growth, promoting early childhood education, and implementing nutrition-focused interventions.

## 2. **Medical Equipment Distribution:**

- A total of 3,253 adult weight scales, 3,208 newborn weight scales, 4,471 hemoglobin meters, 1,216 Ambu bags, 825 nebulizers, 3,517 blood pressure monitors, 3,837 thermometers, and 2,027 ANC tables were distributed across Anganwadi Centers (AWCs) and healthcare facilities.
- These tools were used to monitor maternal and child health, including detecting anemia in pregnant women, tracking infant growth, and providing emergency care when needed.

## 3. **Poshan Maah (Nutrition Month) Campaign:**

- AWWs and AWHs conducted nutrition awareness sessions, focusing on promoting healthy diets and the benefits of early childhood nutrition.
- Growth monitoring camps were organized, where the Poshan Tracker app was used to track children's health and provide timely interventions.

## 4. **Beti Bachao Beti Padhao (BBBP) Campaign:**

- A comprehensive campaign to promote gender equality, focusing on improving the sex ratio at birth and ensuring equal healthcare and educational opportunities for girls.
- The campaign involved community outreach through Nukkad Natak (street plays), Prabhat Pheris (morning rallies), and sports competitions, reaching all 249 Gram Panchayats in Bokaro.

## 5. **VHSND (Village Health, Sanitation, and Nutrition Day) Sessions:**

- AWWs were trained to organize VHSND sessions to educate families on hygiene practices, immunization schedules, and safe feeding techniques.
- These sessions played a key role in promoting awareness about institutional deliveries, vaccination, and the benefits of early breastfeeding.

## 6. **Emergency Care Equipment & Training:**

- Ambu bags, nebulizers, and blood pressure machines were distributed to healthcare workers, ensuring preparedness for maternal and child health emergencies, especially in remote areas.
- AWWs were trained in using these medical devices effectively, improving their ability to handle emergencies and support institutional healthcare services.

## **Need of the project**

In rural areas, the state of healthcare for women reflects the broader issue of gender inequality. Poor access to healthcare services, inadequate diagnostic tools, and limited healthcare training for female workers, such as Anganwadi Workers (AWWs), Anganwadi Helpers (AWHs) highlight the disparity women face in receiving and providing care. This gendered gap in healthcare affects not only women's health but also their socioeconomic standing, reducing their opportunities for empowerment and leadership in their communities.

When healthcare needs of women—particularly maternal and child health—are neglected, it reinforces a cycle of gender-based disadvantage. High rates of anemia, malnutrition, and limited access to emergency care among women in Bokaro are more than health issues; they are symptoms of systemic gender inequality. Women are often primary caregivers, and their health directly impacts the well-being of their families, particularly children. Poor healthcare for women exacerbates issues like maternal mortality, low birth weights, and child malnutrition, creating a ripple effect that affects the entire community.

Anganwadi Workers (AWWs), Anganwadi Helpers (AWHs) and ASHA workers are primary healthcare providers in rural areas, essential for improving health outcomes. In March 2024, the DC office of Bokaro conducted a baseline survey to assess the needs of Anganwadi Workers (AWWs) and Anganwadi Helpers (AWHs). The survey revealed several challenges in Bokaro's rural areas:





## LESS RESOURCES

Lack of essential resources like tables for ANC check-ups and shortages of weight scales, hemoglobin meters, and diagnostic tools hinder healthcare services.



## EMERGENCIES

Resource shortages hamper emergency care, while anemia, malnutrition, and respiratory diseases remain prevalent.



## TRAINING GAPS

Limited skill development and awareness of best practices affect the quality of early childhood care.



## GENDER GAP

Gender disparities, low enrolment, hygiene issues, and under-recognition of female workers reduce service effectiveness.



## DIGITAL GAP

Low digital literacy and inadequate monitoring delay healthcare interventions and limit efficiency.



## HYGIENE

Poor enrolment, hygiene, and education methods reflect gaps in community engagement and infrastructure.

A quick impact study was conducted by DMFT, Bokaro to understand the current status of Specialized Health, Nutrition, and Early Childhood Education Training & Medical Equipment Supply projects sanctioned under Women & Child Development & health sector of DMFT Bokaro, challenges faced, impact on beneficiaries, and need for revision in the scheme. The current outreach of the Specialized Health, Nutrition, and Early Childhood Education Training & Medical Equipment Supply projects of DMFT is more than 10,00,000 beneficiaries. Further, majority of the scheme beneficiaries are from mining affected areas. These projects are physically completed and all the 9 blocks of Bokaro have been covered under the project in terms of outreach of the project.

## Research Framework

DMFT has adopted a comprehensive research framework in the Impact of Specialized Health, Nutrition, and Early Childhood Education Training & Medical Equipment Supply Projects covering multi-stakeholders such as **PIAs, NGOs as well as various line departments such as Civil Surgeon Office Bokaro, Medical Officers in Charge (MOICs) at various Community Health Centers (CHCs), District Social Welfare Officer (DSWO), Bokaro, along with the dedicated Anganwadi Workers (AWWs), Anganwadi Helpers (AWHs), and ASHA workers**, and their beneficiaries:

Both qualitative and quantitative methods have been used to build on each other, facilitating the triangulation of findings. Triangulation is when you use different data sources and methods to shed light on an intervention or a program. This approach enables to compare and validate the insights received from different stakeholders with the data collected through structured questionnaires, FGDs, personal interviews, and participant observations.

The qualitative & quantitative data of the study has been collected from various PIAs, Civil Surgeon Office Bokaro, Community Health Centers (CHCs), District Social Welfare Officer (DSWO), Bokaro, Anganwadi Workers (AWWs), Anganwadi Helpers (AWHs), and ASHA workers, NULM workers, beneficiaries and other stakeholders. Detailed discussion guides, structured questionnaires, and face-to-face interviews have been used in this research tool. Similarly, quantitative data has been collected from various stakeholders like beneficiaries as well as line departments using structured questionnaires.

## Sampling Methodology

The study has used a mixed-method research approach, in which both the quantitative and qualitative research methods were used for generating desired information. A random sampling technique was used to ensure statistically significant representation of beneficiaries from mining affected areas, AWWs, AWHs, NUHM Workers, Asha Workers.

## Key Observations

- a) The project led to **significant improvements** in key health indicators, including **higher rates** of ANC registration in the first trimester, **increased institutional deliveries**, and **better immunization coverage**.
- b) The distribution of **medical equipment** empowered healthcare workers with the **tools to provide timely care**, while the **training enhanced skills** in health monitoring and community outreach.
- c) **Gender equality campaigns** and the **Poshan Maah initiative** contributed to **positive shifts** in community attitudes toward health and nutrition, resulting in **improved health outcomes** for women and children.
- d) **Reduction in Underweight Children**: The use of **newborn and adult weight scales** for monitoring growth and nutrition, along with **Poshan Tracker monitoring**, contributed to a reduction in underweight children.
- e) **Decline in Stunting**: The use of the **BP machine** and **thermometer** for regular monitoring, combined with **child development training**, led to a reduction in stunting.
- f) **Decrease in SAM: Hemoglobin meters** and the **Ambu Bag** played a critical role in **early identification** and emergency response, resulting in a reduction in SAM cases.
- g) **Consistent Breastfeeding Practices**: The introduction of **ANC tables** and **educational workshops** increased the breastfeeding rate.
- h) **Better ANC Care**: The **ANC tables**, along with **BP machines** and **thermometers**, contributed to **better maternal health outcomes**.
- i) **Reduction in Anemia**: Frequent use of **hemoglobin meters and strips** for testing ensured **effective management** of anemia in children.

## CHAPTER 1: ABOUT THE PROJECT

### 1.1 INTRODUCTION

The projects, launched in FY 2024-25 under the leadership of the Deputy Commissioner (DC) of Bokaro, aimed at enhancing early childhood care and education (ECCE) services while improving health outcomes for women and children in mining-affected areas of Bokaro. The initiative involved the training of 4,000 Anganwadi Workers (AWWs) and Anganwadi Helpers (AWHs) and the distribution of critical medical equipment to improve maternal and child health services.

#### **A. Three months Training & Capacity Building of 4,000 Anganwadi Workers (AWWs) and Helpers (AWHs)**

The Deputy Commissioner (DC) Bokaro launched a comprehensive training and capacity-building initiative in March 2024 to enhance early childhood care and education (ECCE) services in mining-affected areas.

On March 16, 2024, the DC Office Bokaro formalized the program by signing an MoU for training and skill development of 4,000 Anganwadi Workers (AWWs) and Helpers (AWHs) with the Management & Entrepreneurship and Professional Skills Council (MEPSC), a Sector Skill Council (SSC) under the Ministry of Skill Development and Entrepreneurship (MSDE), Government of India.

Operating under a Public-Private Partnership (PPP) model, MEPSC provided national-level expertise to ensure that the training curriculum adhered to MSDE, National Skill Qualification Framework (NSQF), National council for vocation education and training (NCEVT) approved standards.

The program provided three months of training for each batch, with training centers established in all blocks, covering every gram panchayat across Bokaro. This initiative marked the first large-scale structured training program for AWWs and AWHs in the district.

All training centers were equipped with biometric or register-based attendance systems, as well as essential equipment such as projectors, furniture, and power backups. Trainees received learning materials, including books, along with transportation allowances, meals during training, and practical materials such as posters, vegetables, and demonstration tools.

From the project's initial conceptualization to its implementation and final assessments, DC Bokaro was actively involved, guiding the program at every stage. The DC held multiple review meetings to ensure consistent progress and closely monitored all phases to align with the project's goals of improving nutrition, health, gender equality, and educational outcomes in Anganwadi centers.





## **Review meeting being held by DC Bokaro**

The program began with stakeholder consultations led by DC Bokaro, involving the DSWO office, Child Development Project Officers (CDPOs), and other relevant agencies. A baseline study was conducted for 4,000 Anganwadi Workers (AWWs) and Helpers (AWHs) to assess their skills and identify specific challenges, which informed the customized training design. All 4,000 trainees' data was registered in the MSP portal.

Training sessions were held in small batches of 30-35 participants, led by highly qualified, ToT-certified trainers from the National Skills Development Corporation (NSDC) specializing in Women & Child Development – ECE. Many of these trainers held advanced degrees, including PhDs. Concurrent monitoring by DMFT's Project Management Unit (PMU) ensured program integrity and high standards throughout the training.

The DMFT Bokaro project introduced an enriched curriculum, integrating national standards like NEP 2020 and NIPUN 2021, to elevate the skills of Anganwadi Workers (AWWs) and Helpers (AWHs) in Early Childhood Care and Education (ECCE) beyond traditional practices. The training covered health and nutrition modules, equipping workers to educate families on affordable nutrition and to utilize digital tools like the Poshan Tracker for growth monitoring. Workers were also trained in child development, literacy, and interactive learning methods, emphasizing a child-centric approach. Hygiene practices, first aid, and emergency care modules empowered them to ensure safe environments. A special focus on gender equality and parent collaboration promoted a balanced approach to child care.



Digital literacy is a pathway to both empowerment and practical, data-driven healthcare, closing a critical gender gap in access to technology. Digital tool proficiency, such as with the Poshan Tracker, enabled real-time health data reporting, while audio-visual aids made learning more accessible. Classroom management, use of teaching aids, and structured daily routines improved session organization. Community engagement activities, including events like Poshan Maah, were integrated to foster local involvement and reinforce the campaign against malnutrition.

Post-training, MEPSC conducted a thorough assessment of participants, trainers, training methodologies, attendance, class participation, and materials, followed by written exams. Certification for all 4,000 AWWs and AWHs was awarded according to MSDE guidelines.

This training program was NCVET approved and aligned with the National Skills Qualification Framework (NSQF). As per the National Credit Framework guidelines, all assessed candidates earned 5 credit points for completing the three-month program. This nationally recognized certification not only validated the skills and dedication of AWWs and AWHs but also enhanced their professional profiles, opening new opportunities for skill development and improved service delivery within their communities.

**Impact Evaluation Report of Specialized Health, Nutrition, and Early Childhood Education Training & Medical Equipment on Women & Child as well as Health Development Outcomes in Bokaro**



By equipping these female workers with the skills and tools needed for effective healthcare delivery, the initiative empowers them to lead in their communities, elevating their status and promoting gender equity in a field traditionally dominated by men in decision-making roles.



