



Email-ori-thrampur@nic.in

OFFICE OF THE PANCHAYAT SAMITI, TH. RAMPUR

Letter No. 3955...

Date. 11./09/2025

To,

The NIC, Kalahandi

Sub: Regarding notification on Expression of interest (EOI) for Mission Balyashree AI based AWC.

Sir,

In inviting reference to the subject cited above, I am to say that, wide publication of notification on Expression of interest (EOI) for Mission Balyashree AI based AWC at Thuamul Rampur Block, Kalahandi Odisha.

This is for favour of your kind information and necessary action.

Yours Faithfully

Encl: As above


Block Development Officer,
Th. Rampur

Expression of Interest (EOI)

For Execution of Mission Balyashree AI Based AWC (AI-Powered Smart Anganwadi Centres) at Thuamul Rampur Block, Kalahandi, Odisha

1. Background

The Government of Odisha, through the ICDS framework and in alignment with Poshan Abhiyan, is committed to strengthening Early Childhood Care and Education (ECCE). Thuamul Rampur block of Kalahandi district, being one of the most underdeveloped regions, has been identified for piloting AI-Powered Smart Anganwadi Centres.

As per the Detailed Project Report (DPR) prepared for Anganwadi Centre of Th.Rampur Block, the project aims to provide interactive digital learning, improved nutrition monitoring, and capacity building of Anganwadi workers through modern AI-based tools and infrastructure. Detailed DPR attached at Annexure-1.

2. Objective of this EOI

The purpose of this EOI is to invite reputed agencies/organizations/consortiums to express their interest in executing the proposed project, including:

- Supply and installation of digital and AI-powered infrastructure.
- Development/customization of ECCE learning applications (bilingual – Odia & English).
- Training and capacity building of Anganwadi workers.
- Monitoring, reporting, and community engagement support.

3. Scope of Work

Interested agencies are expected to undertake, but not limited to, the following:

1. **Digital Infrastructure Setup:** Installation of interactive panels, VR headsets, tablets, routers, and cameras.
2. **Software & AI Tools:** Deployment of AI-powered ECCE app, nutrition tracking dashboard, and progress monitoring system.

3. **Capacity Building:** Training Anganwadi workers on digital pedagogy, reporting, and child-centric learning.
4. **Monitoring & Evaluation:** Periodic evaluation of learning outcomes, nutrition data, and parental engagement.
5. **Sustainability Measures:** Ensure long-term usability with localized content, offline modes, and low recurring costs.

4. AI Module – Functional Details

4.1. Adaptive Learning for Children (3–6 years)

- **Real-time assessment:** The AI module presents age-appropriate questions, stories, and activities on the interactive panel or tablet.
- **Adaptive sequencing:** Based on a child's response (correct, incorrect, time taken), the AI automatically adjusts difficulty — slowing down for weaker learners, providing extra practice, and moving ahead for faster learners.
- **Cognitive profiling:** Over time, the AI builds a learning profile for each child (strengths, weaknesses, pace of learning).
- **Content alignment:** Lessons are aligned with the National ECCE Curriculum Framework and NIPUN Bharat goals (literacy, numeracy, problem-solving, socio-emotional development).
- **Example:** If a child struggles with number recognition, the AI repeats concepts with visual VR aids. If another child masters it quickly, the AI moves on to simple counting exercises. This ensures teaching is not one-size-fits-all.

4.2. AI Dashboard for Anganwadi Workers

- **Class profile view:** Worker sees a colour-coded dashboard (green = child on track, yellow = needs attention, red = lagging behind).
- **Targeted intervention prompts:** AI suggests which children need one-on-one support and in which subject area (e.g., language, numeracy).
- **Trend analysis:** Tracks growth of each child over weeks/months and flags children falling behind peers.



- Time allocation guidance: Suggests how the AWW should divide class time between strong performers, average learners, and struggling children.

4.3. Integration with Poshan Tracker

- Data linkage: Anthropometry (height, weight, MUAC) entered in Poshan Tracker is linked with the child's cognitive growth profile from the AI system.
- AI analysis: Identifies correlations between nutrition status and learning outcomes (e.g., a child flagged underweight who also shows learning delays).
- Actionable alerts: Generates alerts for the AWW/CDPO/Health staff to take corrective action — e.g., nutrition counselling, referral to NRC, extra learning support.

