A Report on

An Evaluation of Mother Tongue Based Early Learning and Parents + (MTELP+) Programme

Centre for Early Childhood Development and Research,

Jamia Millia Islamia, New Delhi

Commissioned by:Bernard van Leer Foundation (BvLF)

Contributions

The present research study is a result of the concerted efforts of the Core team, research team as well as data collection and entry personnel.

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Abbreviations

AWC	**Anganwadi Centre**
AWH	Anganwadi Helper
AWW	Anganwadi Worker
CAPI	Computer Assisted Personal Interviewing
CDPO	Child Development Project Officer
CECDR	Centre for Early Childhood Development and Research
CWSN	Children with Special Needs
DC	District Coordinator
DWCD	Department of Women and Child Development
ECCE	Early Childhood Care and Education
ECE	Early Childhood Education
EVS	Environmental Studies
FGD	Focus Group Discussion
GOI	Government of India
ICDS	Integrated Child Development Services Scheme
ITM	Indigenous Tribal Minority
LS	Lady Supervisor
MLE	Multilingual Education
MOU	Memorandum of Understanding
MT	Mother Tongue
MTB-MLE	Mother Tongue based Multilingual Education

MTELP+	Mother Tongue based Early Learning and Parents+
NIPCCD	National Institute of Public Corporation and Child Development
NGO	Non-Government Organization
OBC	Other Backward Classes
PG	Post Graduate
PMU	Programme Management Unit
PRI	Panchayati Raj Institution
PSE	Pre School Education
RFP	Request for Proposal
SHG	Self Help Group
THR	Take Home Ration
TLM	Teaching Learning Material
TOR	Terms of Reference

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1. Introduction

Languages are a crucial medium for communication and also a repository of culture, traditions and identity. Globally, the year 2019, is being celebrated as *International Year for Indigenous Languages* with the intent to facilitate dissemination of indigenous knowledge, thus ensuring preservation of indigenous cultures and assisting people to live sustainably (United Nations Educational Scientific and Cultural Organization [UNESCO], 2018). This signifies the intention to preserve and celebrate the plurality which contributes to world's rich diversity.

1.1 Status of Mother Tongue Based Early Learning in India

The Census of India 2011 (2011) has recorded 19,569 languages and dialects which the Indian population reported to be speaking as their mother tongue, thus making India a rich repository of heterogeneous languages. In India, various documents, such as position paper, policy brief, curriculum frameworks have reiterated the significance of use of varied mother tongues in early childhood settings and in primary grades. Recently, the Preschool Curriculum advanced by National Council of Educational Research and Training (NCERT), has recommended the usage of mother tongue in Early Childhood Education (ECE) settings. The recent preschool curriculum developed by National Council of Educational Research and Training (NCERT) emphasizes that in situations where children with more than one mother tongue exist, then; it would be most conducive to let children express themselves in their respective mother tongue (NCERT, 2019). Further, the National Early Childhood Care and Education (ECCE), Curriculum Framework advocates the use of mother tongue/ home language as medium of instruction and that all the children in ECCE centres should be allowed to speak their respective mother tongue, as this would further assist young children to be emotionally secure (Ministry of Women and Child Development [MWCD], 2013). The National Curriculum Framework (NCF), 2005, emphasizes the need to foster children's language and cognitive skills in their mother tongue and recommends that teachers should take help from local people who have same mother tongue as children, to assist children in communicating in their respective mother tongue and gradually support children's transitioning to school language (NCERT, 2005). A position paper titled '*Teaching of Indian Languages*' advocates teaching in mother tongue and usage of indigenous languages to advance cognitive and social competencies, assist children to comprehend varied

concepts and facilitate children's understanding of school language (NCERT, 2006). The Article 350 A of Constitution of India, as a directive, urges the state authorities to ensure that children who belong to 'linguistic minority groups', should be provided opportunities to have their mother tongue as the medium of instruction till the primary stage of education (Ministry of Human Resource Development [MHRD], 2016). Further, young children's eloquence in their mother tongue equips them with cognitive as well as linguistic competencies to grasp, learn and subsequently become fluent in second language and additional languages. Keeping this in view, children should be encouraged to gain competence in their mother tongue and then move towards learning additional languages. Empirical evidence confirms children who are fluent in their mother tongue are self-confident and motivated to perform well. This further enhances their enrolment, ability for comprehension and school performance (Ball, 2010; Kosonen, 2005).