Impact Evaluation Report of Specialized Health, Nutrition, and Early Childhood Education Training & Medical Equipment on Women & Child as well as Health Development Outcomes in Bokaro

## B. Distribution of distributed essential diagnostic tools such as ANC Tables to all AWCs and all healthcare workers

DMFT Bokaro distributed essential diagnostic tools to AWCs and healthcare workers in FY 2024-25. Equipment provided included 3253 adult weight scales, 3208 newborn weight scales, 4471 hemoglobin meters, 1,62,270 hemoglobin meter strips, 1216 Ambu bags, 825 nebulizers, 3517 blood pressure monitors, 3,837 thermometers, and 2,027 ANC tables with kit. This distribution covered all AWCs and healthcare workers across Bokaro's blocks, aiming to address the health needs specific to women and children. This prioritization of maternal and child health acknowledges the unique healthcare burdens women face and seeks to improve early detection, diagnosis, and preventive care for women in Bokaro. The training also covered technical usage of these equipment.

<b>Equipment</b>	<b>Utilization</b>
<b>Weight Scale (Adult)</b>	Regular monitoring of adult weight, especially for pregnant women, to detect undernutrition or obesity-related issues.
<b>Weight Scale (Newborn)</b>	Tracking the growth and development of newborns, identifying underweight infants, and taking timely interventions.
<b>Hemoglobin Meter Machine</b>	Measuring hemoglobin levels in pregnant women and children to detect and manage anemia early.
<b>Hemoglobin Strips (Box)</b>	Consumable strips used with the hemoglobin meter machine to conduct multiple tests.
<b>Ambu Bag</b>	A manual resuscitator used in emergency situations for patients who are not breathing adequately.
<b>Nebulizer</b>	Administering medication directly to the lungs, especially useful for children with respiratory issues like asthma.
<b>BP Machine</b>	Monitoring blood pressure levels in pregnant women and adults to detect and manage hypertension.
<b>Thermometer</b>	Measuring body temperature to detect fevers and infections in children and adults.
<b>ANC Tables</b>	Providing a comfortable and hygienic environment for antenatal check-ups in Anganwadi Centers.



Impact Evaluation Report of Specialized Health, Nutrition, and Early Childhood Education Training & Medical Equipment on Women & Child as well as Health Development Outcomes in Bokaro



Impact Evaluation Report of Specialized Health, Nutrition, and Early Childhood Education Training & Medical Equipment on Women & Child as well as Health Development Outcomes in Bokaro

### C. A comprehensive campaign on Beti Bachao Beti Padhao (BBBP)

A comprehensive campaign on Beti Bachao Beti Padhao (BBBP) was launched by the Deputy Commissioner (DC) of Bokaro, reinforcing India's mission to "Save the Girl Child, Educate the Girl Child." This initiative aims to combat declining child sex ratios, eradicate gender biases, and ensure equitable healthcare, education, and welfare services for girls. Led by DC Bokaro it brought together all stakeholders including DDC, BDOs, AWC workers, CDPOs, NGOs, and community leaders. Together, they worked in mission mode across all 249 Gram Panchayats in Bokaro's nine blocks, engaging communities through strategic activities like Prabhat Pheri, Nukkad Natak, sports programs, school competitions, and public outreach. IEC materials, including banners and posters, were distributed to enhance visibility and reinforce the message.

The DC, Bokaro personally visited multiple locations to inaugurate and monitor events, reflecting a strong commitment to gender equality and community engagement. By prioritizing healthcare delivery for women and children, the initiatives by DMFT Bokaro and the Deputy Commissioner emphasized healthcare as a vehicle for gender inclusion, creating an environment where women's health and contributions are respected and integral to rural development.







## D. Building as Learning Aid (BaLA) Implementation in 151 AWCs: Promoting Hygiene & Sanitation

Building as Learning Aid (BaLA) was implemented in 151 Anganwadi Centers (AWCs) across Bokaro, with a focus on themes related to hygiene and sanitation. This initiative aimed to transform the physical environment of the AWCs into interactive learning spaces by integrating educational visuals and learning aids on walls, floors, and other surfaces. The BaLA concept utilized vibrant and informative murals, posters, and diagrams, highlighting key hygiene and sanitation practices. These visual aids served as constant reminders for children, caregivers, and Anganwadi workers (AWWs) to promote essential health practices, such as handwashing, proper waste disposal, and maintaining cleanliness.







## 1.2 Training Project Design and Implementation Phases

### A. Inception and Training Partner Selection

Two highly experienced NGOs as training partners were selected to conduct on-site training: one specializing in large-scale skilling projects and the other with direct experience working with Anganwadis, ensuring a well-rounded approach to Early Childhood Care and Education (ECCE) training.

### B. Stakeholder Consultation and Baseline Assessment

The program commenced with detailed stakeholder consultations led by DC Bokaro, involving the DSWO office, Child Development Project Officers (CDPOs), and other relevant agencies. A baseline study was conducted for 4,000 Anganwadi Workers (AWWs) and Helpers (AWHs) to assess their skills and identify specific challenges. This initial analysis informed the customized training design to address the unique needs of AWWs and AWHs in Bokaro.

### C. Batch and Location Finalization

AWWs and AWHs were grouped into batches of 30, with training centers strategically set up across all 9 blocks of Bokaro for optimal accessibility. Each center provided transportation allowances, meals, and power backups to support smooth training operations, promote attendance, and boost class participation. DC Bokaro's permissions ensured logistical support for the training.

### D. Training of Trainers (ToT)

Trainers underwent a preparatory phase, including both online and in-person sessions. Training sessions were informed by direct interactions with AWWs, enabling trainers to adapt the content to specific, real-world challenges faced in Anganwadi centers.

### E. Curriculum Overview

The curriculum was designed in line with guidelines from the National Council of Vocational Education and Training (NCVET), NSQF ensuring that the program met national standards for skill development in ECCE.

### F. Training Delivery & Concurrent Monitoring

A three months training was delivered in all the centres and DMFT PMU conducted concurrent monitoring of the project as well as desk review of the documents. The DC held multiple review meetings to ensure consistent progress and closely monitored all phases to align with the project's goals.

### G. Training assessment and certificate award:

Post-training, MEPSC conducted a thorough assessment of participants, trainers, training methodologies, attendance, class participation, and materials, followed by written exams. Certification for all 4,000 AWWs and AWHs was awarded according to MSDE guidelines. As per the National Credit Framework guidelines, all assessed candidates earned 5 credit points for completing the three-month program.





Impact Evaluation Report of Specialized Health, Nutrition, and Early Childhood Education Training & Medical Equipment on Women & Child as well as Health Development Outcomes in Bokaro

## CHAPTER 2: COMPREHENSIVE AND SPECIALIZED TRAINING CURRICULUM

The DMFT project employed a curriculum that went beyond traditional ECCE training, aligning with national standards like NEP 2020 and NIPUN 2021. The curriculum was designed to equip AWWs and AWHs with advanced skills to create a well-rounded learning environment for children and provide targeted health and nutrition support for families. Key components included:

### 2.1 HEALTH AND NUTRITION MODULES

#### **Basics of Nutrition for Young Children and Mothers:**

Workers learned about affordable, locally sourced nutrition options to bridge dietary gaps in the community, enabling them to educate families on essential nutrition practices.

#### **Growth Monitoring and Poshan Tracker App Training:**

A central feature of the program was the introduction and training on the Poshan Tracker app, a digital tool that enables workers to monitor children's nutritional status accurately.

Training sessions covered:

- **Importance and usage**
- **Data Entry:** Recording data on children's growth indicators such as weight, height, and nutritional status.
- **Tracking Health Trends:** Using the app's features to analyze growth patterns and identify malnutrition cases.
- **Real-Time Monitoring:** Reporting nutrition and health data to local health authorities, enabling timely interventions.

#### **How to get Incentive by performing well through Poshan Tracker**

#### **Village Health Sanitation and Nutrition Day (VHSND):**

Training on organizing and conducting VHSND sessions, covering basic hygiene practices, safe feeding techniques, and vaccinations.

## 2.2 CHILD DEVELOPMENT AND LEARNING MODULES

**Developmental Milestones and Child Psychology:** Workers were trained to recognize and track developmental milestones, **including cognitive, social, and emotional growth, using tools like the MCP Card.**

**Emergent Literacy and Language Development:** Emphasis was placed on interactive learning, including techniques to introduce **basic language and literacy skills** through **storytelling, rhymes, and educational games.**

## 2.3 SAFETY, HYGIENE, AND HEALTH PRACTICES

**Health and Hygiene Best Practices:** Workers were trained on maintaining sanitation at centers, safe food handling, and promoting handwashing, crucial in rural settings to prevent illness and improve child health outcomes.

**Specialized Modules on Health Checkups and Hygiene:** VHSND (Village Health, Sanitation, and Nutrition Day) practices were reinforced, with participants trained in community engagement and health education. Demonstrations were conducted on filling out health cards accurately and using the Poshan Tracker for data collection.

**First Aid and Emergency Care:** Workers received training on basic first aid, teaching them how to respond to minor injuries, fevers, and other common health issues that might arise in children during the day.

## 2.4 GENDER EQUALITY AND PARENT COLLABORATION

**Parent and Family Engagement:** Workers were trained to conduct workshops for parents on child nutrition, hygiene, and early education, fostering greater parental involvement in their children's learning and health.

**Gender Inclusivity in Child Development:** Given that Anganwadi Workers are predominantly women, the program incorporated a gender-focused approach,

empowering them to become advocates for gender equality within the community. They were trained to encourage families to support the education and health of both girls and boys equally.

## 2.5 COLLABORATION CURRICULUM ON USE OF TECHNOLOGY

**Poshan Tracker App:** In addition to recording and monitoring nutrition data, workers were taught to use the Poshan Tracker app for attendance, performance tracking, and generating reports to share with supervisors and local health authorities. This tool improved data accuracy, increased accountability, and enabled real-time monitoring of child health and nutrition outcomes in the community.

**Audio-Visual and Digital Aids:** Workers learned to use digital resources such as educational videos, visual aids (flashcards, posters), and interactive tools to make learning more accessible and engaging for children. These tools were especially beneficial for workers with limited formal education, providing them with intuitive ways to communicate concepts effectively.

## 2.6 TEACHING AIDS AND CLASSROOM MANAGEMENT

**Teaching-Learning Materials (TLMs):** The training emphasized the creation and use of cost-effective, local resources as **TLMs, including flashcards, charts, and educational games that depict animals, colors, numbers, and letters.**

**Classroom Management and Structure:** Workers learned innovative methods for arranging sessions, such as the circle time model, where children interact in groups rather than traditional rows. This approach fosters social interaction, respect, and collaboration among children, enhancing the learning experience.

**Daily Anganwadi Schedule:** Workers were guided to develop structured daily routines that incorporate nutrition breaks, educational sessions, and physical activities, providing consistency and organization to the day's activities.

## 2.7 SPECIAL EVENTS AND COMMUNITY ENGAGEMENT

**Celebration of Key National Events:** Events like Independence Day, Raksha Bandhan, National Space Day, and Breastfeeding Week were celebrated to strengthen community bonds and instill pride and responsibility among AWWs and AWHs. Each event connected cultural or national values to early childhood education practices.

**Poshan Maah Celebration:** In September, AWCs celebrated Poshan Maah (Nutrition Month) by organizing nutritional awareness sessions, healthy recipe demonstrations, and growth monitoring camps. This campaign reinforced community participation in child nutrition and the commitment to combatting malnutrition.





