

2025-2026



IMPACT REPORT

MUSKAAN ECCCS (EARLY CHILDHOD CARE CENTRES)

SAGAR & GHORAMARA ISLANDS

SUNDERBAN, SOUTH 24 PARGANAS, WEST BENGAL

SUBMITTED TO:

STATE BANK OF INDIA FOUNDATION (SBIF)
(FUNDING PARTNER)



SUBMITTED BY:

SEED (SOCIETY FOR SOCIO ECONOMIC & ECOLOGICAL DEVELOPMENT)
(IMPLEMENTING PARTNER)



ACKNOWLEDGEMENT

SEED extends its sincere gratitude to all individuals, institutions and community members whose collective efforts made the successful implementation of the SBIF Muskaan – Early Childhood Care Centres (ECCCs) Project possible during the period March 2025 to February 2026.

We express our deep appreciation to **SBI Foundation** for their generous support under the Muskaan vertical and for their continued trust in SEED's community-led approach. SBI Foundation's commitment to child well-being has been instrumental in enabling the establishment and operation of two ECCCs. We also acknowledge the guidance and engagement of **Ms. Rudrani Guha, Assistant Manager, SBI Foundation**, whose support and coordination contributed meaningfully to the smooth implementation and reporting of the project.

We gratefully acknowledge the leadership and technical guidance of **Dr. Somnath Bhattacharya**, and the strategic direction and programme oversight provided by **Mrinal Bhattacharya**. The compilation of this impact report was led by **Alima Ahmad**, ensuring systematic documentation of learning and outcomes.

Our heartfelt appreciation goes to the dedicated project implementation team **Surajit Singh Mahapatra (Project Coordinator), Kaberi Banarjee & Projana Bhattacharya (Counsellors), Sefali Mandal & Mrinmoyee Patra (Community mobilizers)** and ECCCs staff **Trishna Bera, Suranjana Ghorai, Sulekha Jana & Labani Maity (ECCCs Educators), Tufan Barui & Kamalika Guria (Centre Supervisors), Anita Dalapati and Tapasi Bhunia (Cooks)** and **Lakxmi Mahata Patra & Supriya Bera (Helpers)**; whose consistent presence, compassion and professionalism created nurturing environments for children and built strong relationships with parents and caregivers. Their efforts laid the foundation for trust, routine and quality early childhood care.

We also acknowledge the valuable cooperation of **AWWs, ASHAs, ICDS functionaries and local health personnel**, whose engagement and collaboration strengthened service convergence. SEED extends its gratitude to the **local Panchayats and Child Advisory Committees (CACs)** for their guidance, oversight and support, which ensured transparency, accountability and community ownership of the centres. Finally, we thank the **parents, caregivers and children** of the project communities, whose active participation, trust and openness to learning remain the true drivers of this initiative's impact.

The progress achieved in Year 1 reflects the power of collaborative action and SEED looks forward to deepening this partnership with SBI Foundation and community stakeholders in the years ahead to ensure lasting outcomes for young children and their families.

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EXECUTIVE SUMMARY

The inaugural year of the Muskaan Early Childhood Care Centres (ECCCs) initiative represents a transformative milestone in integrated early childhood development for climate-vulnerable communities in the Sundarbans. Operating from March 2025 to February 2026, two ECCCs—at Raypara (Ghoramara Island) and Radhakrishnapur (Sagar Island)—successfully delivered comprehensive, evidence-based interventions addressing the intersecting challenges of malnutrition, health vulnerability, educational deprivation, and psychosocial trauma among 100 children from displaced, marginalized families.

Against a baseline characterized by 25% moderate undernutrition, <10% age-appropriate learning readiness, 40% severe separation anxiety, and systemic gaps in ICDS service delivery, the Muskaan model achieved remarkable outcomes through integrated nutrition support, preventive healthcare, structured pre-primary education, trauma-informed psychosocial care, and sustained parental engagement.



The project also prioritised community engagement and system strengthening, establishing Child Advisory Committees (CACs), engaging Anganwadi Workers (AWWs), ASHAs, and ICDS stakeholders, and positioning the ECCCs as demonstration models for quality early childhood care.

An internal impact assessment was conducted by SEED with leadership and technical guidance from Dr. Somnath Bhattacharya and Mrinal Bhattacharya, and report compilation by Alima Ahmad. The assessment employed a mixed-methods approach, combining quantitative monitoring with qualitative insights.

Early evidence indicates improved attendance, enhanced learning readiness, better nutrition and hygiene practices, strengthened parental engagement and growing community ownership. Year 1 focused on establishing strong foundations –systems, routines, trust and capacities; laying the groundwork for deeper developmental outcomes in subsequent years.

The Muskaan model demonstrated that high-quality, integrated early childhood care is achievable and sustainable even in resource-constrained, climate-vulnerable settings when interventions are culturally rooted, community-owned and systematically delivered. This impact assessment documents measurable outcomes, transformation stories, systemic strengths, operational learnings, and recommendations for scale-up and replication.



IMPACT STUDY TEAM

Name	Role	Outcome Domain/ Responsibilities
Dr. Somnath Bhattacharya	Technical & Methodology Advisor	Oversight of assessment framework, tools, indicators and validation of findings
Mrinal Bhattacharya	Programme Oversight & Quality Assurance	Review of outcomes against project objectives, ToC alignment and interpretation
Papai Dutta	Education Outcome Assessor	Foundational Literacy & Numeracy (FLN), learning routines, school readiness
Dr. Antora Dhar Gupta	Health & Nutrition Outcomes Assessor	Child health, nutrition status, growth, health service convergence
Surajit Singh Mahapatra	Community & Parental Engagement Assessor	Parental participation, CAC functioning, community ownership
Projana Bhattacharya	Psychosocial Outcomes Assessor	Emotional wellbeing, behaviour change, confidence and social interaction
Alima Ahmad	Report Compilation & Evidence Synthesis	Data collation, narrative analysis, documentation and reporting

The Year 1 impact assessment was conducted as an internal assessment by SEED, drawing on programme leadership, technical guidance and structured inputs from the field implementation team. The assessment combined routine monitoring data with reflective reviews at the centre and community levels.



CONTEXT AND RATIONALE

1.1 Climate Vulnerability and the Child Development Crisis

The Sundarbans, a UNESCO World Heritage Site comprising more than 100 low-lying islands and home to over 4.5 million people, is among India's most ecologically fragile and socio-economically marginalised regions. Islands such as Ghoramara and Sagar exemplify the severity of climate-induced vulnerability. Ghoramara's landmass has shrunk dramatically—from 9.09 sq. km in 1972 to 3.56 sq. km in 2015—while Sagar Island has lost approximately 50.4 sq. km between 1951 and 2015 due to erosion and sea-level rise. With sea levels rising at an estimated rate of 8 mm annually and frequent cyclones striking the region, communities experience repeated displacement, livelihood disruption, and psychosocial stress.

More than 2,250 climate-affected families have been displaced from Ghoramara and hundreds of refugee families on Sagar Island live without secure access to safe drinking water, sanitation or cultivable land. These recurring shocks create conditions of chronic insecurity that disproportionately affect young children, whose early developmental years are shaped by instability, trauma and deprivation.

1.2 Early Childhood Deprivation in Climate-Affected Communities

Children aged 0–6 years in the Sundarbans face layered vulnerabilities that directly undermine their survival, development and learning potential. Malnutrition remains widespread, with nearly 39 percent of children underweight and one in three experiencing chronic malnutrition. High soil salinity, declining agricultural productivity and climate induced poverty restrict access to diverse and nutritious food, resulting in widespread micronutrient deficiencies.

Health outcomes are equally concerning. Respiratory infections, diarrhoeal diseases and skin ailments are prevalent, often exacerbated by saline-contaminated water sources and inadequate hygiene infrastructure. These health challenges disrupt regular attendance in early learning spaces and further weaken developmental outcomes.

Despite high enrolment under ICDS, early childhood education outcomes remain weak. Only about 45 percent of children aged 3–6 years are effectively engaged in pre-primary education. While approximately 75 percent of children are registered at Anganwadi Centres, consistent attendance drops to nearly 39 percent due to irregular service delivery, caregiver absenteeism, overburdened infrastructure and the absence of structured, age-appropriate early learning curricula. Behaviour change communication with parents on nutrition, hygiene, stimulation and caregiving practices is also limited, reducing the effectiveness of existing services.

1.3 Programme Rationale and Response

The SBIF Muskaan ECCCs were conceptualised as a targeted response to these intersecting challenges, with the objective of strengthening holistic early childhood development outcomes for children aged 2–6 years in climate-vulnerable communities.

The programme was designed to complement and reinforce existing ICDS services by demonstrating a quality, community-led model of early childhood care that integrates nutrition, health, learning, psychosocial support and parental engagement.



The ECCCs provide daily nutritious meals and age-appropriate supplementation, regular health monitoring and preventive care, structured Foundational Literacy and Numeracy (FLN) activities for older children and play-based learning for younger age groups. Recognising the psychosocial toll of displacement and recurrent disasters, the programme incorporates trauma-informed psychosocial support for children and caregivers. Sustained parental engagement and capacity-building sessions strengthen caregiving practices at the household level, while community governance through Child Advisory Committees (CACs) ensures transparency, accountability and local ownership.

1.4 Project Objective and Theory of Change

The primary objective of the Muskaan ECCCs project is to improve nutritional, health, psychosocial and early learning outcomes for vulnerable children aged 2–6 years by creating safe, consistent and developmentally supportive environments in climate-affected regions.

The programme's theory of change rests on the premise that if young children receive regular nutrition, structured early learning, psychosocial care and health support within safe spaces, and if parents and communities are equipped with knowledge and shared responsibility, then children will demonstrate improved developmental outcomes despite external climate stresses. By anchoring ECCCs within community-led governance structures and aligning them with existing public systems, these gains can be sustained and scaled, strengthening resilience at both child and community levels.





GEOGRAPHIC COVERAGE AND BENEFICIARY PROFILE

- Number of ECCC- 2
- ECCC Locations- Radhakrishnapur (Sagar Island) and Raypara (Ghoramara Island), Sundarbans, West Bengal
- Total Children Enrolled- 100
- Children per ECCC- 50 each
- Age Group Covered- 2–6 years
- Gender Composition (Overall): 52 girls, 48 boys
- Primary beneficiaries- Children from climate-affected, low-income households
- Secondary beneficiaries- Parents/caregivers, AWWs, ASHAs, ICDS staff

Profile of Beneficiary Households

The primary beneficiaries of the project are children from climate-affected, low-income households, many of whom belong to families that have experienced repeated displacement due to coastal erosion, cyclones and saline intrusion. A significant proportion of these households are either climate refugees or families living on the margins of eroding islands, with insecure housing, limited access to basic services and high livelihood uncertainty.

Most beneficiary households depend on informal and seasonal livelihoods such as daily wage labour, fishing, small-scale agriculture, crab collection or migration-based work. Income instability is common, resulting in irregular food intake, limited dietary diversity and reduced ability to invest in early childhood care and education.

Women in these households often shoulder the dual burden of caregiving and income generation, with minimal access to institutional support systems.

Centre-wise Beneficiary Profile

Sagar Island ECCC- The ECCC located on Sagar Island enrolled 50 children, comprising 26 girls and 24 boys. Of these, 29 children were in the 2–4 years age group and 21 children were in the 4–6 years age group. Notably, 8 children belonged to Lodha tribal households, reflecting the project's inclusion of particularly marginalised and indigenous communities.

Ghoramara Island ECCC- The ECCC located on Ghoramara Island, one of the most erosion-affected islands in the Sundarbans, also enrolled 50 children, with 26 girls and 24 boys. The age distribution included 20 children aged 2–4 years and 30 children aged 4–6 years.