4.4. Community & Parent Engagement

- Progress reports: Generates simple, visual child progress cards (smiley faces, colours, charts) to show parents in quarterly meetings.
- Language support: Outputs available in Odia and tribal dialects to aid communication with parents.
- Trust-building: Parents can directly see their child's learning growth and nutrition profile, which increases their confidence in Anganwadi services.

4.5. Monitoring & Governance Support

- Aggregated data: Supervisors (LS, CDPO) get block/district-level dashboards showing performance of all AWCs.
- Comparative insights: AI can highlight which AWCs are lagging in school readiness or nutrition outcomes.
- Evidence-based governance: Helps district officials plan corrective actions and prioritise resources.

4. Eligibility Criteria

Interested organizations must provide:



- Proven track record in implementing ICT/digital education projects in rural or government settings.
- Experience in AI/digital learning tools and capacity building.
- Demonstrated financial and technical capacity to execute the project.
- Registration under relevant statutory authorities and valid GST number.

5. Submission of EOI

Agencies are requested to submit their EOI along with the following documents:

- Company/Agency Profile with relevant experience.
- Proposed technical approach and methodology.
- Indicative financial capability.
- List of key professionals/team members.
- Proof of registration and statutory compliances.

6. Timeline

- **Last Date of Submission:** [Insert Date] **Dt. 20.09.2025**
- **Mode of Submission:** Hard copy to be submitted to the office of the undersigned through Regd./Speed Post only. Other means of communication will not be accepted.
- **Shortlisting & Further Process:** Based on the EOIs received, technically shortlisted agencies will be invited for detailed presentations and based on the presentation the agency will be finalised.

7. Contact Information

Block Development Officer

Panchayat Samiti Thuamul Rampur,
Thuamul Rampur Block, Kalahandi, Odisha.

Mob-8826594068 | 9078973182

Email: ori-thrampur@nic.in



Detailed Project Report (DPR) for Establishing AI-Powered Anganwadi Centres at Adri AWC (Adri GP) in Thuamul Rampur Block, Kalahandi, Odisha

1. Introduction

Early Childhood Care and Education (ECCE) plays a crucial role in shaping the cognitive, emotional, and social foundations of children between the ages of 3 to 6 years. The Government of India, through the Integrated Child Development Services (ICDS) and Poshan Abhiyan, has emphasized the modernization of Anganwadi Centres to deliver not only nutrition but also quality pre-school education.

Thuamul Rampur block of Kalahandi district in Odisha represents one of the most backward and remote tribal regions in India. Despite being rich in natural resources, the region continues to face acute poverty, malnutrition, illiteracy, and poor health infrastructure. In such a context, strengthening Anganwadi Centres with digital and AI-powered tools can significantly improve children's developmental outcomes, support Anganwadi workers, and empower communities.

This DPR proposes the establishment of AI-Powered Smart Anganwadi Centres in the pilot location—under Thuamul Rampur block. The initiative is being led by an Agency, in alignment with government policies on ECCE.

2. Demographic Profile of Thuamul Rampur Block

- **Geography:** Thuamul Rampur is a hilly and forested block located in the southern part of Kalahandi district, Odisha. The region is difficult to access due to poor road connectivity.
- **Population:** Around 80,000–85,000 people reside in the block, spread across remote villages.
- **Socio-economic profile:**



- Majority population belongs to Scheduled Tribes (ST) and Scheduled Castes (SC).
- Subsistence agriculture, forest produce collection, and wage labour are the main livelihoods.
- Poverty levels are high, and migration to other states for labour is common.
- **Education:** Literacy rates are below the state average, especially among women. Early school dropouts are frequent due to economic hardship.
- **Health & Nutrition:**
 - Malnutrition remains a severe issue among children under 6 years.
 - Access to primary healthcare and maternal care is limited.
 - Anaemia and stunting rates are high.
- **Existing Anganwadi Status:** The block has more than 250 Anganwadi Centres, but most operate in kutchha houses or community buildings with limited facilities. Teaching-learning material is outdated, and reporting is mostly manual.

This demographic context underlines the need for modernized Anganwadi Centres that can simultaneously provide early education, nutrition tracking, and parental engagement.