## CHAPTER 3: KEY IMPACT ON WOMEN & CHILD DEVELOPMENT

The assessment analyzed health and Women & Child Development related indicators of NITI Aayog and comparing pre-intervention data (April 2024) with post-project completion data (September/October 2024). Key stakeholder interviews were conducted for validation, revealing the following improvements:

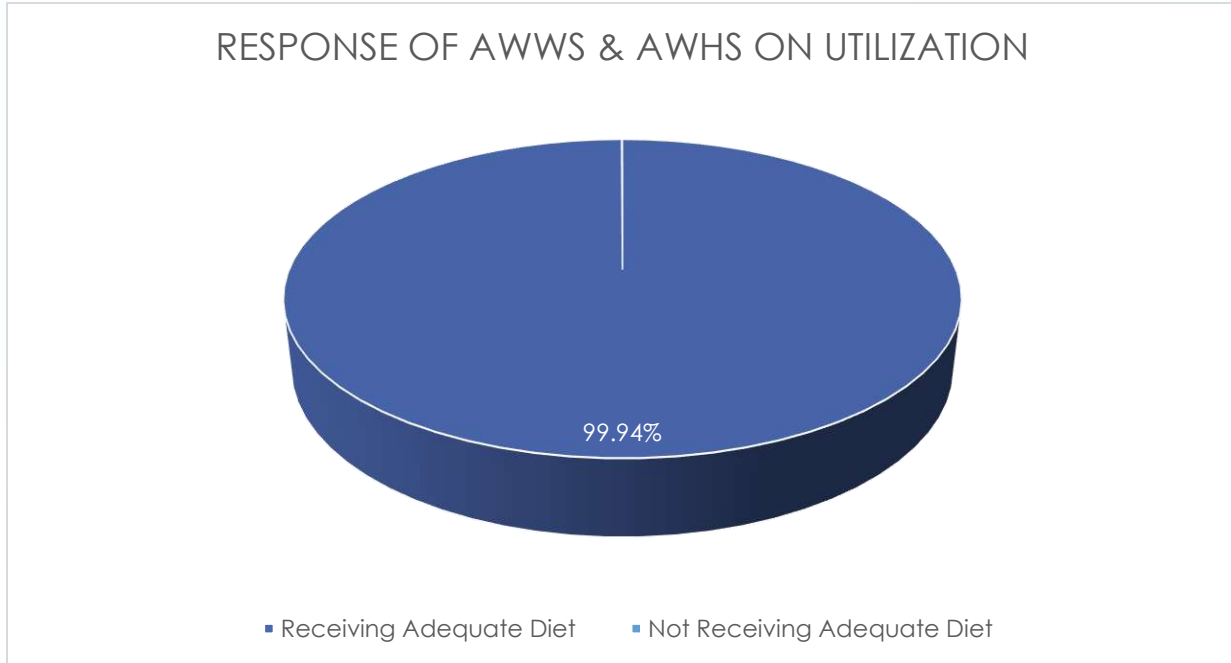


1. **99.94%** of breastfeeding children are receiving an **adequate diet**.
2. **100.00%** newborns breastfed within one hour of birth.
3. **100.00%** (4,942 out of 4,942) **live babies weighed at birth**.
4. **99.90%** (5,062 out of 5,067) **institutional deliveries**.
5. **99.69%** (4,872 out of 4,887) **immunization of children fully (9-11 months)**.
6. **80%** of **Anganwadi Workers (AWWs) and Anganwadi Helpers (AWHs)** reported utilizing **ANC tables for antenatal care**.
7. **Improved antenatal care (ANC) registration (first trimester) by 12.47%** from **86.58%** (4,931 out of 5,695) in April to **99.05%** (5,601 out of 5,655) in October.
8. Achieved **102.80% ANC registration** (5,655 out of 5,501 estimated pregnancies).
9. **95.78% TB treatment success rate**.
10. Significant **Reduction** in **severe acute malnutrition (SAM)**.
11. Significant **Reduction** in **underweight children**.
12. Significant **Reduction** in **stunted children**.
13. Significant **reduction** in **anemia prevalence** as per stakeholder reports.
14. **Only 4.33%** (214 out of 4,942) of **newborns had low birth weight** as of Oct 2024.

### 3.1 BREASTFEEDING CHILDREN RECEIVING ADEQUATE DIET

Indicator Improvement: 41,669 out of 41,695 Breastfeeding Children i.e. 99.94% are Receiving Adequate Diet as per NITI Ayog data in September 2024.

Chart 1: BREASTFEEDING CHILDREN RECEIVING ADEQUATE DIET



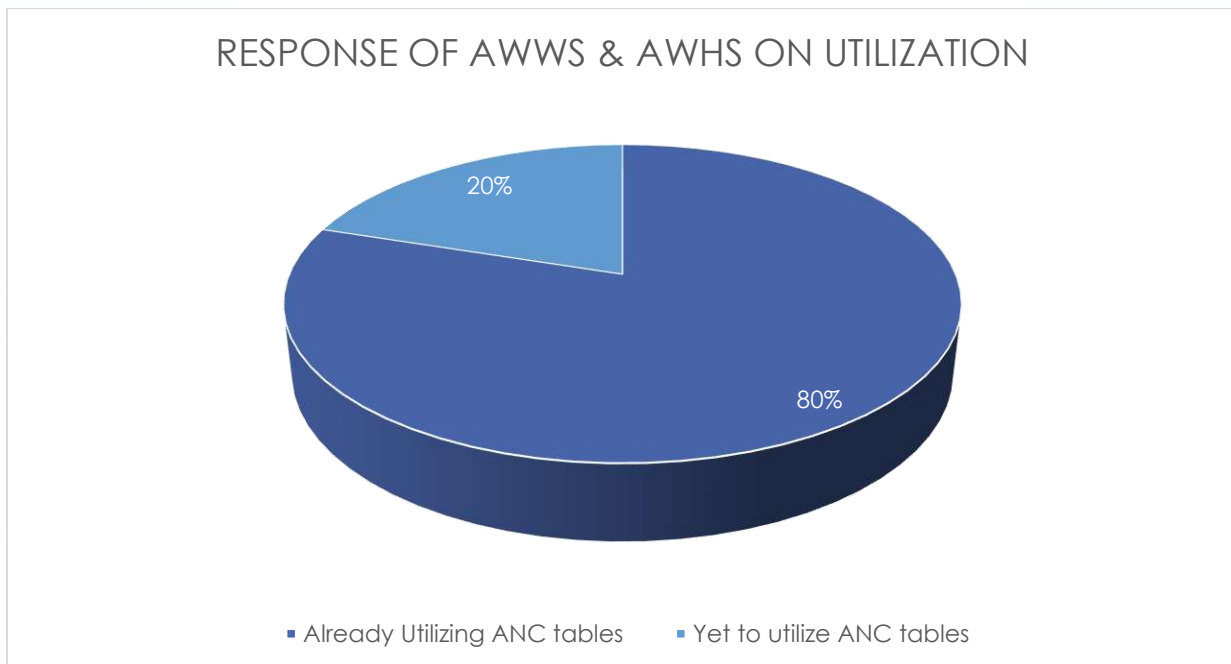
#### KEY PROJECT ACTIVITIES LEADING TO THIS IMPROVEMENT:

- **Parent and Family Engagement:**
  - Workshops emphasized **exclusive breastfeeding** and **complementary feeding**. Families were educated on the importance of these practices for child health.
- **Equipment Utilization:**
  - **ANC Tables:** These provided a comfortable and hygienic space for antenatal check-ups, ensuring that **expecting mothers** received the care and advice needed for optimal breastfeeding post-delivery. This contributed to the high rate of **breastfed children** as mothers were better supported.

### 3.2 ANC (ANTENATAL CARE) TABLE UTILIZATION

Before project in most of the AWCs, ANC was being performed at the floor on mat after providing the ANC tables as per AWWs and AWHs the ANC checkups became proper. 80% of the AWWs & AWHs covered under study as respondents indicated that they are utilizing the newly provided ANC tables.

Chart 2: UTILIZATION OF NEWLY PROVIDED ANC TABLE IN AWCs



#### KEY PROJECT ACTIVITIES LEADING TO THIS IMPROVEMENT:

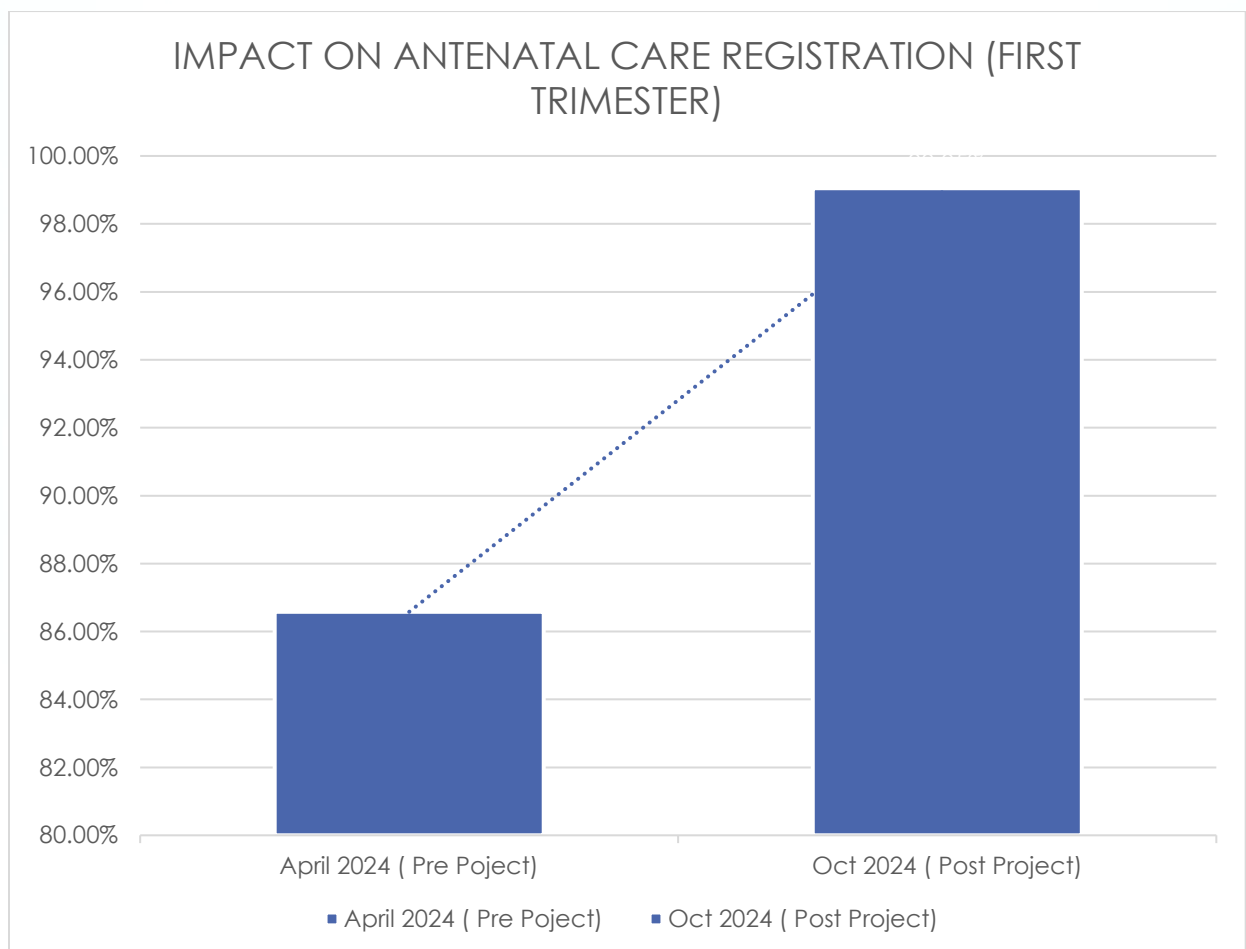
- **Improvement in Maternal Health Services:**
  - The training with focus on **regular ANC check-ups** and **hypertension management** helped in ensuring that more pregnant women received the necessary monitoring and health services.
- **Equipment Utilization:**
  - **ANC Tables:** The introduction of **ANC tables** in Anganwadi Centers provided a hygienic and comfortable space for **antenatal check-ups**, ensuring mothers received better prenatal care.

- **BP Machine and Thermometer:** The **BP machine** helped track blood pressure to detect **gestational hypertension**, and the **thermometer** detected fever, both critical for identifying risks during pregnancy. Early detection allowed workers to refer women for timely medical care.

### 3.3 IMPACT ON ANTENATAL CARE REGISTRATION (FIRST TRIMESTER)

Indicator Improvement: Increased from 86.58% (4,931 out of 5,695) in April to 99.05% (5,601 out of 5,655) in October, showing a 12.47 percentage point improvement.