Secondary Beneficiaries and System-Level Reach

In addition to children, the project directly engages parents and caregivers, strengthening their capacity in nutrition, hygiene, responsive caregiving and early stimulation through regular workshops and interactions. The ECCCs also serve as learning and demonstration spaces for Anganwadi Workers (AWWs), ASHAs and ICDS functionaries, enabling knowledge exchange, improved coordination and reinforcement of quality ECCE practices.

At the community level, Child Advisory Committees (CACs) and local governance structures are engaged to ensure accountability, transparency and sustainability of services.

Through this multi-layered beneficiary approach, the project extended its impact beyond enrolled children to influence household practices and strengthen early childhood systems within the project geography.





IMPLEMENTATION FRAMEWORK AND GOVERNANCE

6.1 Implementation Framework

The Muskaan ECCCs project follows a child-centred, community-anchored implementation framework that integrates service delivery with governance, capacity building and system convergence. The framework is designed to ensure continuity of care, quality of services, and local ownership; particularly in climate-vulnerable contexts where institutional disruption is frequent.

At the centre of implementation are the ECCCs, which function as safe, structured spaces providing daily nutrition, early learning, health and psychosocial support. These centres are supported by trained educators, counsellors and supervisors and are closely linked to parents, community members and frontline government systems.

6.2 Governance through Child Advisory Committees (CACs)

To ensure accountability and community ownership, Child Advisory Committees (CACs) were constituted for each ECCC. CACs comprise 10 members including parents representative, community elders, ASHAs, AWWs and panchayat. Monthly CAC meetings are held to review attendance, nutrition quality, hygiene standards, safety, and child well-being. CACs functioned as:

- Oversight bodies for centre functioning
- Platforms for grievance redressal and feedback
- Community interfaces for strengthening trust and transparency

Their involvement ensured that ECCCs were not perceived as external interventions but as shared community assets.

6.3 ECCC Muskaan – Activity /Interventions Conducted 2025-26 (Year 1)

The table below presents an overview of the activity conducted under the SBIF Muskaan Early Childhood Care Centres (ECCCs) covering both locations during April 2025 till February 2026. It outlines the frequency, scope and delivery modalities of core ECCE services, including daily centre-based routines, periodic health and nutrition interventions and community engagement activities.

This structured schedule ensured regularity of services, alignment with national child health and nutrition protocols and effective convergence with ICDS and public health systems, while responding to the specific needs of children and families in climate-vulnerable contexts.

Frequency	Activity / Intervention	Nos. Conducted (Across 2 Centres)
Daily	Mid-day meals	All working days
	FLN sessions (4–6 years)	All working days
	Play-based learning (2–3 years)	All working days
	Psychosocial activities	All working days
Monthly	Parental workshops	22
	CAC meetings	20
	Expert-led counselling sessions	8
	Special day celebrations	15
Quarterly	Nutrition assessments	8
	Micronutrient food packet distribution	8
	Child health camps	8
	Maternal health camps	10
	Breastfeeding workshops	8
	WASH workshops	8
Bi-annual	Vitamin A supplementation	2
	Deworming Drive	2
	Iron & Folic Acid (IFA)	As per protocol

A group of children in a schoolyard holding Indian flags and wearing matching hats.

IMPACT ASSESSMENT METHODOLOGY AND FINDINGS

1. IMPACT ASSESSMENT FRAMEWORK

1.1 Assessment Approach

The Year 1 impact assessment employed a mixed-methods longitudinal design combining quantitative measurements and qualitative evaluations to comprehensively assess the Muskaan ECCCs' effectiveness across multiple developmental domains. The assessment was conducted internally by the SEED team under the leadership and technical guidance of Dr. Somnath Bhattacharya (Executive Director) and Mr. Mrinal Bhattacharya (Programme Director), with coordination by Ms. Alima Ahmad (Senior Manager - Partnerships & Communications).

Assessment Design:

- Type: Pre-post comparative analysis using baseline (March 2025) and endline (February 2026) data
- Sample: Universal coverage - all 100 enrolled children and their families
- Duration: 12-month longitudinal tracking (March 2025 - February 2026)
- Frequency: Quarterly assessments for health and nutrition; monthly tracking for attendance and participation; continuous documentation for learning and psychosocial outcomes
- Data Collection: Structured tools, observational protocols, expert-led assessments, caregiver interviews, focus group discussions

1.2 Core Assessment Domains

Domain	Sub-Indicators	Assessment Frequency
School Readiness & Learning	FLN competencies, cognitive development, fine/gross motor skills, social readiness	Monthly tracking; Expert assessment at baseline and endline
Nutritional Status	Anthropometric measurements (height, weight, MUAC), dietary diversity, feeding practices	Baseline + Quarterly (8 assessments)
Child Health	Growth monitoring, morbidity, immunization coverage, developmental milestones	Quarterly health camps (8 camps)
Maternal Health	Nutritional status, reproductive health, mental wellbeing, health literacy	Baseline + Quarterly (7 camps total)
Psychosocial Wellbeing	Emotional regulation, separation anxiety, peer interaction, behavioral patterns	Baseline + Monthly observations + Expert assessments (8 sessions)
Parental Engagement	Workshop attendance, knowledge improvement, home practice adoption	Monthly tracking across 24 workshops
Community Participation	CAC functionality, ICDS convergence, community ownership indicators	Monthly CAC meetings (24 total)

1.3 Data Quality Assurance

Quality Control Measures:

- Standardization- All measurement tools calibrated; staff trained in standardized protocols
- Triangulation- Multiple data sources (direct observation, caregiver reports, expert assessments) for validation
- Documentation- Systematic record-keeping with digital and physical backups
- Supervision- Regular monitoring by SEED leadership ensuring data integrity
- Expert validation- Medical professionals, paediatricians and nutritionist reviewing findings



EARLY LEARNING & SCHOOL READINESS

Building strong foundations for lifelong learning

2. SCHOOL READINESS & LEARNING OUTCOMES

A. Foundational Literacy Assessment (Ages 4-6 years)

Assessment Component	Tool / Method	Measurement Criteria
Alphabet Recognition	Visual flashcards (English A-Z)	Independent identification without prompting
Letter Stroke Writing	Guided worksheets with dotted patterns	Correct stroke sequence and letter formation
Phonemic Awareness	Sound-symbol matching games	Ability to connect letters with corresponding sounds
Vocabulary Development	Picture-word association cards	Naming objects, colours, body parts and vehicles
Sentence Formation	Structured conversation prompts	Ability to form simple 3-5 word sentences
Self-Introduction	Oral presentation assessment	Stating name, age, village and parents' names

B. Foundational Numeracy Assessment (Ages 4-6 Years)

Assessment Component	Tool / Method	Measurement Criteria
Number Recognition	Numeric flashcards (1-20)	Independent identification and correct naming
Counting Skills	Object counting (beads, blocks, stones)	Accurate sequential counting from 1-20
Number Writing	Guided worksheets	Correct numeral formation
Quantity Concepts	Comparative tasks (more/less/equal)	Understanding and comparing quantities

C. Play-Based Developmental Assessment (Ages 2–4 Years)

Assessment Component	Tool / Method	Measurement Criteria
Fine Motor Skills	Bead threading, clay modelling, puzzles	Hand-eye coordination and precision
Gross Motor Skills	Yoga poses, movement games, obstacle play	Balance, coordination, body awareness
Language Development	Action rhymes, object naming	Vocabulary range and speech clarity
Cognitive Development	Shape/color sorting, pattern recognition	Classification and sequencing ability
Social-Emotional Skills	Group play observation	Peer interaction, sharing and cooperation

D. Expert-Led Comprehensive Assessment

Under supervision of Ms. Papia Dutta (Child Care & Protection Advisor) and Mr. Mrinal Bhattacharya (Programme Director) an assessment was conducted at both the centres for all enrolled children in December 2025:

- Oral Assessments (Ages 2-4)- One-on-one conversations evaluating vocabulary, comprehension, expression, number sense, color/shape recognition
- Written Assessments (Ages 5-6)- Structured worksheets testing letter/number writing, reading readiness, basic problem-solving

E. Hygiene & Self-Care Assessment

Skill Area	Assessment Method	Measurement Criteria
Handwashing	Direct observation during daily routines	Follows correct steps: wet, soap, scrub, rinse, dry
Toilet Use	Teacher reports and observation	Independently uses toilet facilities
Eating Habits	Mealtime observation	Uses utensils properly and follows eating hygiene
Personal Hygiene	Daily hygiene checklist	Clean hands and face, appropriate footwear use

2.3 Detailed Findings

2.3.1 Foundational Literacy Outcomes (Ages 4-6 years, n=52)

English Alphabet Proficiency

Metric	Baseline (May 2025)	Endline (February 2026)	Improvement
Recognize letters A-Z	<10% (5 children)	85% (44 children)	+75 percentage points
Write letter strokes correctly	0%	85% (44 children)	+85 percentage points
Associate sounds with letters	<5% (2 children)	78% (40 children)	+73 percentage points

Language & Communication Skills

Skill Area	Baseline	Endline	Progress
Self-introduction (name, age, village)	12%	87%	+75 pp
Form simple sentences (3-5 words)	8%	79%	+71 pp
Vocabulary: Colors (7 rainbow colors)	15%	88%	+73 pp
Vocabulary: Body parts (10 parts)	25%	92%	+67 pp
Vocabulary: Vehicles (car, bus, boat, train)	10%	83%	+73 pp
Vocabulary: Days of week	0%	69%	+69 pp
Vocabulary: Months (Jan-Dec)	0%	58%	+58 pp

2.3.2 Foundational Numeracy Outcomes (Ages 4-6 years, n=52)

Number Recognition & Counting

Metric	Baseline	Endline	Improvement
Recognize numbers 1-10	15%	90%	+75 pp
Recognize numbers 11-20	0%	85%	+85 pp
Count objects accurately (1-20)	12%	87%	+75 pp
Write numbers 1-10 correctly	8%	83%	+75 pp
Write numbers 11-20 correctly	0%	77%	+77 pp

2.3.3 Play-Based Learning Outcomes (Ages 2-3 years, n=48)

Developmental Milestones Achieved

Domain	Baseline Proficiency	Endline Proficiency	Improvement
Fine Motor Skills (bead threading, clay modeling)	22%	79%	+57 pp
Gross Motor Skills (yoga poses, balance)	35%	85%	+50 pp
Language Development (vocabulary 20+ words)	28%	81%	+53 pp
Cognitive Skills (color/shape sorting)	20%	76%	+56 pp
Social Skills (group play participation)	15%	73%	+58 pp

Specific Skill Progression

Skill Assessed	Baseline	Endline	Progress
Identify 5 basic colours (Red, Green, Blue, Yellow & Black)	25%	83%	+58 pp
Identify 4 basic shapes (Circle, Square, Triangle & Rectangle)	18%	77%	+59 pp
Complete 4-piece puzzle independently	12%	71%	+59 pp
Perform 3 yoga poses (Butterfly, Cat, Lion)	8%	75%	+67 pp
Sing 3+ action rhymes	20%	88%	+68 pp

2.3.4 Hygiene & Self-Care Independence

Hygiene Practice Adoption (All 100 children)

Practice	Baseline	Endline	Achievement
Wash hands before meals independently	30%	85%	+55 pp
Wash hands after toilet use	25%	82%	+57 pp
Use toilet facilities independently (4-6 yrs)	35%	83%	+48 pp
Use eating utensils properly	40%	88%	+48 pp
Brush teeth technique (demonstrated correctly)	15%	76%	+61 pp
Wear footwear consistently	45%	87%	+42 pp

2.3.5 Group Activity Participation & Social Readiness

Classroom Engagement Metrics

Behavioral Indicator	Baseline	Endline	Change
Participate in circle time activities	45%	89%	+44 pp
Volunteer responses during lessons	20%	72%	+52 pp
Complete activities without distraction	25%	68%	+43 pp
Follow multi-step instructions	22%	71%	+49 pp
Share materials with peers willingly	30%	81%	+51 pp
Take turns during games	28%	79%	+51 pp
Demonstrate patience while waiting	18%	65%	+47 pp