3. Issues Persisting in the Area

1. Malnutrition and Poor Health Indicators

- High prevalence of underweight and stunted children.
- Irregular growth monitoring and nutrition reporting.
- Limited parental awareness about child nutrition.

2. Educational Challenges

- Lack of engaging teaching tools and methodologies.
- Language barriers (need for Odia + tribal language support).
- Low readiness for school among children due to absence of structured pre-primary education.

3. Capacity Constraints of Anganwadi Workers

- Workers are overburdened with administrative work.
- Limited digital literacy and lack of modern pedagogical training.
- Manual reporting delays data collection and monitoring.

4. Infrastructure Gaps

- Poorly equipped Anganwadi Centres with inadequate furniture, toys, and digital tools.
- Electricity and internet connectivity issues.

5. Community Issues

- Parents' migration for labour leads to irregular child attendance.
- Limited parental involvement in ECCE due to illiteracy.

4. Objectives of the Project

- To provide interactive, play-based AI-powered learning for children aged 3-6 years.
- To ensure real-time monitoring of nutrition and health parameters integrated with ICDS dashboards.
- To empower Anganwadi workers with digital tools for pedagogy, reporting, and monitoring.
- To strengthen parental engagement through mobile-friendly dashboards and periodic updates.



- To create a model Anganwadi ecosystem in Thuamul Rampur block that can be replicated across Odisha.

5. Proposed Solution – AI-Powered Anganwadi Model

Digital Infrastructure

- Smart Interactive Panels (65" / 75") for digital classrooms.
- Tablet devices for Anganwadi workers and children's use.
- Wi-Fi routers for internet-enabled learning.
- VR Headsets (Meta Quest 3) with child-friendly, curriculum-linked modules.
- Comfortable bean bags and storage units for child-friendly spaces.

Software & AI Tools

- AI-based ECCE Learning App (bilingual: Odia + English).
- Growth & Nutrition Tracking Dashboard integrated with ICDS data.
- AI-powered progress assessment to personalize child learning.

6. Implementation Plan

- **Phase 1 – Pilot (Year 1):**
Establish AI-Powered Smart Anganwadi Centres in Adri AWCs.
- **Phase 2 – Training & Capacity Building:**
 - Train Anganwadi workers in digital pedagogy and reporting.
 - Continuous handholding support by the implementing Agency.
- **Phase 3 – Monitoring & Evaluation:**
 - Quarterly monitoring of child learning outcomes, nutrition data, and parental engagement.



- Use AI-generated dashboards for real-time decision-making.
 - **Phase 4 – Expansion (Year 2 onwards):**
Scale the model to cover more AWCs in Thuamul Rampur and across Kalahandi district.
-
-

7. Expected Outcomes

- Improved literacy, numeracy, and cognitive skills among 3–6-year-olds.
 - Enhanced nutrition monitoring and reduction in malnutrition cases.
 - Increased attendance and school readiness in children.
 - Empowered Anganwadi workers with digital skills.
 - Improved parental awareness and engagement in child development.
-

8. Sustainability and Scalability

- **Sustainability:**
 - Localized Odia + English digital content ensures adoption.
 - Training Anganwadi workers creates self-sufficiency.
 - Low recurring cost after initial setup.
 - **Scalability:**
 - Once successful, the model can be replicated in other blocks of Kalahandi and extended statewide.
 - AI-powered dashboards can inform policymakers for better ECCE strategies.
- 

9. Risks and Mitigation

- **Connectivity Issues:** Learning apps to include offline mode.
- **Low Digital Literacy:** Step-by-step training modules and support.
- **Resistance to Change:** Awareness campaigns for parents and community members.

10. Conclusion

The proposed AI-Powered Anganwadi Centres in Thuamul Rampur block will address long-standing challenges of malnutrition, poor early education, and limited digital capacity. By leveraging Artificial Intelligence, Virtual Reality, and data-driven dashboards, this initiative will revolutionize ECCE delivery in one of the most backward regions of Odisha.

This pilot project of three centres (Adri) will serve as a **demonstration model** for Odisha, paving the way for scaling across other districts. With the collaboration of the Government, community, and private sector, the AI Anganwadi model has the potential to become a national benchmark in modernizing early childhood care and education.