Chart 3: *IMPACT ON ANTENATAL CARE REGISTRATION (FIRST TRIMESTER)*



#### KEY PROJECT ACTIVITIES LEADING TO THIS IMPROVEMENT:

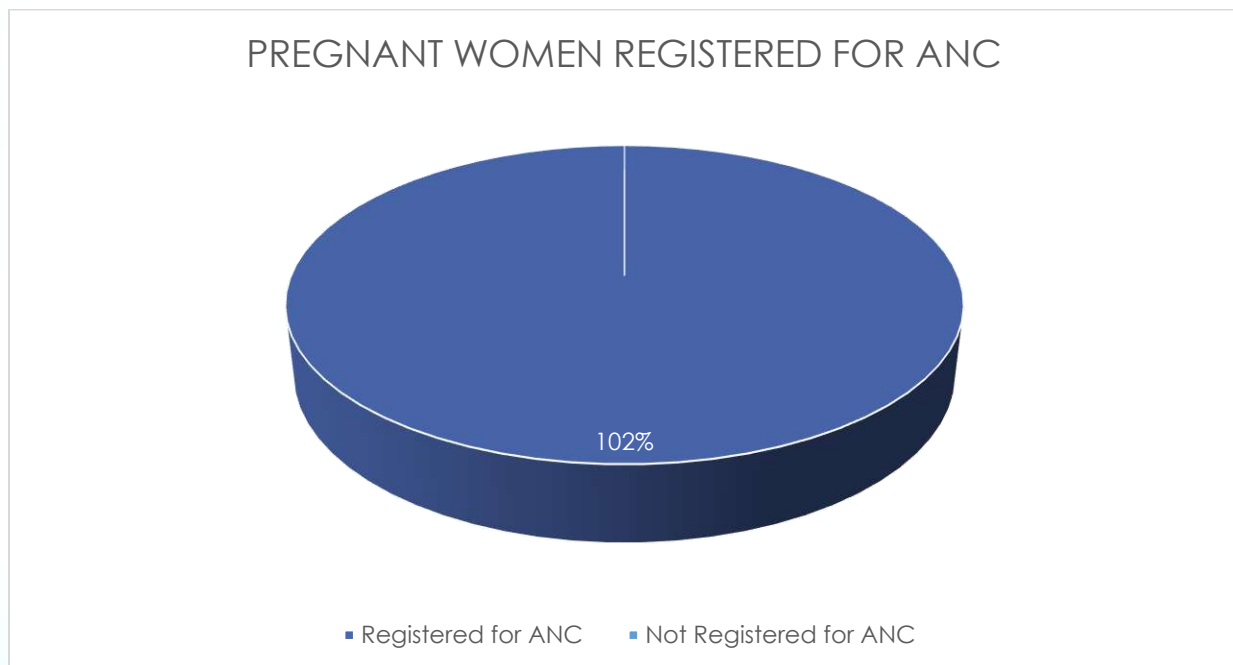
- **Growth Monitoring and Poshan Tracker:**

- Training on using the Poshan Tracker app enabled real-time recording of pregnancies and ANC data, reducing delays and improving outreach to pregnant women.
- **Medical Equipment Distribution:**
  - BP machines, hemoglobin meters, and ANC tables improved early identification of high-risk pregnancies and provided comfortable, hygienic spaces for ANC check-ups.
- **Village Health, Sanitation, and Nutrition Days (VHSND):**
  - AWWs organized community sessions focusing on early ANC registration and addressing cultural barriers.

### 3.4 PREGNANT WOMEN REGISTERED FOR ANC

It was found that 102.80% (5,655 out of 5,501) women had registered for ANC out of total estimated pregnancies as per NITI Ayog Data as on Oct 2024 because of newly supplied ANC Tables and many other facilities provided in AWCs.

Chart 4: *PREGNANT WOMEN REGISTERED FOR ANC*



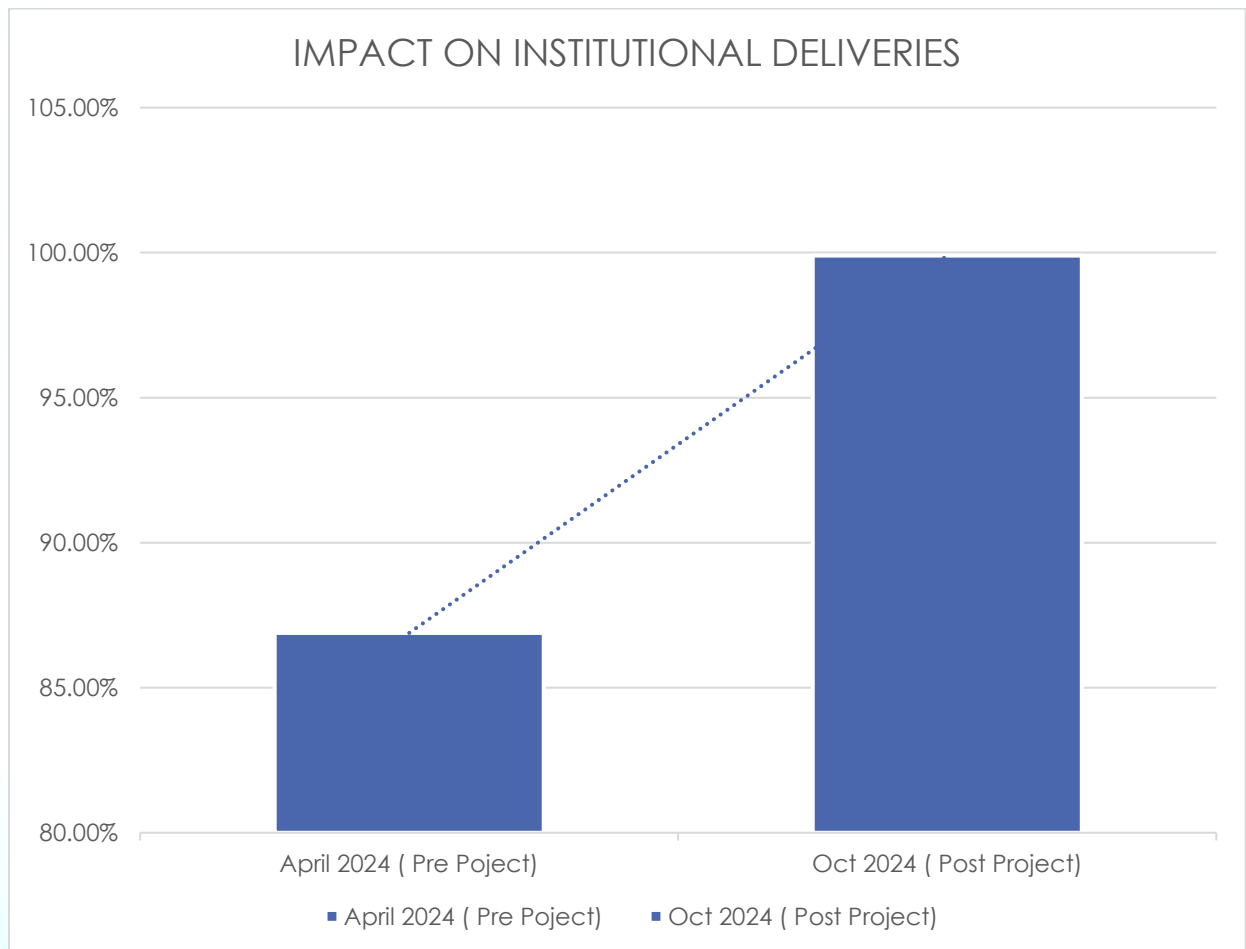
### KEY PROJECT ACTIVITIES LEADING TO THIS IMPROVEMENT:

- **Comprehensive Health Check-ups:**
  - Distributed hemoglobin meters and weight scales allowed workers to screen for Anemia and monitor maternal weight during registration.
- **Improved Data Accuracy:**
  - Poshan Tracker training ensured precise data entry, aligning registrations with estimated pregnancies.

### 3.5 IMPACT ON INSTITUTIONAL DELIVERIES

Indicator Improvement: Increased from 88.89% (4,504 out of 5,067) in April to 99.90% (5,062 out of 5067) in October, showing an 13.01 percentage point improvement.

Chart 5: *IMPACT ON INSTITUTIONAL DELIVERIES*



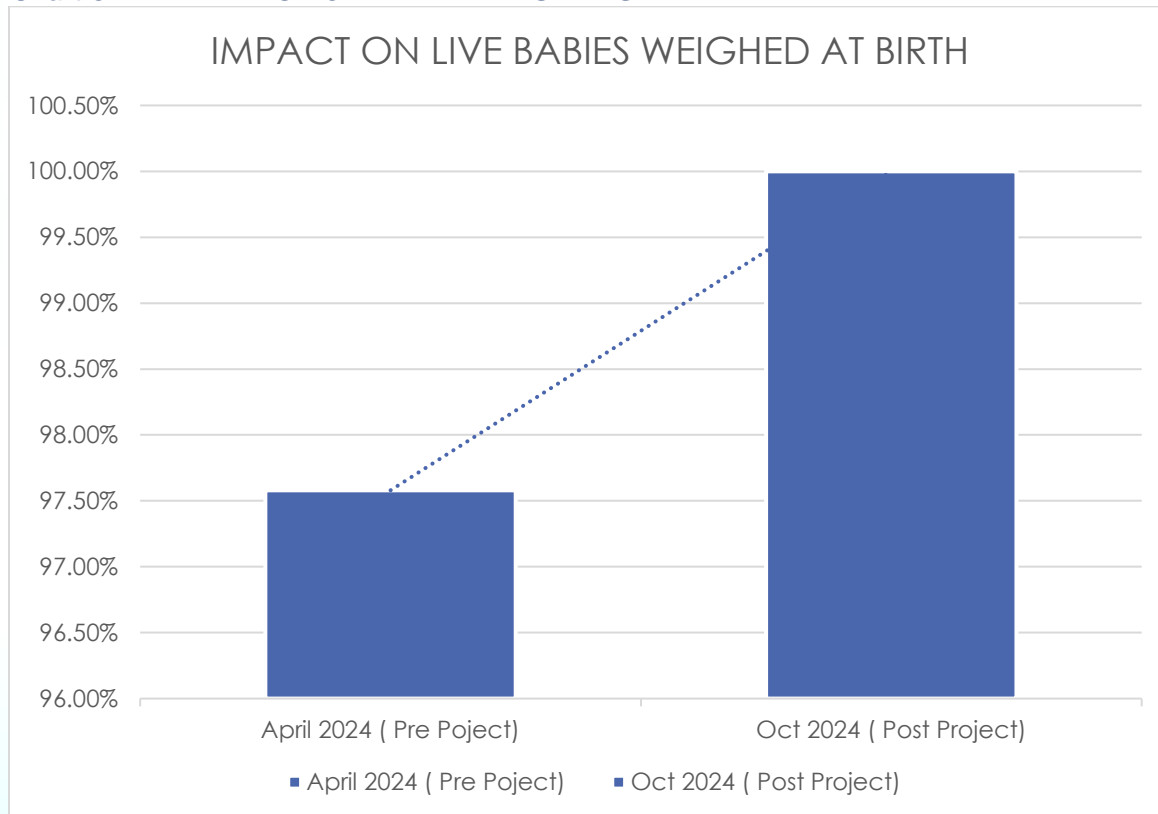
### KEY PROJECT ACTIVITIES LEADING TO THIS IMPROVEMENT:

- **Health and Hygiene Best Practices**
  - AWWs learned to counsel families on the safety and hygiene benefits of institutional deliveries.
- **Medical Equipment Readiness**
  - Ambu bags, thermometers, and BP machines enhanced emergency preparedness, reassuring families about the quality of institutional care.
- **Transport and Logistical Support**
  - Workers coordinated with local healthcare centers to facilitate transportation for pregnant women.

### 3.6 IMPACT ON LIVE BABIES WEIGHED AT BIRTH

Indicator Improvement: Increased from 97.58% (4,396 out of 4,505) in April to 100.00% (4,942 out of 4,942) in October, showing a 2.42 percentage point rise.