2.3.6 School Transition Outcomes

Children Mainstreamed to Formal Schools (n=15)

Centre	Number Transitioned	Age	Readiness Level
Ghoramara ECCC	12	7 years	High (all assessed school-ready)
Sagar ECCC	3	7 years	High (all assessed school-ready)

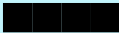
School Readiness Assessment Results (n=15)

Readiness Criteria	Children Meeting Criteria	Percentage
Age-appropriate literacy skills	15/15	100%
Age-appropriate numeracy skills	15/15	100%
Social-emotional readiness	14/15	93%
Hygiene independence	15/15	100%
Attention span adequate for class	14/15	93%
Communication confidence	15/15	100%

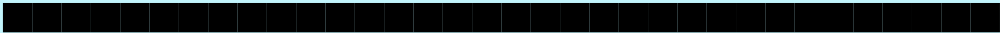
2.4 Learning Progress Visualization

LITERACY PROFICIENCY PROGRESSION (Ages 4-6)

Baseline (May 2025)
10%

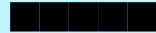


Endline (February 2026)
85%

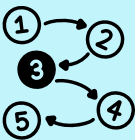


NUMERACY PROFICIENCY PROGRESSION (Ages 4-6)

Baseline (May 2025)
12%

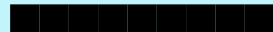


Endline (February 2026)
87%



PLAY-BASED DEVELOPMENT (Ages 2-3)

Baseline (May 2025)
22%

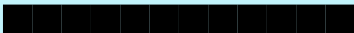


Endline (February 2026)
79%

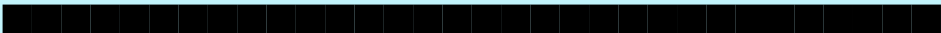


HYGIENE INDEPENDENCE (All Children)

Baseline (May 2025)
30%



Endline (February 2026)
80%+



2.5 Key Learning Achievements Summary

Achievement Category	Key Findings
Literacy Foundation	85% of children aged 4-6 years achieved independent mastery of bilingual alphabets (English A-Z, Bengali অ-খ) with correct stroke formation
Numeracy Foundation	87% demonstrated proficiency in recognizing and writing numbers 1-20
Language Development	87% could confidently introduce themselves; 79% formed simple sentences independently
Cognitive Skills	Significant improvements in classification, sequencing, problem-solving across age-appropriate tasks
School Readiness	100% of transitioned children (n=15) demonstrated adequate school readiness across literacy, numeracy, social-emotional, and self-care domains
Sustained Engagement	89% participation in group activities (from 45% baseline); 82% average daily attendance





CHILD NUTRITION

Ensuring daily nourishment for healthy growth

3. NUTRITIONAL STATUS ASSESSMENT

3.1 Assessment Methodology

A. Anthropometric Measurements

Measurement	Tool/Equipment	Protocol	Frequency
Height	Portable stadiometer (accuracy: ± 0.1 cm)	WHO standard protocol; shoes removed, heels together, head in Frankfort plane	Baseline + Quarterly (5 assessments)
Weight	Digital weighing scale (accuracy: ± 100 g)	Minimal clothing, calibrated before each session	Baseline + Quarterly (5 assessments)
MUAC (Mid-Upper Arm Circumference)	Color-coded MUAC tape	Left arm, midpoint between shoulder and elbow	Baseline + Quarterly (5 assessments)

B. Growth Indices Calculated

Index	Calculation Method	Interpretation Standards
Weight-for-Age (WAA)	Compared against WHO child growth standards	Z-scores: < -2 SD = Underweight
Height-for-Age (HAA)	Compared against WHO child growth standards	Z-scores: < -2 SD = Stunted
Weight-for-Height (WFH)	Compared against WHO child growth standards	Z-scores: < -2 SD = Wasted
BMI-for-Age	Weight (kg) / Height ² (m ²) compared to standards	Age-specific percentiles used

C. Clinical Assessment

Parameter	Method	Conducted By
Pallor (anemia indicator)	Visual examination of conjunctiva, palms	Pediatricians during health camps
Edema	Physical examination	Pediatricians during health camps
Skin/Hair Changes	Visual assessment for nutritional deficiency signs	Pediatricians during health camps
Developmental Delays	Age-appropriate milestone checklist	Pediatricians + educators

E. Assessment Team & Schedule

Assessment Round	Month	Conducted By	Children Assessed
Baseline	May 2025	ECCCs Staff	100
Q1 Follow-up	June 2025	Dr. Sweety Suman Jha	100
Q2 Assessment	Sep 2025	Dr. Aristro Lahiri + Dr. Sweety Suman Jha	100
Q3 Assessment	December 2025	Dr. Sanchita Roy (MD, Diamond Harbour Hospital)	100
Q4 Endline	February 2026	Dr. Antora Dhar Gupta	100

3.2 Detailed Findings

3.2.1 Anthropometric Outcomes

Malnutrition Prevalence Trends

Indicator	Baseline (May 2025)	Q2 (Sep 2025)	Q3 (Dec 2025)	Endline (Feb 2026)	Change
Moderate Undernutrition (Weight-for-Age)	25% (25 children)	19% (19 children)	15% (15 children)	13% (13 children)	-48% reduction
Mild Undernutrition	35% (35 children)	32% (32 children)	24% (24 children)	18% (18 children)	-49% reduction
Stunting (Height- for-Age)	28% (28 children)	26% (26 children)	22% (22 children)	19% (19 children)	-32% reduction
Wasting (Weight- for-Height)	18% (18 children)	14% (14 children)	10% (10 children)	8% (8 children)	-56% reduction

Anthropometric Progress by Centre

Centre	Baseline Moderate Undernutrition	Endline Moderate Undernutrition	Improvement
Ghoramara ECCC	14 children (28%)	7 children (14%)	-50% reduction
Sagar ECCC	11 children (22%)	6 children (12%)	-45% reduction

MUAC Classification Changes

MUAC Category	Baseline	Endline	Change
Severe Acute Malnutrition (<11.5 cm, Red)	3% (3 children)	0% (0 children)	-100%
Moderate Acute Malnutrition (11.5-12.5 cm, Yellow)	22% (22 children)	9% (9 children)	-59%
Normal (>12.5 cm, Green)	75% (75 children)	91% (91 children)	21%

3.2.2 Growth Velocity Analysis

Average Monthly Weight Gain (by age group)

Age Group	Expected Gain	Observed Gain (ECCCs)	Status
2-3 years	150-200g/month	185g/month	Adequate
3-4 years	120-150g/month	142g/month	Adequate
4-5 years	100-140g/month	128g/month	Adequate
5-6 years	100-130g/month	119g/month	Adequate

Average Linear Growth (Height gain per quarter)

Quarter	Expected Growth	Observed Growth	Status
Q1 (Apr-Jun)	1.5-2.0 cm	1.8 cm	On track
Q2 (Jul-Sep)	1.5-2.0 cm	1.9 cm	On track
Q3 (Oct-Dec)	1.5-2.0 cm	1.7 cm	On track
Q4 (Jan-Feb)	1.0-1.5 cm (2 months)	1.2 cm	On track

3.2.3 Dietary Diversity Improvements

Food Group Consumption (24-hour recall, n=100)

Food Group	Baseline Consumption	Endline Consumption	Change
Grains/Cereals	98%	100%	+2 pp
Pulses/Legumes	72%	94%	+22 pp
Dairy Products (milk, curd)	35%	78%	+43 pp
Eggs	28%	71%	+43 pp
Flesh Foods (chicken, fish)	42%	83%	+41 pp
Vitamin A-rich Fruits/Vegetables	48%	87%	+39 pp
Other Fruits/Vegetables	65%	92%	+27 pp

Minimum Dietary Diversity (MDD) Achievement

Metric	Baseline	Endline	Improvement
Children consuming ≥ 4 food groups/day	15% (15 children)	82% (82 children)	+67 pp
Children consuming ≥ 5 food groups/day	8% (8 children)	68% (68 children)	+60 pp
Children consuming ≥ 6 food groups/day	3% (3 children)	45% (45 children)	+42 pp

Meal Frequency Adequacy

Age Group	Recommended Meals/Day	Baseline Compliance	Endline Compliance	Improvement
2-3 years	5-6 (3 main + 2-3 snacks)	38%	87%	+49 pp
3-6 years	4-5 (3 main + 1-2 snacks)	52%	91%	+39 pp

3.2.4 Micronutrient Supplementation Coverage

Vitamin A Supplementation (Biannual, n=100)

Month	Children Eligible	Children Supplemented	Coverage
June 2025	100	100	100%
January 2026	100	100	100%
Annual	400 doses	400 doses	100%

Iron Supplementation (for identified anemia cases)

Assessment Period	Anemia Cases Identified	Iron Supplements Provided	Follow-up Improvement
Baseline (May 2025)	25 children (borderline Hb)	25	72% showed improvement by Sep
Q2 (Sep 2025)	18 children	18	67% showed improvement by Dec
Q3 (Dec 2025)	12 children	12	Ongoing monitoring

Micronutrient Supplements/Food Package Distribution (Quarterly)

Distribution Round	Children Receiving Package	Items per Package	Total Weight
June 2025	100	Complan/Horlicks	1 kg
Sep 2025	100	7 items (atta, daliya, sattu, jaggery, rajma, groundnut, roasted chana)	6.5 kg
December 2025	100	7 items (Do)	6.5 kg
February 2026	100	7 items (Do)	6.5 Kg

32.5 Deworming Drive (Biannually)

Deworming Round	Month	Children Dewormed	Coverage	Adverse Effects
Round 1	June 2025	100	100%	0
Round 2	December 2025	100	100%	0
Total Annual	2 rounds	200 doses	100% avg	0

3.2.6 Daily Mid-Day Meal Programme Impact

Meal Service Statistics

Metric	Value
Total programme days	10 months (6 days/week × 40 weeks)
Average daily attendance	82 children (82%)
Menu diversity	4-week rotating menu with seasonal variations
Staple food	Rice served daily with Dal (on alternate days mixed with vegetables)
Protein sources	Eggs (daily), Chicken (1x/week), Fish (1x/week), Paneer (1x/week), Dal (daily)
Milk provision	2x/week
Fruit provision	One fruit daily (banana, apple, orange, guava, papaya - seasonal)

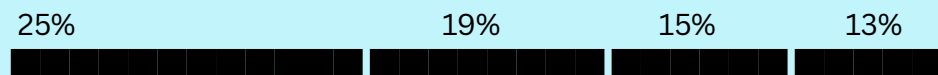
Observed Behavioral Improvements

Indicator	Baseline	Endline	Change
Children showing improved attentiveness	Baseline not measured	92%	Improvement
Children with higher energy levels		88%	Improvement
Plate waste reduction		15% reduction observed	Improvement
Children asking for seconds		68%	Improvement
Parental satisfaction with meals		96%	Improvement

3.3 Nutrition Progress Visualization

MODERATE UNDERNUTRITION REDUCTION TRAJECTORY

May 2025 Sep 2025 Dec 2025 Feb 2026



NUMBER OF UNDERNOURISHED CHILDREN

Baseline: 25 children → Endline: 13 children

52% REDUCTION IN ABSOLUTE NUMBERS



DIETARY DIVERSITY IMPROVEMENT

Baseline MDD Achievement: 15%

Endline MDD Achievement: 82%



+67 percentage points improvement



3.4 Key Nutritional Outcomes Summary

Category	Key Findings
Malnutrition Reduction	48% reduction in moderate undernutrition (25 to 13 children); 56% reduction in wasting
Growth Adequacy	All age groups demonstrated adequate monthly weight gain and quarterly height gain meeting WHO standards
Dietary Quality	82% children achieved Minimum Dietary Diversity (from 15% baseline); consumption of protein-rich foods increased 40+ percentage points
Micronutrient Coverage	100% coverage for Vitamin A supplementation across all 4 quarters; 400 total doses administered
Meal Programme Success	92% children showing improved attentiveness; 88% with higher energy levels
Deworming Compliance	100% coverage across 2 rounds; zero adverse effects; improved nutrient absorption