Chart 6: *IMPACT ON LIVE BABIES WEIGHED AT BIRTH*





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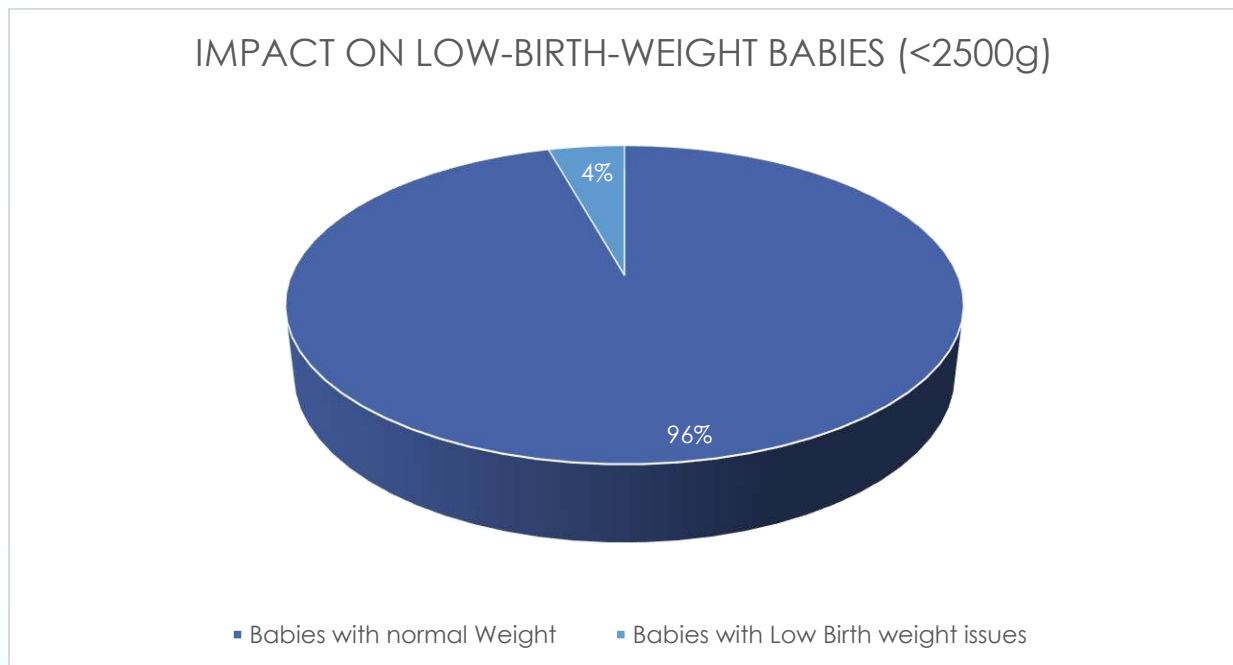
**KEY PROJECT ACTIVITIES LEADING TO THIS IMPROVEMENT:**

- **Distributed Weight Scales**
  - Scales for newborns were provided to all AWCs, ensuring universal weighing.
- **Training on Accuracy**
  - AWWs were trained to weigh newborns immediately after delivery, ensuring complete data collection.

### 3.7 IMPACT ON LOW-BIRTH-WEIGHT BABIES (<2500g)

As of October 2024, NITI Aayog data shows 4.33% (214 out of 4,942) of newborns with low birth weight (<2500g). This is due to initiatives like nutrition training for AWWs, distribution of newborn weight scales for early identification, and the use of hemoglobin meters for maternal health monitoring. Combined with advanced ANC tables, medical equipment, and capacity building for AWWs, AWHs, and ASHA workers, these efforts ensure continuous care and weight improvement for affected babies.

*Chart 7: IMPACT ON LOW-BIRTH-WEIGHT BABIES (<2500g)*



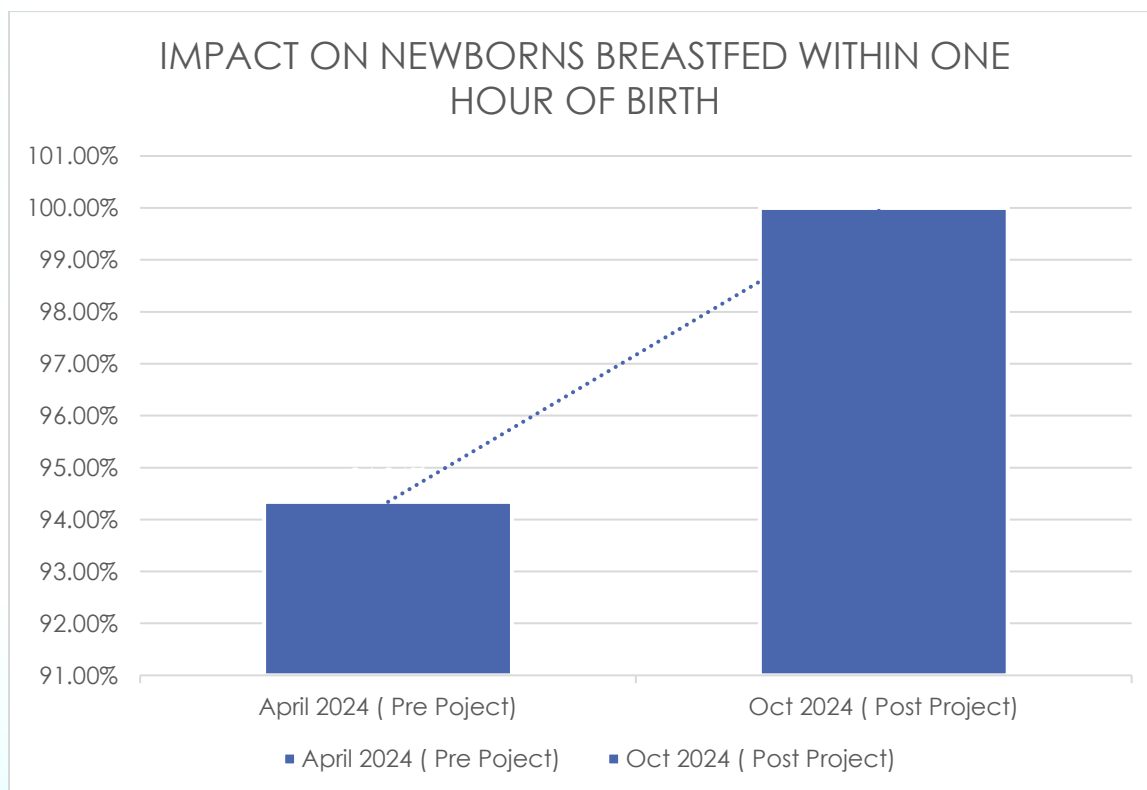
### KEY PROJECT ACTIVITIES LEADING TO THIS IMPROVEMENT:

- **Basics of Nutrition Training:**
  - AWWs educated families on affordable, locally sourced nutrition to improve maternal and fetal health.
- **Newborn Weight Scales:**
  - Distributed scales ensured immediate weighing of newborns, identifying low birth weight cases for early interventions.
- **Close Monitoring:**
  - Hemoglobin meters helped detect maternal anemia, although broader nutritional support is needed to address low birth weight trends.

### 3.8 IMPACT ON NEWBORNS BREASTFED WITHIN ONE HOUR OF BIRTH

Indicator Improvement: Increased from 94.34% (4,250 out of 4,505) in April to 100.00% (4,942 out of 4,942) in October, reflecting a 5.66 percentage point rise.

Chart 8: *IMPACT ON NEWBORNS BREASTFED WITHIN ONE HOUR OF BIRTH*



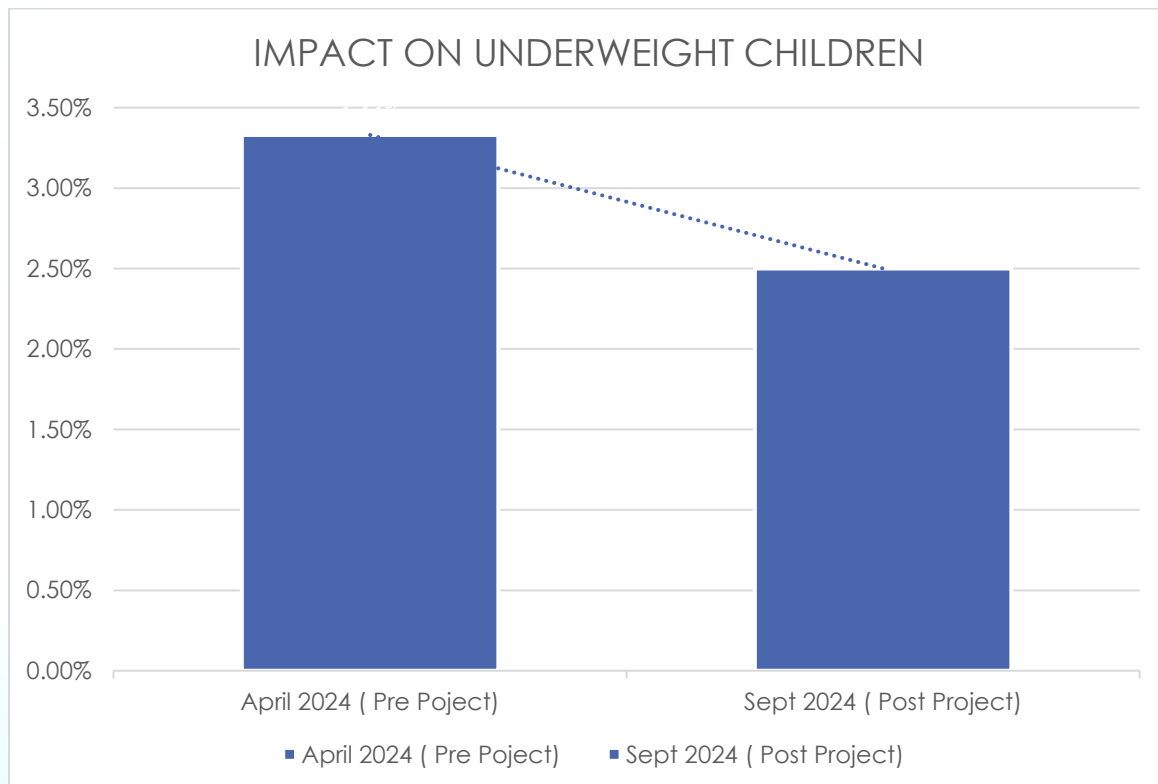
#### KEY PROJECT ACTIVITIES LEADING TO THIS IMPROVEMENT:

- **Breastfeeding Awareness Campaigns:**
  - Workers used Poshan Maah and VHSND events to emphasize the importance of early breastfeeding.
- **Emergency Preparedness:**
  - Ambu bags ensured newborns were stabilized quickly, enabling immediate breastfeeding.
- **Postnatal Counseling:**
  - Workers guided mothers on breastfeeding techniques through one-on-one interactions.

### 3.9 IMPACT ON UNDERWEIGHT CHILDREN

Indicator Improvement: Decreased from 3.33% (4,259 out of 127,956) in April 2024 to 2.50% (2,963 out of 118,702) in September 2024, showing a 0.83% reduction.

Chart 9: *IMPACT ON UNDERWEIGHT CHILDREN*



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**KEY PROJECT ACTIVITIES LEADING TO THIS IMPROVEMENT:**

- **Health and Nutrition Training:**
  - AWWs and AWHs were trained in **advanced nutrition practices**, which included educating families about affordable, locally sourced foods to improve nutrition. Additionally, workers used the **Poshan Tracker app** for real-time monitoring of children's nutritional status.
- **Equipment Utilization:**
  - **Weight Scales (Newborn and Adult):** The **Newborn Weight Scale** was crucial in monitoring infant growth. Early detection of underweight infants allowed for timely nutritional interventions, which helped in preventing malnutrition. The **Adult Weight Scale** helped track the weight of pregnant women, enabling the detection of **undernutrition or obesity** early, both of which can affect child health.
  - **Hemoglobin Meter:** Early detection of **anemia** in children and pregnant women allowed for appropriate interventions, ensuring better maternal and child health, which contributed to the reduction in underweight children.



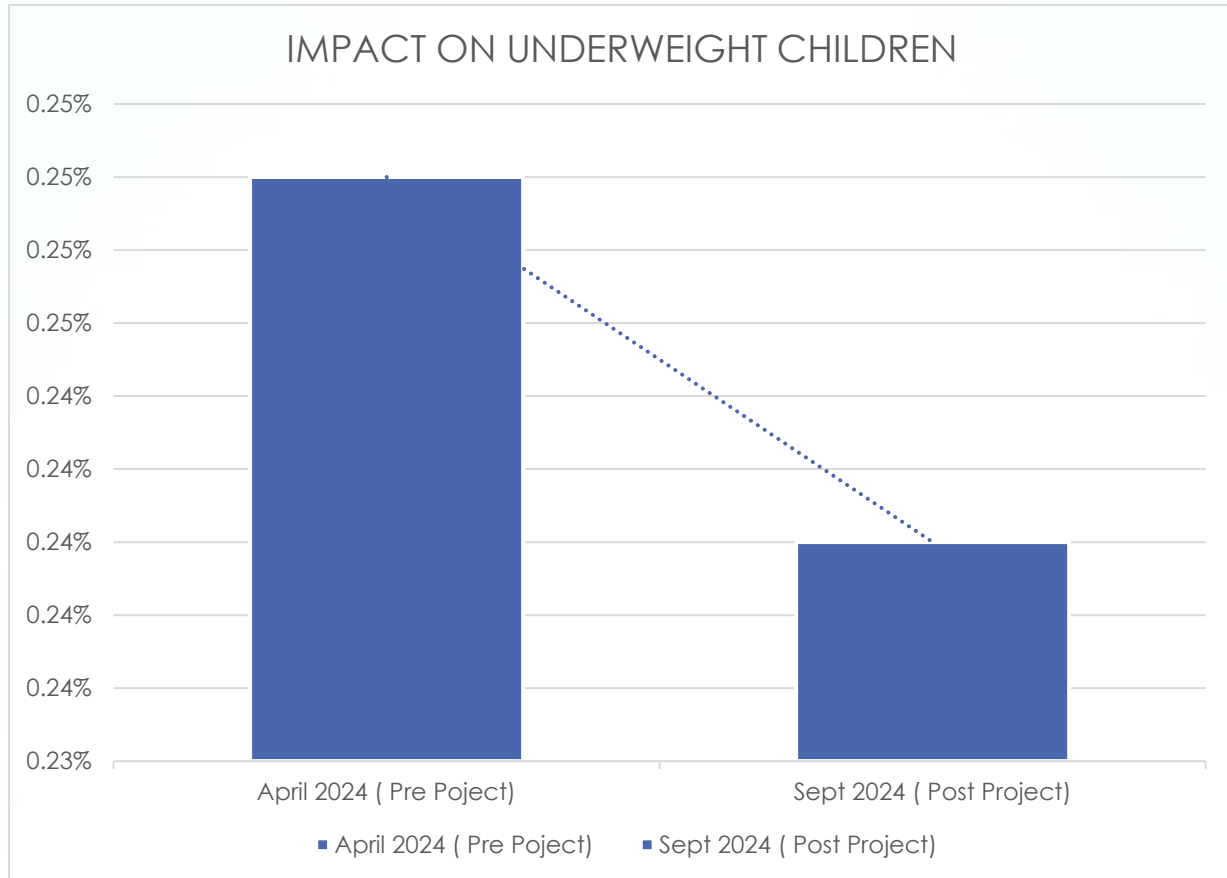


Impact Evaluation Report of Specialized Health, Nutrition, and Early Childhood Education Training & Medical Equipment on Women & Child as well as Health Development Outcomes in Bokaro

### 3.10 IMPACT ON STUNTED CHILDREN

Indicator Improvement: Decreased from 0.25% (329 out of 133,271) in April 2024 to 0.24% (294 out of 125,018) in September 2024, showing a 0.01% reduction.

Chart 10: *IMPACT ON STUNTED CHILDREN*



#### KEY PROJECT ACTIVITIES LEADING TO THIS IMPROVEMENT:

- **Child Development and Learning Modules:**
  - AWWs and AWHs were trained to recognize and track **developmental milestones** using tools like the **MCP Card**. Additionally, the curriculum emphasized **interactive learning**, fostering physical and cognitive growth.
- **Equipment Utilization:**
  - **BP Machine and Thermometer:** Regular monitoring of **blood pressure** in pregnant women and **fever detection** in children helped identify early signs of nutritional deficiencies or infections that contribute to stunting. Early

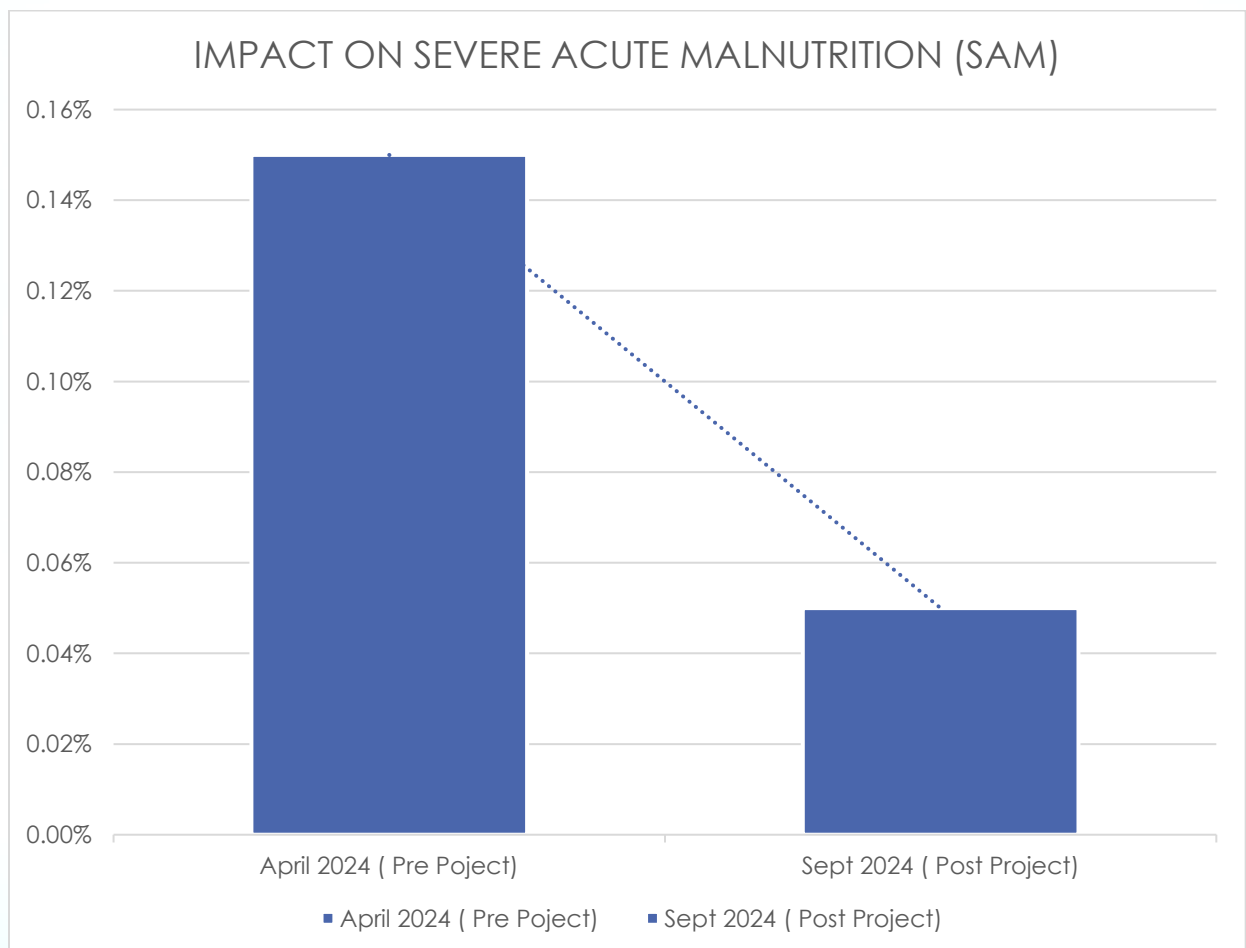
interventions reduced the risk of long-term developmental delays in children.

- **Poshan Tracker App:** Monitoring children's growth and development patterns enabled AWWs to identify stunted growth early, facilitating interventions such as nutritional supplementation or other health-related actions.

### 3.11 IMPACT ON SEVERE ACUTE MALNUTRITION (SAM)

Indicator Improvement: Decreased from 0.15% (195 out of 127,956) in April 2024 to 0.05% (65 out of 129,220) in September 2024, a 0.10% decrease.

Chart 11: *IMPACT ON SEVERE ACUTE MALNUTRITION (SAM)*



#### KEY PROJECT ACTIVITIES LEADING TO THIS IMPROVEMENT:

Impact Evaluation Report of Specialized Health, Nutrition, and Early Childhood Education Training & Medical Equipment on Women & Child as well as Health Development Outcomes in Bokaro

- **SAM Detection and Intervention:**

- The training focused on identifying **SAM** in children and providing **therapeutic nutrition**. AWWs were equipped with tools to monitor **growth patterns** and intervene before SAM became severe.

- **Equipment Utilization:**

- **Hemoglobin Meter:** Early detection of **anemia** was critical in identifying SAM, as children with anemia are more susceptible to severe malnutrition. The **hemoglobin meter** allowed workers to identify anemia early and initiate dietary or medical interventions.
- **Ambu Bag:** In emergency situations where children faced severe health crises, the **Ambu Bag** enabled immediate intervention, ensuring children received respiratory support before being transferred for further medical care.





## CHAPTER 4: KEY IMPACT ON OTHER INDICATORS

Following other improvements in Bokaro were noticed:



### 4.1 IMPACT ON ANEMIA IN CHILDREN

There has been significant reduction in anemia prevalence among children as per stakeholders interviewed.

#### KEY PROJECT ACTIVITIES LEADING TO THIS IMPROVEMENT:

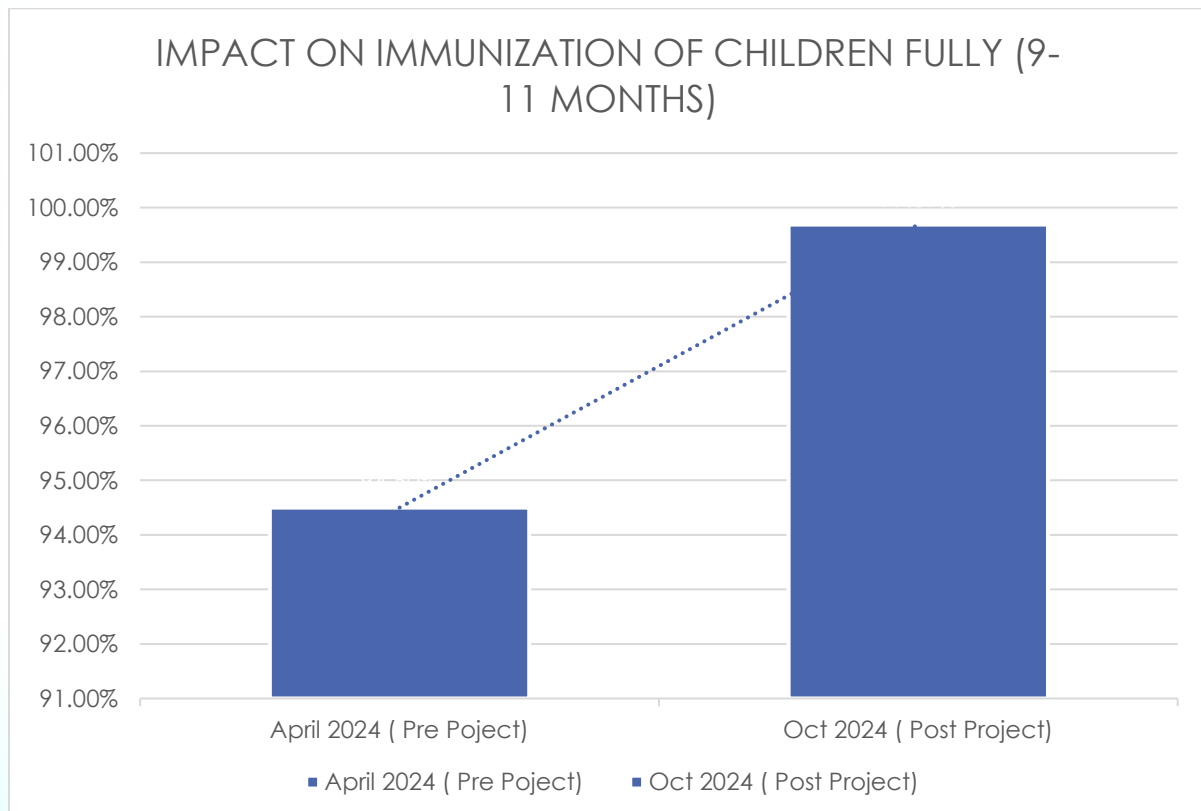
- **Anemia Monitoring and Early Intervention:**

- AWWs were trained on nutrition education and the importance of providing iron-rich foods to prevent anemia. The Poshan Tracker app allowed for continuous monitoring of children’s hemoglobin levels.
- **Equipment Utilization:**
  - **Hemoglobin Meter:** The use of hemoglobin meters enabled workers to test children’s hemoglobin levels frequently, ensuring that any child with anemia received immediate nutritional intervention or supplementation.
  - **Hemoglobin Meter Strips:** The consumable strips allowed for multiple tests, ensuring continuous monitoring and early detection, leading to timely interventions to manage anemia.