CHILD HEALTH

Promoting preventive care and early wellness

4. CHILD HEALTH ASSESSMENT

4.1 Assessment Methodology

A. Pediatric Health Camp Assessments

Component	Tool/Instrument	Parameters Measured	Professional Conducting
General Physical Examination	Clinical examination protocol	Overall health status, vital signs, general appearance	Pediatrician (MBBS)
Hemoglobin Testing	CBC (Laboratory blood analysis)	Hemoglobin levels (g/dL)	Lab technician under physician supervision
Vision Screening	Snellen chart (modified for children), visual inspection	Visual acuity, eye allergies, infections	Ophthalmologist
Hearing Assessment	Whisper test, behavioral observation	Hearing responsiveness	Pediatrician
Dental Examination	Visual oral examination	Dental caries, gum health, oral hygiene	Pediatrician
Developmental Milestone Assessment	WHO developmental checklist	Age-appropriate motor, cognitive, social milestones	Pediatrician + Educators

B. Immunization Status Tracking

Tool	Data Collected	Frequency
Individual immunization cards	Vaccine doses received, pending vaccinations	Reviewed at enrollment + each health camp
ICDS immunization register cross-verification	Coordination with AWW/ASHA records	Quarterly
Camp-based catch-up vaccination	On-spot vaccination for identified gaps	During health camps

C. Morbidity Tracking

Method	Data Captured	Frequency
Daily attendance registers	Absence due to illness	Daily
Teacher observation reports	Signs of illness (cough, fever, fatigue)	Daily
Parental interviews (15-day recall)	Recent illnesses: fever, cough, diarrhea, ARI	Monthly
Health camp screenings	Active disease detection	Quarterly

D. Health Camp Schedule & Team

Camp	Date	Location	Medical Team	Children Screened
Camp 1	June 21, 2025	Sagar ECCC	Dr. S. Gayen (Pediatrician) + team	50
Camp 2	June 22, 2025	Ghoramara ECCC	Dr. S. Gayen + team	50
Camp 3	July 20, 2025	Ghoramara ECCC	Dr. S. Gayen + team	48
Camp 4	July 27, 2025	Sagar ECCC	Dr. S. Gayen + team	50
Camp 5	December 12, 2025	Sagar ECCC	Premananda Memorial Hospital team	42
Camp 6	December 13, 2025	Ghoramara ECCC	Premananda Memorial Hospital team	42
Camp 7	January 30, 2026	Ghoramara ECCC	Dr. S. Gayen + team	45
Camp 8	January 31, 2026	Sagar ECCC	Dr. S. Gayen + team	41
Total	8 camps	Both centres	Multiple medical professionals	268 total screenings*

*Some children screened multiple times across different camps

4.2.1 Immunization Coverage

Immunization Coverage Outcomes – ECCCs Muskaan (Year 1, n = 100)

Vaccine / Indicator	Baseline Status (Mar 2025)	Gaps Identified	Endline Status (Feb 2026)	Outcome / Improvement
BCG	100% fully immunized	None	100%	Sustained full coverage
OPV	98% fully immunized	2% missed doses	100%	2 children received catch-up
DPT Booster-1	97% fully immunized	3% pending	100%	All pending doses completed
DPT Booster-2	96% fully immunized	4% pending	100%	Full booster coverage achieved
Measles-Rubella (MR)	98% fully immunized	2% pending	100%	Catch-up vaccination ensured
Tetanus Toxoid	96% fully immunized	4% pending	100%	Universal coverage reached
Overall Immunization (age-appropriate)	96–98% across vaccines	15 children required catch-up	100%	All gaps closed

Key Summary:

- At baseline, immunization coverage was high but 15 children had missed one or more age-appropriate doses.
- Through systematic tracking, coordination with AWWs/ASHAs, and follow-up during health camps, all pending vaccinations were completed.
- By February 2026, 100% of enrolled children were fully immunized for all age-appropriate vaccines, demonstrating effective convergence with public health systems.

Notable Catch-up Cases

Case	Age	Pending Vaccines	Action Taken	Outcome
Purnima Bhattacharya	5 years 4 months	DPT Booster 2, Tetanus Toxoid	SEED mobilizer home visit, coordination with ANM, dedicated session at ECCC	Fully immunized within 1 week
Surya Bhattacharya	18 months	MR dose 2, DPT Booster 1, OPV Booster	SEED mobilizer counseling, parental vaccine hesitancy addressed, ANM coordination	Fully immunized within 1 week

4.2.2 Morbidity Patterns & Reduction

Illness Prevalence (15-day recall, quarterly assessments)

Illness Type	Baseline (May 2025)	Q2 (Sep 2025)	Q3 (Dec 2025)	Endline (Feb 2026)	Reduction
Fever	38% (38 children)	28%	22%	18%	-53%
Cough/Cold	45% (45 children)	35%	28%	24%	-47%
Diarrhea	22% (22 children)	15%	11%	8%	-64%
Acute Respiratory Infection (ARI)	28% (28 children)	19%	14%	12%	-57%
Skin Problems	18% (18 children)	13%	9%	7%	-61%
Eye Infections	12% (12 children)	8%	6%	4%	-67%

4.2.3 Health Camp Screening Findings

June 2025 Health Camps (no. of screenings =100)

Condition Detected	Number of Cases	Intervention Provided
Borderline Hemoglobin (anemia indicator)	25	Iron supplementation + dietary counseling
Elevated TLC (infection/inflammation)	18	Antibiotics prescribed; follow-up scheduled
Urinary Tract Infection (UTI)	1	Antibiotic regimen + hydration protocol
Dental caries	8	Oral hygiene counseling + referral
Vision issues	3	Referral to ophthalmologist
Developmental delays	4	Enhanced psychosocial support + monitoring

July 2025 Follow Up Health Camps (no. of screenings = 98)

Condition Detected	Number of Cases	Intervention Provided
Low Hemoglobin	21	Continued iron supplementation
Infections (various)	14	Treatment + follow-up
Dental issues	6	Oral hygiene demonstration + counseling
Eye allergies	6	Medications + hygiene guidance

December 2025 Health Camps (no. of screenings =84)

Condition Detected	Number of Cases	Intervention Provided
Eye Allergies	11	Medicines + eye drops distributed
Infections	2	Treatment provided

January 2026 Health Camps (no. of screenings = 86)

Condition Detected	Number of Cases	Intervention Provided
Minor Infections	8	Treatment + counseling
Dental Issues	6	Oral hygiene reinforcement



4.2.4 Developmental Milestone Achievement

WHO Developmental Milestones (Age 2-6 years)

Age Group	Milestone Category	Baseline	Endline	Improvement
2–3 years	Fine Motor (stacks blocks, scribbles)	65%	91%	+26 pp
2–3 years	Language (2-word phrases)	58%	87%	+29 pp
2–3 years	Social (plays alongside others)	52%	83%	+31 pp
3–4 years	Language (tells simple stories)	38%	76%	+38 pp
3–4 years	Social (plays cooperatively)	45%	79%	+34 pp
4–6 years	Gross Motor (skips, catches ball)	68%	88%	+20 pp
4–6 years	Fine Motor (draws person, writes letters)	35%	82%	+47 pp
4–6 years	Language (clear speech, storytelling)	58%	89%	+31 pp
4–6 years	Social (follows rules, independence)	62%	91%	+29 pp

4.3 Child Health Progress Visualization

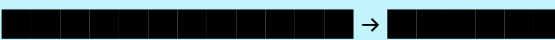
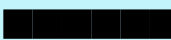
IMMUNIZATION COVERAGE IMPROVEMENT

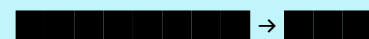
Baseline Coverage: 96-98%

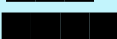
Endline Coverage: 100%

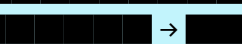


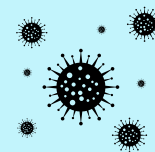
MORBIDITY REDUCTION (Baseline to Endline)

Fever: 38% → 18% (-53%)  → 

Diarrhea: 22% → 8% (-64%)  → 

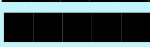
ARI: 28% → 12% (-57%)  → 

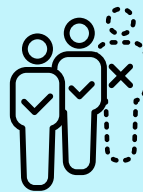
Skin: 18% → 7% (-61%)  → 



ILLNESS-RELATED ABSENCES REDUCTION

Q1: 2.8 days/child 

Q4: 1.3 days/child 



53% REDUCTION

4.4 Key Child Health Achievements Summary

Achievement Category	Key Findings
Immunization Success	100% coverage achieved; 15 children with catch-up vaccinations completed; zero gaps remaining
Morbidity Reduction	47-67% reduction across major illness categories (fever, diarrhea, ARI, skin problems); 53% reduction in fever incidence
Illness-Related Absences	29% reduction in total lost days due to illness; average monthly absences decreased from 2.8 to 1.3 days
Health Camp Reach	8 comprehensive camps conducted; 268 total child screenings; individualized care plans for identified conditions
Developmental Milestones	18-47% improvement across age-specific motor, language, and social milestones; greatest gains in fine motor and language domains
Preventive Care	100% deworming coverage (2 rounds); early detection and treatment of infections, allergies, dental issues and eye examination



MATERNAL HEALTH

A mother's well-being is the foundation of a child's care.

5. MATERNAL HEALTH ASSESSMENT

5.1 Assessment Methodology

A. Clinical Examination

Component	Tool / Method	Parameters Assessed	Conducted By
General Physical Examination	Standard clinical protocol	Overall health status, pallor, edema	General Physician (MD)
Reproductive Health Assessment	Gynecological examination and history-taking	Menstrual irregularities, abnormal discharge, pain, post-delivery concerns	Gynecologist
Blood Pressure Measurement	Digital sphygmomanometer	Systolic and diastolic BP; detection of hypertension or hypotension	Nurses under physician supervision
Blood Sugar Screening	Glucometer (random blood sugar)	RBS levels; diabetes risk screening	Laboratory technician
Vision & Eye Health	Visual acuity test and eye examination	Refractive errors, infections, allergies	Ophthalmologist / Medical team

B. Laboratory Investigations

Test	Purpose	Sample Size	Interpretation
Complete Blood Count (CBC)	Hemoglobin, RBC, WBC, platelets; anemia detection	All mothers attending camp	Hb <12 g/dL = Anemia
Random Blood Sugar (RBS)	Diabetes/pre-diabetes screening	Mothers with risk factors or elevated glucometer readings	RBS >140 mg/dL = concerning; >200 mg/dL = likely diabetes
Thyroid Stimulating Hormone (TSH)	Thyroid function assessment	Mothers with symptoms (fatigue, weight changes, cold intolerance)	Abnormal TSH indicates thyroid disorder

C. Nutritional Assessment

Parameter	Tool	Measurement
Body Mass Index (BMI)	Height/weight measurement	BMI <18.5 = Underweight; 18.5-24.9 = Normal; ≥25 = Overweight
Dietary Diversity	7-day food frequency recall	Number of food groups consumed
Iron/Folic Acid Intake	Supplementation history	Compliance with IFA tablets



D. Maternal Health Camp Schedule

Camp No.	Date	Location	Medical Team	Mothers Screened	Services Provided
Camp 1	20 Sept 2025	Ghoramara ECCC	Dr. Arun Das (MD) + nurses	46	Physical exam, BP, RBS, CBC, TSH; counselling
Camp 2	27 Sept 2025	Sagar ECCC	Dr. Arun Das + team	46	Do
Camp 3	Nov 2025	Both ECCCs	Dr. Arun Das + lab team	92	Lab test review, medication, follow-up consultations
Camp 4	28 Dec 2025	Sagar ECCC	Premananda Hospital medical team	41	Eye health, general health, anemia screening
Camp 5	29 Dec 2025	Ghoramara ECCC	Premananda Hospital medical team	40	Eye health, general health, anemia screening
Camp 6	6 Jan 2026	Ghoramara ECCC	Cardiology & medical team	45	Heart health screening, BP, lifestyle counselling
Camp 7	7 Jan 2026	Sagar ECCC	Cardiology & medical team	44	Heart health screening, BP, lifestyle counselling
Camp 8	20 Jan 2026	Ghoramara ECCC	Dr. Arun Das + medical team	48	Maternal health check-up, BP, RBS, counselling
Camp 9	21 Jan 2026	Sagar ECCC	Dr. Arun Das + medical team	47	Maternal health check-up, BP, RBS, counselling
Total	10 camps	Both ECCCs	Multiple specialists	489 screenings	Comprehensive maternal and preventive health services

5.2 Detailed Findings

5.2.1 Maternal Anemia Prevalence

Haemoglobin Levels Distribution (September 2025 camp, no. of screenings- 92 mothers)

Hemoglobin Range	Classification	Number of Mothers
<7 g/dL	Severe Anemia	2
7-9.9 g/dL	Moderate Anemia	8
10-11.9 g/dL	Mild Anemia	25
≥12 g/dL	Normal/No Anemia	57
Total Anemia Cases	All categories	35

Anemia Status Follow-up (December 2025 camp, no. of screenings- 81 mothers)

Status	Sep 2025	December 2025	Change
Severe Anemia (<10 g/dL)	10 mothers (10.9%)	4 mothers (4.9%)	-55% reduction
Mild-Moderate Anemia (10-11.9 g/dL)	25 mothers (27.2%)	17 mothers (21.0%)	-23% reduction
Normal (≥12 g/dL)	57 mothers (62.0%)	60 mothers (74.1%)	+20% increase

5.2.2 Reproductive Health Findings

Reproductive Health Issues Identified (September 2025, no. of screenings- 92 mothers)

Condition	Number of Cases	Intervention Provided
Menstrual Irregularities	18	Hormonal assessment recommended; lifestyle counseling
White Discharge/Vaginitis	14	Antifungal/antibacterial treatment; hygiene counseling
Pelvic Inflammatory Disease (PID)	6	Antibiotic course; partner treatment advised
Post-Delivery Complications	10	Specialized consultation; treatment initiated
History of Miscarriage/Infertility	19	Counseling; fertility evaluation recommended for willing mothers
Uterine Prolapse (mild)	4	Pelvic floor exercises taught; referral for severe cases
Total with Reproductive Concerns	54	Individualized treatment + follow-up

5.2.3 Non-Communicable Disease (NCD) Screening

Hypertension Prevalence (September 2025, no. of screenings- 92 mothers)

Blood Pressure Category	No. of Mothers	Management
Hypotension (<90/60 mmHg)	6	Nutritional counseling; hydration advice
Normal (90/60 - 120/80)	65	Lifestyle maintenance counseling
Pre-hypertension (120-139/80-89)	12	Lifestyle modification counseling; monitoring
Hypertension Stage 1 (140-159/90-99)	7	Medications initiated; follow-up scheduled
Hypertension Stage 2 (≥160/≥100)	2	Urgent treatment; referral to physician
Total Hypertension Cases	21	Medical management + lifestyle counseling

Blood Sugar Screening (September 2025, no. of screenings- 92 mothers)

Random Blood Sugar Level	Number of Mothers	Interpretation & Action
Normal (<140 mg/dL)	57	Preventive counseling
Impaired (140-199 mg/dL)	29	Pre-diabetes counseling; dietary modification; exercise advised; HbA1c test recommended
Likely Diabetes (≥200 mg/dL)	6	Urgent referral for confirmatory fasting blood sugar + HbA1c; treatment initiated
Total with Elevated Levels	35	Medical follow-up + lifestyle intervention

Thyroid Dysfunction (November 2025, TSH tested; no. of screenings- 36 mothers)

TSH Range	Interpretation	Number of Cases	Action Taken
<0.4 mIU/L	Hyperthyroidism	2	Thyroid hormone supplementation; monitoring
0.4-4.0 mIU/L	Normal	28	Reassurance
>4.0 mIU/L	Hypothyroidism	6	Thyroid hormone supplementation; monitoring

5.2.4 Eye Health & Vision Screening (December 2025, no. of screenings- 81 mothers)

Condition	Number of Cases	Intervention
Refractive Errors (eye power issues)	16	Referral for spectacles; vision aids recommended
Eye Infections/Conjunctivitis	6	Antibiotic eye drops; hygiene counseling
Eye Allergies	8	Anti-allergic drops; environmental trigger identification
Normal Vision	51	Preventive counseling on eye care

5.2.5 Nutritional Status of Mothers

Body Mass Index (BMI) Distribution (September 2025, no. of screenings- 92 mothers)

BMI Category	BMI Range	Number of Mothers
Underweight	<18.5	35
Normal	18.5-24.9	44
Overweight	25.0-29.9	11
Obese	≥30.0	2

Dietary Diversity (7-day recall, n=92)

Food Groups Consumed	Baseline Estimate (March 2025)	Post-Intervention (February 2026)	Improvement
≥5 food groups/week	~40%	73%	+33 pp
Daily protein intake adequate	~35%	68%	+33 pp
Daily iron-rich foods	~30%	65%	+35 pp

The marked improvements in dietary diversity and nutrient intake among mothers and young children can be attributed in part to the consistent nutrition counselling efforts integrated into the ECCC model. SEED's ECCCs didn't just provide meals — they served as regular platforms for nutrition education, delivered through multiple touchpoints including organised health camps, National Nutrition Week activities, and informal evening group meetings with caregivers. In these sessions, facilitators emphasised the importance of food quality over sheer quantity, helping families shift from monotonous cereal-based diets to more balanced plates.

Practical, locally relevant recipes were discussed using affordable, locally available ingredients — for example, combining small amounts of fish, eggs, green leafy vegetables, and pulses, which are commonly found in the Sundarbans, to boost protein and micronutrient intake without imposing a high cost. Women were guided on affordable ways to include iron-rich foods such as spinach, drumstick leaves, small dried fish (muri shutki) and jaggery with vitamin C sources like guava and lime to enhance iron absorption. This hands-on counselling helped caregivers understand not just what to feed, but why it matters, and how to do it within their resource constraints — a factor that aligns with the observed changes: an increase from ~40% to 73% in consumption of five or more food groups per week, from ~35% to 68% in adequate daily protein intake, and from ~30% to 65% in daily intake of iron-rich foods by February 2026.



5.2.6 Breastfeeding Promotion and Support

Breastfeeding support under the Muskaan ECCCs was positioned as a preventive and promotive maternal health intervention, closely linked with child nutrition outcomes. Given the high prevalence of maternal anaemia, food insecurity and early return to domestic and informal work in the Sundarbans, breastfeeding practices were addressed through repeated, low-intensity but consistent engagements rather than one-time awareness activities.

Breastfeeding Activities – Summary Table

Activity	Period	Location	Frequency
Breastfeeding workshops	May 2025–February 2026	Both ECCCs	8 sessions
Breastfeeding Awareness Week	August 2025	Both ECCCs	1 week





Observed Outcomes:

Quantitative (Process-Level):

- 8 structured breastfeeding workshops conducted across two centres.
- Breastfeeding Awareness Week observed with participation of 300 mothers across Ghoramara & Sagar islands.
- Breastfeeding component consistently integrated into maternal health and nutrition-related activities.

Qualitative Outcomes:

- Improved awareness among mothers regarding exclusive breastfeeding duration and continuation practices.
- Increased openness among mothers to discuss breastfeeding challenges during ECCCs interactions.
- Greater acceptance of the idea that locally available foods can support lactation, reducing dependence on external supplements.
- Strengthened trust in ECCCs as spaces for maternal guidance, not limited to child-focused services alone.

ECCC staff reported that repeated interactions—rather than single sessions—enabled mothers to gradually clarify doubts, challenge misconceptions and seek reassurance related to breastfeeding practices.

The breastfeeding component contributed to strengthening maternal knowledge and confidence during the early years of child development. By embedding breastfeeding promotion within routine ECCCs activities and maternal health engagements, SEED ensured that breastfeeding support remained continuous, accessible and contextually relevant, aligning with the broader goals of child nutrition and early childhood care under the Muskaan ECCCs programme.

5.3 Maternal Health Progress Visualization

MATERNAL ANEMIA REDUCTION

September 2025 Anemia: 38% (35/92 mothers) 

December 2025 Anemia: 26% (21/81 mothers)

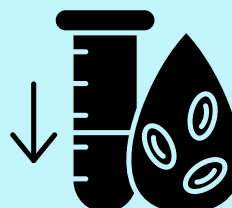
32% RELATIVE REDUCTION

SEVERE ANEMIA (<10 g/dL) IMPROVEMENT

September: 10 mothers

December: 4 mothers

55% REDUCTION



NCD BURDEN IDENTIFIED

Hypertension: 21 mothers (23%)

Elevated Blood Sugar: 35 (38%)

Vision Issues: 16 (20%)

MATERNAL HEALTH CAMP REACH

Total Camps: 10

Total Screening Instances: 438

Average Attendance per Camp: 88 mothers



5.4 Key Maternal Health Achievements Summary

Category	Key Findings
Anemia Detection & Treatment	35 anemia cases identified (38%); 50 cases total across all camps; 55% reduction in severe anemia through iron supplementation + counseling
Reproductive Health Screening	54 mothers (59%) had reproductive health concerns identified; all received treatment or referrals; 30 mothers counseled on family planning
NCD Identification	21 hypertension cases (23%), 35 elevated blood sugar cases (38%), 6 thyroid issues; all initiated on treatment/lifestyle modification
Comprehensive Coverage	10 maternal health camps conducted; 438 total screening instances; laboratory investigations (CBC for all, RBS for 29, TSH for 36)
Vision Care	16 mothers identified with refractive errors; 14 with eye infections/allergies; all received treatment/referrals



PSYCHOSOCIAL WELLBEING

Fostering emotional security and resilience

6. PSYCHOSOCIAL WELLBEING ASSESSMENT

6.1 Assessment Methodology

A. Separation Anxiety Assessment

Tool/Method	What It Measures	Frequency	Assessor
Drop-off Observation	Child's reaction during parent separation (crying duration, clinging behavior, distress level)	Daily for first 3 months; weekly thereafter	Educators
5-Point Separation Anxiety Scale	1=Minimal distress; 2=Brief crying; 3=Moderate distress; 4=Prolonged crying/resistance; 5=Severe distress/refusal	Quarterly for affected children	Counselors
Parental Interview	Home behavior, sleep patterns, changes in attachment	Monthly during parental meetings	Community Mobilizers

B. Emotional Regulation & Expression Assessment

Tool/Method	What It Measures	Frequency	Assessor
Emotion Recognition Tasks	Ability to identify emotions (happy, sad, angry, scared, surprised) using flashcards	Baseline + Quarterly	Counselors
Emotion Expression Observation	Spontaneous emotional vocabulary use during play, storytelling	Structured observation during activities	Educators
Self-Regulation Assessment	Ability to manage frustration, wait turns, calm down after upset	Structured observation during activities	Educators + Counselors