## 4.2 IMPACT ON IMMUNIZATION OF CHILDREN FULLY (9-11 MONTHS)

Indicator Improvement: Increased from 94.50% (4,618 out of 4,887) in April to 99.69% (4,872 out of 4,887) in October, showing a 5.19 percentage point improvement.

Chart 12: 4.1 IMPACT ON IMMUNIZATION OF CHILDREN FULLY (9-11 MONTHS)



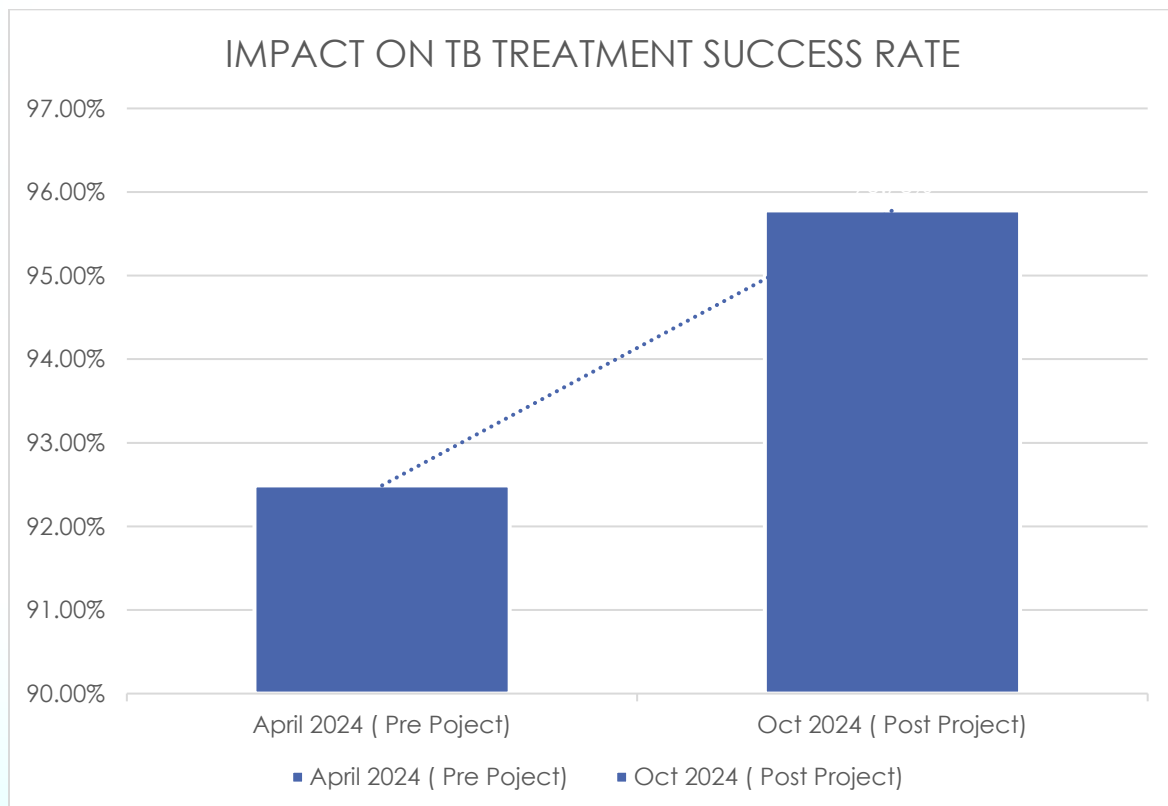
#### KEY PROJECT ACTIVITIES LEADING TO THIS IMPROVEMENT:

- **Immunization Drives during VHSND**
  - AWWs conducted targeted awareness campaigns to ensure full immunization schedules were followed.
- **Tracking and Reporting**
  - Poshan Tracker helped monitor immunization status, enabling timely reminders and follow-ups.
- **Community Collaboration**
  - Events and engagement with local leaders encouraged families to prioritize vaccinations.

### 4.3 IMPACT ON TB TREATMENT SUCCESS RATE

Indicator Improvement: Increased from 92.49% (271 out of 293) in April to 95.78% (318 out of 332) in October, showing a 3.29 percentage point improvement.

Chart 13: 4.1 IMPACT ON TB TREATMENT SUCCESS RATE



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**KEY PROJECT ACTIVITIES LEADING TO THIS IMPROVEMENT:**

- **Health and Hygiene Training:**
  - AWWs, AWHs & Asha Workers educated families on TB symptoms, prevention, and the importance of treatment adherence.
- **Equipment Utilization:**
  - Thermometers and BP machines allowed workers to monitor TB patients' health and detect complications early.

#### **4.4 INCREASED ATTENDANCE IN AWC SESSIONS**

Child-centered learning techniques and community engagement activities led to a 2% increase in attendance, bringing it to 93.49% by October 2024, up from April 2024.

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**KEY PROJECT ACTIVITIES LEADING TO THIS IMPROVEMENT:**

Interactive teaching methods, such as play-based learning and the use of visual aids, along with a focus on gender inclusivity and family engagement, fostered greater interest among children and their parents. These efforts were further supported by enhanced community outreach during Poshan Maah and Village Health Sanitation and Nutrition Days (VHSND), where parents were actively involved in their children's educational progress.

#### **4.5 INCREASE IN DIGITAL LITERACY AND POSHAN TRACKER USAGE**

Digital literacy training, focusing on the Poshan Tracker app, led to an increase in incentive eligibility among AWWs from 57% in September 2023 to 75.55% in October 2024.

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**KEY PROJECT ACTIVITIES LEADING TO THIS IMPROVEMENT:**

The focus on training AWWs in digital tools, particularly the Poshan Tracker, allowed for more accurate recording of nutrition data, improving real-time monitoring and interventions. AWWs were empowered to track children's growth, identify malnutrition cases early, and engage with local health authorities, contributing to better nutritional outcomes. This increased digital proficiency also unlocked higher incentive eligibility for AWWs, further motivating their participation and performance.

#### 4.6 IMPROVED OPERATIONAL EFFICIENCY OF AWCS

Based on the endline survey, the regular opening of centers on time increased by 91%, and the ability of Sevikas (AWWs) to conduct well-structured sessions improved by 40%.

##### KEY PROJECT ACTIVITIES LEADING TO THIS IMPROVEMENT:

The three-month training program equipped AWWs with advanced teaching methods, classroom management strategies, and the use of educational aids. The integration of **Building as Learning Aid (BaLA)** to create visually stimulating environments in AWCs further enhanced the learning experience, ensuring that centers opened on time and sessions were well-organized, fostering better learning outcomes.

#### 4.7 INCREASED TOTAL ENROLMENT OF AWC AND PRIMARY SCHOOLS

As of October 2024, 70,401 children aged 3-6 years were enrolled in AWCs across Bokaro, reflecting a drastic increase compared to pre-intervention levels.

##### KEY PROJECT ACTIVITIES LEADING TO THIS IMPROVEMENT:

Enhanced infrastructure, including BaLA painting, and the improved teaching capabilities of AWWs contributed to a more engaging and educationally rich environment. This, in turn, attracted more children to enroll in AWCs, with many parents opting for early childhood education programs due to the perceived improvements in quality.

#### 4.8 INCREASED OPERATIONAL EFFICIENCY IN AWCS

Improved infrastructure, such as BaLA painting, and the enhanced teaching capacities of AWWs led to higher attendance and class participation.

##### KEY PROJECT ACTIVITIES LEADING TO THIS IMPROVEMENT:

The introduction of visually appealing learning spaces (BaLA) and training in child development and interactive teaching methods improved the overall quality of ECCE delivery, which directly resulted in better attendance and more engaged participation from children during sessions.

#### 4.9 INCREASED ENROLMENT & ATTENDANCE OF GIRL CHILDREN

The Beti Bachao Beti Padhao (BBBP) campaign led to a significant increase in enrolment, attendance, and class participation of girl children in AWCs and schools across Bokaro.

##### KEY PROJECT ACTIVITIES LEADING TO THIS IMPROVEMENT:

The campaign raised awareness about the importance of educating the girl child through community outreach activities, such as Nukkad Nataks, school competitions, and IEC materials. As a result, families became more receptive to sending their daughters to AWCs, leading to higher female enrolment rates and improved participation in educational activities.

#### 4.10 INCREASED SANITATION AMONG STUDENTS IN AWCS & SCHOOLS

151 AWCs were equipped with sanitation-related murals and educational posters through the Building as Learning Aid (BaLA) initiative, contributing to improved hygiene among students.

##### KEY PROJECT ACTIVITIES LEADING TO THIS IMPROVEMENT:

BaLA murals focused on key sanitation practices like handwashing, waste disposal, and personal hygiene, acting as constant visual reminders for both children and caregivers. These interventions fostered better hygiene habits among children, thereby improving overall health and sanitation outcomes in AWCs.

#### 4.11 INCREASED SANITATION AMONG FAMILY MEMBERS OF CHILDREN

A village-to-village sensitization campaign, led by the Sanitation Committee of Bokaro and the DC Bokaro, contributed to increased sanitation awareness among families.

##### KEY PROJECT ACTIVITIES LEADING TO THIS IMPROVEMENT:

The sensitization campaign targeted families of children enrolled in AWCs, educating them on the importance of sanitation in maintaining good health.

## CHAPTER 5: KEY OTHER FINDINGS OF STUDY

Following were major findings of the Endline Survey which was conducted for Training Projects of AWWs & AWHs as per the report from the PIA:

### **Success in Sensitizing Early Childhood Care and Education among AWW and Parents.**

Assessment done by the agency post the completion of the initiative shows a drastic improvement in ECCE indicators such as Physical and motor development, Cognitive development, Socio-emotional-ethical development, Cultural/artistic development, Communication and early language, literacy and numeracy, Social capacities, sensitivity, good behavior, courtesy, ethics, personal and public cleanliness, teamwork, and cooperation.

Before the training program, only 16% of Anganwadi workers and 14% of Anganwadi helpers knew the importance of ECCE and ways to support it. Assessment data post-completion of the project shows that the number increased to 76% of Anganwadi workers and 68% of Anganwadi Helpers.



### **Early Grasp in Foundational Literacy and Numeracy.**

The training curriculum inculcated the ECCE Improvement activities in Anganwadi's day-to-day routine through multiple initiatives such as Building Learning Aid (BaLA) paintings, Early Simulation Activities, and understanding and effective use of mother and child protection cards. These initiatives helped the children quickly understand basic letters, numbers, gestures, etc.

### **Overcoming the Major Challenges in Imparting ECCE.**

After the completion of the training and their understanding of ECCE, every AWW and AWH acknowledged their challenges in conducting practical ECCE activities. Out of many challenges, significant difficulties were that 34% said there was a lack of parental involvement, 28% said there was a lack of resources, and the remaining said other reasons such as indulgence in other tasks given to AWW, mobility issues, etc.