C. Social Skills & Peer Interaction Assessment

Tool/Method	What It Measures	Frequency	Assessor
Peer Interaction Observation Scale	Frequency and quality of peer interactions (initiates play, shares, cooperates, resolves conflicts)	Structured observation during activities	Educators
Social Withdrawal Checklist	Isolation behaviors, reluctance to join activities, social avoidance	Monthly	Counselors
Cooperative Play Assessment	Participation in group games, turn-taking, collaborative activities	Structured observation during group sessions	Educators
Empathy Indicators	Comforting peers, sharing, showing concern for others	Anecdotal notes	All staff

D. Behavioral Patterns Assessment

Tool/Method	What It Measures	Frequency	Assessor
Behavioral Observation Checklist	Aggression, tantrums, destructive behavior, compliance	Ongoing observation	Educators
Attention & Focus Assessment	Ability to complete tasks, follow instructions, maintain concentration	During structured activities	Educators
Sleep & Appetite Patterns	Changes reported by parents as indicators of emotional wellbeing	Monthly parental interviews	Community Mobilizers
Stress Indicators	Nail-biting, thumb-sucking, regression behaviors, frequent crying	During quarterly sessions	Counselors

E. Expert-Led Psychosocial Assessments

Assessment	Date	Conducted By	Method	Children Assessed
Group Counseling Session 1	July 24-25, 2025	Ms. Kaberi Banerjee + Ms. Projna Bhattacharya	Story-based roleplay, emotion wheels, collaborative art	100 (both centres)
Group Counseling Session 2	September 10-11, 2025	Ms. Projana Bhattacharya	Roleplay, storytelling, emotion-recognition games	100 (both centres)
Expert Assessment 3	November 21-22, 2025	Ms. Kaberi Banerjee	Observational assessment, interactive activities, educator guidance	100 (both centres)
Expert Assessment 4	January 29-30, 2026	Ms. Projana Bhattacharya	Observational assessment, individual counselling sessions for the identified cases	100 (both centres)

F. Parental Report Tools

Tool	Information Collected	Frequency
Home Behavior FGDs (during monthly meetings)	Changes in tantrums, sleep patterns, emotional expression, peer relationships at home	Monthly
Parental Concern recorded	Specific worries about child's behavior or emotional state	As needed
Transformation Stories	Anecdotal reports of positive changes	Ongoing collection

6.2 Detailed Findings

6.2.1 Separation Anxiety Outcomes

Separation Anxiety Prevalence & Severity

Assessment Period	Severe Anxiety (Score 4-5)	Moderate Anxiety (Score 3)	Mild/None (Score 1-2)
Baseline (May 2025)	20% (20 children)	25% (25 children)	55% (55 children)
Month 4 (Aug 2025)	15% (15 children)	20% (25 children)	65% (65 children)
Month 8 (Dec 2025)	10% (10 children)	15% (15 children)	75% (75 children)
Endline (Feb 2026)	8% (8 children)	12% (12 children)	80% (80 children)

Drop-off Behavior Changes

Indicator	Baseline	Endline	Change
Children entering centre independently without crying	25%	72%	+47 pp
Children waving goodbye to parents confidently	20%	68%	+48 pp
Average crying duration upon separation	8.5 minutes	2.1 minutes	-75%
Children requiring parental presence in classroom	38%	8%	-79%

6.2.2 Social Skills & Peer Interaction

Peer Interaction Outcomes

Behavior	Baseline	Endline	Improvement
Initiates play with peers	30%	81%	+51 pp
Responds positively to peer invitations	45%	87%	+42 pp
Shares toys/materials willingly	30%	81%	+51 pp
Takes turns during games	28%	79%	+51 pp
Helps peers with tasks	22%	68%	+46 pp
Comforts upset peers	18%	59%	+41 pp

Cooperative Play Development

Metric	Baseline	Endline	Progress
Participate actively in group games	45%	89%	+44 pp
Follow game rules without reminders	32%	74%	+42 pp
Resolve minor conflicts with peers independently	15%	53%	+38 pp
Include others in play activities	25%	72%	+47 pp

6.2.3 Behavioral Pattern Changes

Attention & Focus Improvements

Metric	Baseline	Endline	Improvement
Can focus on activity for 10+ minutes	25%	68%	+43 pp
Complete assigned tasks without distraction	22%	71%	+49 pp
Follow 2-3 step instructions accurately	35%	83%	+48 pp
Maintain engagement during story time (15 min)	40%	88%	+48 pp

Parent-Reported Changes at Home

Indicator	Baseline	Endline	Change
Sleep Disturbances (difficulty falling asleep, nightmares)	28% reporting issues	8% reporting issues	-71%
Tantrums at Home	72% frequent tantrums	28% occasional tantrums	-61%
Improved Communication	35% good communication	79% good communication	+44 pp
Cooperative Behavior	32% cooperative	76% cooperative	+44 pp

6.2.4 Structured Psychosocial Sessions Impact

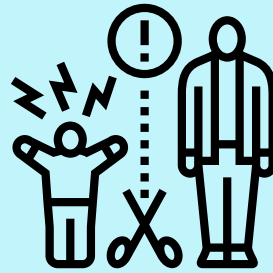
Session Delivery Metrics

Quarter	Total Sessions Conducted	Average Attendance	Children Receiving Individual Support
Q1 (May-June)	52 sessions (26/month)	85 children (85%)	18
Q2 (July-Sep)	78 sessions (26/month)	87 children (87%)	15
Q3 (Oct-Dec)	78 sessions (26/month)	84 children (84%)	12
Q4 (Jan-Feb)	52 sessions (26/month)	86 children (86%)	10
Annual Total	260 sessions	86% average	55 cumulative

Activities Conducted in Psychosocial Sessions

Activity Type	Frequency	Primary Objectives	Observed Outcomes
Emotion Mapping	48 sessions	Emotion identification, vocabulary building	84% children identify 5+ emotions correctly
Storytelling Circles	42 sessions	Emotional expression, empathy development	Increased engagement, peer bonding observed
Roleplay/Drama	30 sessions	Perspective-taking, conflict resolution	53% children resolve minor conflicts independently
Cooperative Games	40 sessions	Social skills, turn-taking, teamwork	89% participate actively in group activities
Art Therapy	36 sessions	Emotional expression, stress relief	Calmer demeanor, creative expression improved
Breathing/Relaxation (Yoga)	34 sessions	Self-regulation, stress management	64% use calming strategies when upset
Emotion Charades	18 sessions	Emotion recognition, expressive skills	Fun engagement, laughter, connection
Mirror Play	12 sessions	Self-awareness, emotion expression	Children more comfortable expressing feelings

Endline: 8 children 

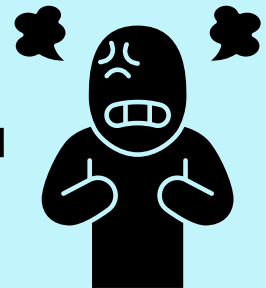


Endline: 81% 



Endline: 28

61.1% REDUCTION



Endline: 8%

71.4 % REDUCTION



6.4 Key Psychosocial Achievements Summary

Category	Key Findings
Separation Anxiety	70% reduction in severe cases; 72% children now enter independently without distress
Emotional Literacy	Average emotion vocabulary increased from 2.3 to 6.8 words; 76% use feeling words spontaneously
Self-Regulation	64% children use calming strategies independently; 77% recover from disappointment within 5 minutes
Social Skills	81% initiate play with peers (from 30%); 64% reduction in social withdrawal behaviors
Behavioral Improvements	75% reduction in tantrums; 78% reduction in aggressive behaviors
Home Impact	72% parents report fewer tantrums; 74% reduction in sleep disturbances; improved family communication
Session Delivery	260 structured psychosocial sessions conducted; 86% average attendance





PARENTAL ENGAGEMENT & CAPACITY BUILDING

Parents as partners in early childhood development

7. PARENTAL ENGAGEMENT & CAPACITY BUILDING ASSESSMENT

7.1 Assessment Methodology

A. Knowledge Assessment

Assessment Method	What It Measures	When Administered
Pre-Workshop FGDs	Baseline knowledge on workshop topic (nutrition, FLN, child development, etc.)	Before workshop begins
Post-Workshop FGDs	Immediate knowledge gain after workshop	At workshop conclusion
Follow-up Assessment (at the beginning of next workshop)	Knowledge retention and practical application	One month after workshop
Practical Demonstration	Ability to demonstrate learned skills	During and after workshop

B. Behavior Change Indicators

Indicator	Measurement Tool	Frequency
Home-Based Learning Practices	Parent self-reporting + child teacher observation	Monthly
Feeding Practice Changes	24-hour dietary recall + child nutrition outcomes	Quarterly (linked to nutrition assessments)
Hygiene Habit Reinforcement	Direct observation of child behaviors + parent interviews	Weekly spot checks
Emotional Support Practices	Parent testimonials + child behavioral improvements	Ongoing qualitative collection

C. Satisfaction & Feedback Assessment

Tool	Purpose	Administration
Workshop Evaluation	Relevance, clarity, usefulness, facilitator effectiveness	End of each workshop
Open-Ended Feedback	Suggestions, concerns, topics requested	Verbal collection during CAC meetings + suggestion box
Parent Testimonial Collection	Transformation stories, behavior changes observed	Ongoing interviews by mobilizers

D. Home Visit Observation (Done by respective community mobilizers)

Component	What's Observed	Frequency
Learning Materials at Home	Presence of books, homemade learning aids, child's work displayed	Monthly home visits
Parent-Child Interaction	Quality of communication, use of taught techniques	During home visits
Hygiene Environment	Handwashing setup, cleanliness, food storage	During home visits
Nutrition Practices	Meal diversity, portion sizes, food preparation methods	Meal time observations when possible

7.2 Detailed Findings

7.2.1 Workshop Participation Outcomes

Overall Workshop Statistics (April 2025 - February 2026)

Metric	Value
Total Workshops Conducted	27 workshops (22 monthly parental workshops+ 5 specialized workshops on Pneumonia, National Nutrition Day, World Breastfeeding Week, Child Rights Week, National Education Day)
Average Attendance per Workshop	86 parents
Average Participation Rate	90%+ consistently

Workshop Participation by Quarter

Quarter	No. of Workshops	Average Attendance	Participation Rate	Topics Covered
Q1 (Apr-Jun)	6 (2/month each centre)	87 parents	91%	Programme orientation, nutrition, early learning, responsive caregiving
Q2 (Jul-Sep)	6 (2/month each centre)+ 2 specialized workshops during nutrition & breastfeeding week	85 parents	89%	Emotional growth, early learning at home, numeracy (Cholo Guni) + nutrition & breastfeeding importance
Q3 (Oct-Dec)	6 (2/month each centre)+ 3 specialized workshops during child rights week, pneumonia and education day	84 parents	88%	FLN importance, pneumonia awareness, child rights, child behavior, home learning
Q4 (Jan-Feb)	4 (2/month each centre)	88 parents	92%	School readiness, continued learning support, emotional intelligence

Gender Participation

Participant Type	Number	Percentage	Typical Role
Mothers	78	81%	Primary caregivers; most frequent attendees
Fathers	12	13%	Attend selected workshops (especially orientation workshop & child rights week)
Grandmothers	4	4%	Primary caregivers in some households
Other Caregivers	2	2%	Aunts, elder siblings

7.2.2 Knowledge Gain & Retention

Nutrition Knowledge Assessment (May & August Workshops + September National Nutrition Week workshop, average no. of parents=81)

Question	Pre-Workshop Correct	Post-Workshop Correct	1-Month Follow-up Correct	Gain	Retention
Identify 5 food groups	32%	87%	78%	+55 pp	90% retention
Name iron-rich foods available locally	28%	82%	74%	+54 pp	90% retention
Appropriate meal frequency for child (2-6 yrs)	48%	91%	85%	+43 pp	93% retention
Signs of dehydration in children	22%	76%	68%	+54 pp	89% retention
Safe food storage practices	38%	84%	77%	+46 pp	92% retention

FLN & Early Learning Knowledge (July & September Workshops+ November National Education Day workshop, average no. of parents=85)

Question	Pre-Workshop	Post-Workshop	1-Month Follow-up	Gain	Retention
Importance of early years (2-6) for brain development	25%	89%	81%	+64 pp	91% retention
How to teach counting using household items	18%	82%	76%	+64 pp	93% retention
Benefits of reading aloud to children	42%	93%	87%	+51 pp	94% retention
Age-appropriate activities for home learning	28%	85%	78%	+57 pp	92% retention
How to make learning materials from local resources	15%	79%	71%	+64 pp	90% retention

Child Health & Development Knowledge (Nov-Dec Workshops, average no. of parents=84)

Question	Pre-Workshop	Post-Workshop	1-Month Follow-up	Gain	Retention
Pneumonia warning signs (rapid breathing, chest indrawing)	22%	84%	76%	+62 pp	90% retention
When to seek medical care urgently	48%	91%	84%	+43 pp	92% retention
Importance of complete immunization schedule	68%	96%	92%	+28 pp	96% retention
Emotional needs of young children	32%	81%	74%	+49 pp	91% retention
How to support emotional expression	28%	79%	71%	+51 pp	90% retention

Average Knowledge Gain Across All Workshops: +52 percentage points

Average Knowledge Retention (1 month): 91%

7.2.3 Behavior Change Outcomes

Home-Based Learning Practice Adoption

Practice	Baseline (April)	Mid-Year (Sep)	Endline (Feb)	Total Adoption
Reading/storytelling to child regularly	18%	62%	78%	+60 pp
Counting practice during daily activities	12%	58%	75%	+63 pp
Using household items for learning games	8%	54%	71%	+63 pp
Singing rhymes/songs with child	38%	76%	87%	+49 pp
Asking questions during activities to promote thinking	15%	51%	68%	+53 pp
Creating learning materials (from seeds, leaves, etc.)	5%	42%	64%	+59 pp
Displaying child's work at home	12%	48%	69%	+57 pp
Overall Home Learning Practice	11%	58%	76%	+65 pp

Hygiene Reinforcement at Home

Practice	Baseline	Endline	Change
Handwashing before meals (consistent)	42%	89%	+47 pp
Handwashing after toilet (consistent)	38%	86%	+48 pp
Child brushing teeth twice daily	22%	71%	+49 pp
Child wearing footwear outside home	48%	84%	+36 pp
Safe drinking water storage	55%	88%	+33 pp
Maintaining clean eating area	48%	82%	+34 pp

Emotional Support Practices

Practice	Baseline	Endline	Change
Asking child about feelings regularly	15%	72%	+57 pp
Using positive language/encouragement	38%	81%	+43 pp
Responding calmly to child's emotions	32%	76%	+44 pp
Nightly "feelings circle" or bedtime talk	8%	58%	+50 pp
Praising effort rather than only results	22%	69%	+47 pp
Using timeout/calm-down instead of punishment	18%	64%	+46 pp

Requested Future Topics

Topic	Number of Requests
Managing child's difficult behaviors	42
Preparing child for formal school	38
Supporting multiple children with limited time	34
Dealing with learning difficulties	28
Financial planning for child's education	24

7.3 Parental Engagement Visualization

WORKSHOP PARTICIPATION CONSISTENCY

High Attendance ($\geq 80\%$): 71 parents

Moderate (50-79%): 18 parents

Low ($< 50\%$): 7 parents



KNOWLEDGE GAIN (Average across all workshops)

Pre-Workshop Knowledge: 29%

Post-Workshop Knowledge: 81%

+52 PERCENTAGE POINTS

KNOWLEDGE RETENTION (1-month follow-up)

Retained Knowledge: 91% of gained knowledge



HOME LEARNING PRACTICE ADOPTION

Baseline (April): 11% families

Endline (February): 76% families

+65 PERCENTAGE POINTS



FEEDING PRACTICE IMPROVEMENT

Baseline: 15%

Endline: 82%

+67 PERCENTAGE POINTS



7.4 Key Parental Engagement Achievements Summary

Category	Key Findings
Workshop Participation	96% families engaged; 90%+ average attendance rate; 2,580 total attendances across 27 workshops; 74% parents attended 20+ workshops
Knowledge Acquisition	Average knowledge gain: +52 percentage points; 91% knowledge retention after 1 month; excellent retention across nutrition, FLN, health topics
Home Learning Practices	76% families implementing ≥ 4 home-based learning practices (from 11% baseline); 78% reading to children regularly
Feeding Improvements	82% providing ≥ 4 food groups daily (from 15%); 68% families using ECCC recipes at home
Hygiene Reinforcement	89% ensuring consistent handwashing before meals; 86% after toilet use; 71% children brushing teeth twice daily
Emotional Support	72% parents regularly discussing feelings with children; 76% responding calmly to emotions
Resource Utilization	86% families using distributed books regularly; 72% tried ≥ 3 nutrition recipes
Satisfaction	4.6/5.0 average overall satisfaction; 94% rated home learning workshop "very useful"; high demand for continued sessions





COMMUNITY PARTICIPATION & GOVERNANCE

When communities govern, programmes endure

8. COMMUNITY PARTICIPATION & GOVERNANCE ASSESSMENT

8.1 Assessment Methodology

A. Community Advisory Committee (CAC) Functioning

Assessment Tool	What It Measures	Frequency
Meeting Attendance	CAC member participation rates	Every CAC meeting (monthly)
Meeting Minutes	Quality of discussions, decisions made, action points, follow-through	After each meeting
CAC Functionality	Governance quality, decision-making effectiveness, community representation	Quarterly review

B. Community Engagement Events Tracking

Metric	Measurement Method	Documentation / Evidence
Event Attendance	Registration and head counts during events	Attendance sheets, dated photographs
Community Mobilization Reach	Number of households and individuals engaged per event	Field mobilizer reports
Participation Quality	Observation of active vs. passive participation and diversity (women, caregivers, community leaders)	Facilitators' observational notes
Community Contributions	Volunteer time, in-kind support, peer education efforts	Contribution and activity logs

Note: The above metrics and documentation methods were applied across all community engagement and awareness events organised between April 2025 and February 2026. These include, but are not limited to, National Nutrition Week, Breastfeeding Awareness Week, World Environment Day, Breast Cancer Awareness Month, Child Rights Week and other thematic campaigns and community-led activities conducted at the ECCCs and village level.

8.2 Detailed Findings

8.2.1 Community Advisory Committee (CAC) Performance

CAC Composition & Structure

Centre	Total Members	Composition
Ghoramara ECCC	10 members	4 parents, 2 AWWs, 1 ASHA, 1 ANM, 1 local development practitioner, 1 community leader
Sagar ECCC	10 members	4 parents, 2 AWWs, 1 ASHA, 1 ANM, 1 local development practitioner, 1 community leader
Total	20 members	Diverse stakeholder representation

CAC Meeting Statistics (May 2025 - February 2026)

Metric	Value
Total Meetings Conducted	20 meetings (10 per centre)
Meeting Frequency	Monthly at each centre
Average Attendance per Meeting	80% attendance rate
Average Meeting Duration	1.5 hours

CAC Member Participation Quality

Participation Indicator	Ghoramara CAC	Sagar CAC
Members actively contributing to discussions	8/10 (80%)	7/10 (70%)
Members proposing action points	6/10 (60%)	5/10 (50%)
Members following up on assigned tasks	5/10 (50%)	4/10 (40%)
Members bringing community feedback	7/10 (70%)	8/10 (80%)

8.2.3 ICDS Convergence & Service Integration

Joint Activities with ICDS Functionaries

Activity Type	Frequency / Reach	ICDS Partners Involved	Key Outcomes
Vitamin A Administration	2 rounds annually	ANMs administered doses; AWWs supported mobilisation	100% eligible children received Vitamin A supplementation
Pending Immunisation (Catch-up)	4 campaigns + follow-up sessions	ANMs administered vaccines; ASHAs mobilised families	15 children completed pending immunisations; no gaps remaining
Deworming	2 rounds annually	ANMs provided tablets; ASHAs ensured compliance	100% deworming coverage aligned with ICDS schedule
Breastfeeding Workshops (Breastfeeding Week)	4 sessions across 2 centres	ANMs and AWWs facilitated sessions	85% mothers reported improved confidence in breastfeeding practices
Nutrition Workshops (Nutrition Week)	4 sessions across 2 centres	AWWs supported mobilisation and follow-up	Improved caregiver understanding of balanced diets and anaemia prevention



8.2.4 Community Engagement Events Impact

Major Community Events (Attendance & Reach)

Event	Date	Attendance	Key Activities	Community Impact
World Breastfeeding Week	Aug 1-7, 2025	300+ families	Workshops, demonstrations, peer counseling, village march	85% mothers improved breastfeeding confidence; established peer networks
National Nutrition Week	Sep 1-7, 2025	100+ beneficiaries	Community rally, "Nutrition Mela" show, cooking demos	Increased awareness on balanced diets using local foods
Child Rights Week (Bachpan Utsav)	Nov 14-20, 2025	500+ participants	Rallies, art competition (250 children), street plays, workshops, frontline worker training	Enhanced child protection awareness; 20 frontline workers trained
World Environment Day	June 5, 2025	150+ participants	Rallies, plantation drive, art competition	Improved understanding of environmental protection through drawings, rallies, and nature walks
Swachhta Pakhwada Campaign	July 1-15, 2025	350+ participants	Rallies, cleanliness drive, plantation activities etc.	Improved handwashing, waste segregation awareness, and cleaner centre surroundings
Independence & Republic Day Celebrations	15th August 2025 & 26 Jan 2026	180+ attendees	Flag hoisting, "My Dream for India" drawing competition, community pledge	Strengthened civic identity; community bonding

8.4 Community Participation Visualization

Community Outreach & Event Reach

World Breastfeeding Week: 300+ families



Child Rights Week: 500+ participants



National Nutrition Week: 100+ beneficiaries

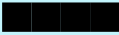


ICDS Convergence – Joint Actions

Deworming: 2 joint camps



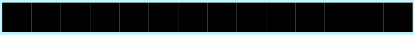
Immunisation Drives: 4+ coordinated rounds



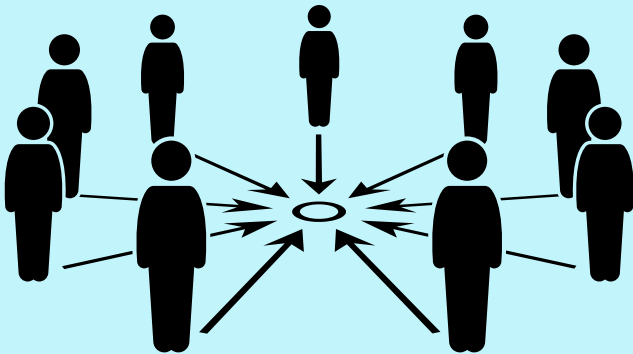
Vit A Administration: 2 joint camps



Workshops: 14 joint sessions



Home Visits: 45 collaborative visits





REFLECTIONS & PATHWAYS FORWARD

The Learning Journey.....



CHALLENGES, LESSONS LEARNED, STAKEHOLDER VOICES & CONCLUSION

CHALLENGES & ADAPTIVE RESPONSES:

1. Climate & Geographical Challenges

Heavy monsoons, tidal surges, waterlogged roads disrupting transport and attendance, especially during July to September.

Response:

- Modified daily schedules accommodating delayed arrivals
- Rescheduled key events ensuring maximum participation
- Maintained core activities despite weather challenges
- Regular parent communication on safety during adverse conditions
- Achieved 82% average attendance despite disruptions

2. Low Initial Parental Participation

Early engagement efforts witnessed low turnout due to irregular work schedules (farming, fishing, honey collection).