To work on these issues, we started to fill the resource gaps in Anganwadi centers by providing items such as 825 adult weight scales, 825 newborn weight scales, 1,775 hemoglobin meters, 38,000 hemoglobin meter strips, 825 Ambu bags, 825 nebulizers, 1,775 blood pressure monitors, 1,775 thermometers, and 2,027 ANC tables.

To increase parental involvement in Anganwadi centers, we first focused on Re-branding Anganwadis from "feeding centers" to centers of early childhood education. Multiple training and workshops were organized for parents on child nutrition, hygiene, and early education. Parents were involved in activities like storytelling, art-making, educational games, reading, etc,

This involvement helped children not only receive additional support but also firsthand witnessing the value placed on education in their family unit. Furthermore, parental participation in learning activities strengthened the bond between parents and children, which helped in meaningful interactions that contributed to the child's overall development.

### **Increase in both Child Attendance and Parental Participation.**

The end-line assessment revealed a notable improvement in both child attendance and parental involvement. The data shows that 72% of the AWW have acknowledged that there is more than that 66% increase in average attendance in all Anganwadi centers. Increased attendance also ensures that children receive daily nutrition, enhancing their overall health. Additionally, greater parental participation will ultimately contribute to the sustainability of the Anganwadi.

### **Augmented Growth Monitoring Mechanism and Community Involvement.**

The endline assessment also shows that 72% of AWW have acknowledged that growth monitoring mechanisms are conducted more frequently and smoothly, and 64% of AWW dished out that there is an increase in community involvement in regular VHSND activities.

## **Qualitative Impact found based FGDs conducted**



## **Enhanced Quality of Early Childhood Care and Education (ECCE)**

The curriculum was enriched with child-centered and interactive learning methods, which were new to most Anganwadi centers. By shifting from rote learning to activity-based approaches (like storytelling, role-playing, and circle time), workers could create a stimulating environment for children. Teaching-Learning Materials (TLMs), such as flashcards and visual aids, were developed to cater to the specific developmental needs of children aged 3-6 years. These materials made lessons more accessible, engaging, and suited to early childhood learning needs.

- Outcome: This led to a noticeable improvement in classroom engagement, with children showing higher participation and learning retention. The interactive methods fostered foundational literacy and social skills, enhancing the overall quality of ECCE in Bokaro's Anganwadi centers.

## **Improved Health and Nutrition Monitoring through the Poshan Tracker App**

Training on the Poshan Tracker app empowered workers to record and monitor critical data such as children's height, weight, and nutritional status, enabling them to identify malnutrition or stunting cases early. The app provided real-time data reporting to local health authorities, facilitating swift interventions when needed. Additionally, workers were trained on using the data for analytical purposes, allowing them to recognize trends and monitor each child's progress over time.

- Outcome: With accurate, timely data, Anganwadi centers improved health outcomes by addressing nutritional gaps faster. The Poshan Tracker app also increased accountability and allowed Anganwadi Workers to offer personalized health guidance to parents, contributing to healthier childhoods.

## **Stronger Community Ties and Increased Parental Involvement**

The training emphasized community engagement, teaching workers to actively involve parents in their children's early learning journey. This included organizing workshops on topics like nutrition, hygiene, and child development milestones, as well as guiding parents on creating supportive home environments for children's growth. The program encouraged regular parent-teacher interactions and community health days (like VHSND), promoting a sense of shared responsibility for child well-being.

- Outcome: Parental participation increased as parents began to understand the value of ECCE and nutrition for their children's future. This close-knit engagement led to better attendance and consistent follow-through on nutrition and health practices at home, reinforcing the efforts made in Anganwadi centers.

## **Empowerment and Skill Recognition for Women**

DMFT Bokaro's focus on Recognition of Prior Learning (RPL) was essential in validating the years of experience and knowledge that Anganwadi Workers already possessed. The training built on their skills with new teaching methods, digital tools, and leadership techniques, reinforcing their sense of purpose and professionalism. The gender lens in the curriculum, with emphasis on gender equality, equipped workers with the skills to advocate for equal opportunities and health benefits for all children, irrespective of gender.

- Outcome: The validation of prior skills boosted workers' confidence and standing in the community, while the advanced skills gave them tools to become more effective in their roles. This empowered group of predominantly female workers became better advocates for community health and education, reinforcing their role as respected, informed leaders.

### **Increased Efficiency in Health and Hygiene Practices**

Health and hygiene training, coupled with regular health check-ups and the inclusion of sanitary protocols, enabled AWWs to implement daily practices that protect children from common illnesses. Training on first aid and emergency response further prepared workers to address minor injuries or health issues on-site, reducing health risks for children.

- Outcome: Improved hygiene practices, including consistent handwashing and food safety measures, contributed to a healthier environment for children. This created a foundation for lifelong health habits, significantly reducing the occurrence of hygiene-related illnesses in Anganwadi centers.

### **Real-Time Data Tracking and Enhanced Accountability**

The Poshan Tracker app, along with digital data entry training, allowed workers to update records in real-time. This provided transparency in health and nutrition metrics and enabled Anganwadi supervisors and local authorities to have immediate access to accurate data on child health, allowing for informed decision-making and quick responses to emerging health needs.

- Outcome: Real-time data tracking improved the accountability of Anganwadi Workers, ensuring that each child's nutritional and health needs were continuously monitored. This transparency fostered a responsive system where immediate action could be taken for children showing signs of nutritional deficiency or delayed growth.

## CHAPTER 6: RECOMMENDATIONS

One of the major findings and challenges, which has come across during the study, was the lack of awareness of the projects being sanctioned from DMFT among beneficiaries at the ground level. The scheme outcomes are currently driven by a supply-side push with minimal demand-side push-in force. Therefore, a meeting with AWWs, AWHs, Asha Workers is needed for their sensitization about the project and DMFT.

While improvements have been observed in various health indicators, certain areas such as underweight children, stunted children, and severe acute malnutrition (SAM) still show limited progress. To further enhance the project's impact, the following recommendations are suggested:

### **1. Enhanced Nutritional Support and Awareness:**

- Expand and intensify community-level education on balanced diets and locally sourced, nutritious foods. Target more vulnerable groups, particularly families of underweight and stunted children, through additional workshops and awareness campaigns.
- Strengthen the integration of nutrition education with local health programs, ensuring that dietary interventions are tailored to the region's needs.

### **2. Timely Nutritional Interventions:**

- Introduce a more systematic follow-up mechanism for children identified with malnutrition or underweight, ensuring they receive continued nutritional interventions until they reach healthy weight and development benchmarks.
- Increase access to therapeutic foods and supplements for children showing early signs of malnutrition, including in areas where progress is slow.

### **3. Regular Equipment Utilization:**

- Ensure regular calibration and maintenance of monitoring equipment (e.g., weight scales, hemoglobin meters) to enhance accuracy and reliability, especially for detecting early signs of malnutrition.

- Broaden the use of health monitoring technologies like the Poshan Tracker app to track nutritional progress over time and generate alerts for timely interventions.

#### **4. Targeted Health Interventions for SAM and Stunting:**

- Initiate specialized training for AWWs, AWHs, and ASHA workers to focus on addressing SAM and stunting, with emphasis on early detection and intervention.
- Establish a system of referrals to higher health centers for severe cases that require urgent care or specialized treatment.

#### **5. Strengthened Stakeholder Engagement:**

- Involve local community leaders and influencers in health campaigns to increase engagement and overcome cultural barriers, particularly for issues like institutional deliveries and early antenatal care (ANC) registration.
- Continue to focus on family involvement, particularly in breastfeeding and postnatal care, to ensure the sustainability of interventions.

#### **6. Regular Monitoring and Evaluation:**

- Enhance data collection and analysis for more granular tracking of health indicators, particularly in areas where impact remains minimal. This will help in identifying gaps and optimizing intervention strategies.
- Conduct periodic assessments and refine training modules to incorporate the latest research on maternal and child nutrition and health practices.

## CASE STUDIES FROM THE FIELD

A few stakeholders of each project activity have given following testimonials:

### TESTIMONIAL



**Shakra Khatun**

**AWW**

"I am an Anganwadi worker, and after receiving ECCE (Early Childhood Care and Education) and VHSND (Village Health, Sanitation, and Nutrition Day) training, I feel more confident and capable. These trainings have taught me how to take better care of children's growth and learning. I now know how to engage children with fun activities that help in their development and how to guide mothers on health and nutrition. This training has made my work easier and more effective in improving the well-being of the community."

BASGODA PASCHIMI, BS CITY,

### TESTIMONIAL



**Arati Paswan**

**AWW**

"I am very thankful for the ECCE training. It has taught me new ways to teach and care for young children. I learned fun activities that help children grow and learn better. This training made me more confident and skilled in my work as an Anganwadi worker. Now, I can support the children's development with more love and knowledge."

NAGAR NIGAM, BS CITY  
BOKARO

### TESTIMONIAL



**Farida Khatun**

**AWH**

"I am very happy after attending my first ECCE and VHSND training. I learned new ways to teach young children and take better care of their health. This training has given me more confidence to help children grow and develop in a healthy way. I feel proud to use these skills in my work."

BASGODA PASCHIMI, BS CITY,  
BOKARO

### TESTIMONIAL



**Gulshan Praveen**

**AWH**

"As an Anganwadi helper, the ECCE and VHSND training has been very helpful for me. It taught me how to engage better with children and help their early learning in fun ways. I also learned to guide mothers on health and nutrition during VHSND sessions. This training has made me feel more confident and capable in my work, and I am happy to support my community better."

BASGODA PASCHIMI, BS CITY,  
BOKARO

## TESTIMONIAL

**Hema Kumari****AWH**

"As an Anganwadi worker, the training on Early Childhood Care and Education (ECCE) and Village Health, Sanitation, and Nutrition Day (VHSND) has been very helpful for me. It taught me how to better support the growth and learning of young children and how to ensure the health and well-being of mothers and kids. The training was simple to follow and has made my work easier and more effective. Now, I feel more confident in helping the community and guiding families for better health and education."

BASGODA PASCHIMI, BS CITY,

## TESTIMONIAL

**Laxmi Devi****AWH**

"I am very happy with the ECCE training. It has taught me new ways to help children learn through play and activities. I feel more confident in my work, and I see the children enjoying and learning better. This training is very helpful for my role as an Anganwadi helper."

BS CITY, BOKARO

## TESTIMONIAL

**Parwati Devi****AWW**

"The ECCE training provided by MEPSC has been a transformative experience for us Anganwadi Sevikas. It has equipped us with practical knowledge, engaging teaching strategies, and innovative tools to enhance early childhood education. The training sessions were interactive and tailored to meet our needs, making it easier to implement what we learned in our day-to-day activities. Thanks to MEPSC, we now feel more confident in creating a nurturing and stimulating learning environment for young children, fostering their growth and development effectively."

BS CITY, BOKARO

## TESTIMONIAL

**Pratima Kumari****AWW**

"As an Anganwadi worker, I found the ECCE (Early Childhood Care and Education) and VHSND (Village Health, Sanitation, and Nutrition Day) training very helpful. It taught me better ways to support children's early learning and health. I learned new activities to help kids learn through play and important health tips to share with parents. The training made my work more effective and improved the well-being of children in our community."

NAGAR NIGAM, BS CITY  
BOKARO

## CONCLUSION

The DMFT project in Bokaro has led to significant improvements in education, health, hygiene, and sanitation. Key activities such as training Anganwadi Workers (AWWs) and Helpers (AWHs), enhancing infrastructure, and distributing essential medical equipment have strengthened operational efficiency, Women & Child Development & Health Outcomes.

The focus on child-centered learning, gender equality, and digital literacy, particularly through the Poshan Tracker app, has empowered AWWs to improve health and nutrition outcomes. Additionally, the integration of sanitation practices through initiatives like Building as Learning Aid (BaLA) and community campaigns has enhanced hygiene standards in both AWCs and households.

The Beti Bachao Beti Padhao (BBBP) campaign further contributed to increased enrolment and attendance of girls in schools. Overall, the project has successfully improved the quality of life for women and children in Bokaro, with a lasting impact on education, health, and community well-being.