Response:

- Intensified door-to-door outreach
- Flexible session timings (early morning/late evening)
- One-on-one counseling building trust
- Demonstrated immediate benefits (FLN, health care)
- Gradually achieved 90%+ sustained participation

3. Irregular Child Attendance & Separation Anxiety

Consistent attendance difficult initially, especially Ghoramara; separation anxiety affecting 40% children.

Response:

- One-on-one counseling with hesitant parents
- Home visits and positive messaging
- Weekly parent-child joint sessions easing transition
- Structured psychosocial support building emotional security
- Reduced separation anxiety to 12% by year-end

4. Limited Health Literacy

Caregivers unaware of pending vaccinations, held misconceptions about side effects, hesitant about supplementation and deworming.

Response:

- Targeted awareness sessions before deworming drive and Vit A administration.
- Home visits and individual counseling whenever required .
- Myth-busting using culturally appropriate communication
- Coordination with health workers building trust
- Achieved 100% immunization coverage, deworming and micronutrients supplementation.

5. Low Marginalized Community Engagement

Low, irregular participation from Lodha Scheduled Tribe community, underlying social marginalization.

Response:

- Daily visits to Lodha households
- Open conversations emphasizing benefits
- Demonstrations, storytelling, play-based interactions
- Culturally sensitive, respectful engagement
- Steady attendance improvement achieved in the last quarters.





6. Home-Based Learning Sustainability

Caregivers with low literacy struggled reinforcing learning at home; competing livelihood demands affected continuity.

Response:

- Redesigned workshops focusing on low-cost, everyday methods
- Book-borrowing initiatives and practical demonstrations
- Peer-sharing by confident parents
- Integration of learning into daily routines (counting vegetables, naming objects)
- 75%+ parents implementing home-based practices

7. Staff Retention & Motivation

Ensuring staff continuity in remote locations with limited amenities and compensation constraints.

Response:

- Fair, timely compensation
- Continuous capacity building providing professional growth
- Supportive supervision and recognition
- Creating positive work environment
- Maintained 100% staff retention throughout year

LESSONS LEARNED

1. Continuity Matters More Than Perfection

Initial weeks involved trial-and-error, but consistent presence—daily meals, predictable routines, familiar faces—gradually built trust and participation. Showing up consistently, even imperfectly, mattered more than waiting for ideal conditions.

2. Parents Are Partners

Early hesitancy reflected legitimate concerns (safety, opportunity costs), not indifference. Once engaged respectfully, understanding their constraints, demonstrating visible benefits, parents became program's strongest advocates and sustainability pillars.

3. Small Wins Build Momentum

Celebrating small achievements—parent's first workshop attendance, community member's supportive comment—created positive reinforcement loops motivating staff, families, community stakeholders.

4. Cultural Adaptation Is Non-Negotiable

One-size-fits-all approaches fail in diverse, marginalized contexts. Success required deep cultural listening, linguistic respect, integration of traditional practices, flexibility in scheduling, and local resource utilization.

5. Nutrition + Education + Psychosocial = Synergy

Isolated interventions yield limited impact. Integrated approach created multiplicative effects: well-nourished children learned better; emotionally secure children participated actively; educated parents reinforced all domains at home.





6. Community Ownership Ensures Sustainability

External programs remain fragile without local ownership. CACs, Mother Support Circles, peer networks, community-led campaigns transformed ECCC from NGO projects into community assets worth protecting and sustaining.

7. Staff Quality Determines Program Quality

Despite excellent curriculum, infrastructure, resources, outcomes ultimately depend on staff commitment, skills, empathy. Investing in human resource development—training, supervision, motivation—proved critical.

8. Flexibility Within Structure Works

While routines provided stability, rigid adherence would have failed. Balancing structured programming with responsiveness to weather, festivals, family emergencies, community events maintained relevance and accessibility.

9. Early Childhood Is Window of Opportunity

Changes observed in one year—nutritional improvement, learning gains, emotional transformation—demonstrate early childhood's plasticity. Investing in ages 2-6 yields disproportionate returns for lifetime outcomes, making ECCC cost-effective development strategy.

STAKEHOLDER FEEDBACK

Parental Testimonials

Parents consistently expressed that the ECCC became safe and dependable spaces for their children, especially in households affected by erosion and displacement. Several caregivers shared that children who previously resisted separation or lacked confidence began independently introducing themselves, maintaining hygiene routines and expressing interest in schooling. Mothers highlighted improvements in appetite, energy levels and illness reduction, attributing these changes to structured meals and regular health monitoring.

"Education doesn't wait for perfect conditions—it creates them. I learned I can teach my child with simple things at home. Now learning happens everywhere—kitchen, field, everywhere."

— Sumitra Manna (Mother of Tanisha, Ghoramara ECCC)

"She used to hide behind me. Now she waves goodbye and walks in with a smile. She talks to her friends and asks me to sing her favorite rhyme at home. The teachers have given her voice."

— Pranita Barui (Mother of Ankita, Sagar ECCC)

"I never thought I could learn to teach my child. Now I understand why these early years matter so much. The centre gave us hope when we had lost everything to river erosion."

— Anita Giri (Mother of Suman, Ghoramara ECCC)





Community Advisory Committee Members

Community leaders and CAC members described the centres as demonstration models of quality early childhood care, particularly in contrast to irregular service delivery patterns often experienced in fragile geographies. Frontline health workers and Anganwadi functionaries acknowledged that coordination through health camps and immunization tracking improved service convergence. The completion of 100% age-appropriate immunization coverage reflected strengthened collaboration rather than parallel service delivery.

"The ECCC has set new standards for early childhood care in our area. The children are healthier, happier, more ready for school. Parents who never attended meetings now come regularly. This is how change should happen—from community, for community."

**— Smt. Putul Manna Parua,
Anganwadi Worker, Radhakrishnapur**

"Coordination between ECCC and health workers has improved mother-child health dramatically. Mothers attend health camps willingly. The trust built through ECCCs extended to all health services."

— Smt. Mita Bhuiya, ASHA Worker, Ghoramara

"As a CAC member, I've seen transformation not just in children but in how community thinks about early childhood. We now advocate for every child's right to quality care and education. ECCCs taught us our voice matters."

— Smt. Kabita Bhunia, Parent Representative, CAC Sagar

External Expert Observations

Medical professionals involved in child health and maternal camps noted that early screening enabled detection of anemia, hypertension, thyroid dysfunction and infections that might otherwise have gone untreated in remote island settings. They emphasized that preventive camps reduced long-term health risks and strengthened health-seeking behaviour among parents and women.

"The nutritional improvements documented in ECCC children are remarkable given the challenging context. The integration of assessment, supplementation, counseling, and follow-up creates comprehensive care rarely seen in rural settings. This model deserves replication."

— Dr. Sanchita Roy, MD Community Medicine, Diamond Harbour Super Specialty Hospital

"The psychosocial component is what sets Muskaan apart. Addressing trauma, building emotional vocabulary, creating safe spaces—these interventions recognize children as whole persons navigating difficult circumstances. The staff's commitment to trauma-informed care is exemplary."

— Ms. Kaberi Banerjee, Child Psychologist





SEED Leadership Perspectives

From the perspective of SEED's leadership, Year 1 of the Muskaan ECCCs represents more than programme delivery; it affirms the viability of a community-anchored, integrated early childhood model in one of India's most climate-fragile geographies. What stands out is not only the measurable improvements in nutrition, learning and health indicators, but the restoration of trust among displaced and vulnerable families.

Leadership reflects that the most meaningful outcome has been the establishment of structured, safe spaces where children experience continuity despite environmental instability. The experience reinforces SEED's conviction that resilience in climate-affected regions must begin in early childhood, combining evidence-based interventions with strong community governance and system convergence.

"The Muskaan initiative validates our belief that climate vulnerability and child development must be addressed together. These children face challenges most urban children never encounter, yet with right support, their potential is limitless. Year 1 outcomes give us confidence this model can transform early childhood care across Sundarbans."

**— Dr. Somnath Bhattacharya,
Executive Director, SEED**

"What makes Muskaan special is integration—not just providing meals or teaching alphabets, but addressing whole child in their whole context. Staff dedication, community ownership, children's joy—these intangibles matter as much as nutrition data. We've built something sustainable."

**— Mr. Mrinal Bhattacharya,
Programme Director, SEED**

CONCLUSION

The first year of the Muskaan Early Childhood Care Centres initiative demonstrates conclusively that high-quality, integrated early childhood development is both achievable and transformative even in India's most climate-vulnerable, resource-constrained settings.

Against formidable odds—ongoing displacement, livelihood insecurity, systemic service gaps, geographical isolation—the Muskaan model successfully delivered comprehensive nutrition, health, education, and psychosocial support to 100 children from marginalized families in the Sundarbans. The measurable outcomes speak for themselves:

- 48% reduction in moderate undernutrition
- 85% of children achieving age-appropriate learning milestones
- 70% reduction in separation anxiety
- 90%+ sustained parental participation
- 15 children successfully transitioned to formal schools

Beyond these quantitative achievements, the qualitative transformation is equally significant. Children who arrived withdrawn, anxious, and undernourished now greet peers confidently, participate actively, demonstrate empathy, and exhibit school readiness. Parents who initially hesitated have become vocal advocates, implementing home-based learning and reinforcing healthy behaviors. Communities that viewed ECCCs with skepticism now recognize them as trusted hubs for child development, health access, and community solidarity.



The Muskaan model's success rests on several pillars: integrated programming addressing multiple deprivations simultaneously; cultural rootedness ensuring relevance and acceptance; community ownership creating sustainability; evidence-based practice maintaining quality; strong partnerships leveraging resources; and dedicated staff ensuring compassionate, consistent care.

As climate change intensifies and the Sundarbans faces accelerating vulnerabilities, investing in early childhood development becomes not just a moral imperative but a strategic necessity. Children equipped with strong nutritional foundations, cognitive skills, emotional resilience, and social competencies are better positioned to navigate uncertain futures, contribute to climate adaptation, and break intergenerational cycles of poverty.

The documented evidence from Year 1 provides a compelling case for:

- 1.Continuation: Sustaining support for enrolled children through their complete developmental years
- 2.Consolidation: Deepening program quality and community systems
- 3.Scale-up: Expanding the model to reach more vulnerable children across the Sundarbans
- 4.Replication: Adapting learnings for other climate-affected regions nationally



SPECIAL THANKS TO SBI FOUNDATION

SEED expresses profound gratitude to SBI Foundation for their visionary support, flexible partnership, and commitment to transforming the lives of Sundarbans' most vulnerable children. This journey has just begun, but the foundation laid in Year 1—in the hearts of children, families, and communities—creates enduring hope for a more equitable, resilient future.

The smiles of children who once clung silently to their mothers, the pride of parents who discovered their capacity to teach, the solidarity of communities protecting their ECCCs —these are the true measures of impact that numbers alone cannot capture. They represent not just program outcomes, but restored dignity, realized potential, and renewed possibilities.

Year 1 focused on establishing systems, trust and foundational capacities. The gains achieved provide a strong base for deeper developmental outcomes in subsequent years, including school retention, sustained nutritional recovery and strengthened maternal health trajectories.

The Muskaan ECCCs model illustrates that even in ecologically fragile, socio-economically marginalized contexts, sustained, community-anchored interventions can transform early childhood trajectories. Continued investment, system convergence and evidence-based scaling will be critical to consolidating and expanding these outcomes in the years ahead.



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DEVELOPMENT



As we look toward Year 2 and beyond, we carry forward the learnings, strengthen the foundations, and expand the reach—with unwavering commitment to ensuring that every child in the Sundarbans, regardless of climate vulnerability or socioeconomic status, receives the quality early childhood care they deserve and the opportunity to thrive.



+91 7980964138



www.seedin.org



17 A, Naktala Road,
Kolkata- 700047, West
Bengal, India