In India, majority of tribal languages do not find a place in formal education sectors and literacy programmes as medium of instruction. The languages spoken by the tribal populace, do not gain recognition because these are not utilized in education, economic and political realms, and are perceived as powerless in comparison to dominant languages (Mohanty, 2008). The restricted use of tribal languages coupled with illiteracy and economic vulnerability jeopardize day to day existence of the tribes (Mohanty, 2008). Scholars have had used phrases such as 'crime against humanity' and 'linguistic genocide' to put emphasis on the gravity of pervasive disadvantage encountered by children, due to neglect of their respective mother tongue in educational settings coupled with use of dominant language as the medium of instruction (Mohanty & Skutnabb-Kangas, 2013; Arnold, Bartlett, Gowani, & Merali, 2006). Due to absence of tribal languages as medium of instruction, a recursive process was established. This process involved Indigenous Tribal Minority (ITM) language speakers to get exposed to dominant languages in schools, which restricted the opportunity to gain command over their mother tongue. This resulted in failure to develop foundational cognitive and linguistic skills in their mother tongue, subsequently; there was failure in acquisition of dominant languages. Consequently, this resulted in low literacy levels, which further manifested in economic inequalities and lack of cultural identity among children (Mohanty & Skutnabb-Kangas, 2013).

1.2 Why Mother Tongue Based Early Learning is Beneficial?

In Indian context, research has shown that often mother tongue based early childhood education interventions have a positive influence on teaching learning practices in early grades. Both teachers and children are comfortable communicating in their mother tongue. Improvements that are visible entail better interactions among children and between teachers and children, increase in children's interest in activities such as storytelling and children readily express their needs. Listening and speaking a familiar language removes fear from children's mind and increases their confidence. Creating quality learning environments include having appropriate pedagogical strategies in place where children are encouraged to put up questions to teachers, and the latter proactively respond to their queries. However, having appropriate and contextual TLMs is futile as majority of available TLMs are in dominant language. Hence, teachers are empowered to develop and use contextual and appropriate TLMs, contextual stories, and local games to engage children in various activities (New Education Group-Foundation for Innovation and Research in Education & Rajya Shiksha Kendra [NEG-FIRE& RSK], 2015).

In India, a programme on Multilingual Education (MLE) commenced in Andhra Pradesh and Odisha in 2004 and 2006 respectively. In furtherance to this, an empirical longitudinal study was undertaken to gauge the impact of the Mother tongue based Multilingual Education (MTB-MLE) on the academic performance of children in early grades, in these two states (Panda, Mohanty, Nag, & Biswabandan, 2011). The study established that children from MLE schools performed significantly better on the tests of Mathematics, EVS and Languages, in comparison to children in non-MLE schools. Besides, the performance of MLE children improved significantly, as they progressed through primary grades. Additionally, MLE classrooms were better in terms of children's participation, children centered activities and teachers' teaching practices. For example, in MLE classrooms, there was greater interaction among children and between children and teachers. The teachers in MLE classrooms put to use interactive teaching materials such as storybooks and blocks and focused on advancing students' engagement in varied activities. All these positive dimensions were nearly absent in non-MLE classrooms, wherein teachers used oral didactic lectures to teach children and teacher-children interactions were negligible. The authors posited that tribal children's academic performance would improve if exposure to their respective mother tongue was for longer durations (Panda et al., 2011). This

was because basic skills such as sound-symbol and meaning-symbol correlation were established if children were first exposed to their respective mother tongues as medium of instruction (Benson, 2005). Evidence from global research also informs the effectiveness of engaging children from marginalized communities through MTB-MLE (Benson & Kosonen, 2013).

Another study in four Indian states, namely, Assam, Gujarat, Odisha and Madhya Pradesh, found that children who were in schools, where the medium of instruction was another language but their mother tongue, were unable to derive meaning from what their teachers were teaching in Grade 1. These children did not recognize alphabets and their classroom interactions were merely restricted to copying alphabets from the black board. However, the research revealed that children were better off when there was provision of a tribal teacher who communicated with children in their mother tongue. Since, the language competencies did not develop among these children, poor academic performance was prevalent in grade fifth too (Jhingran, 2005, as cited in Mohanty, & Skutnabb-Kanga, 2013). According to Benson (2005) teaching children in any other language apart from their mother tongue was similar to throwing children in water without prior swimming lessons. Therefore, the researchers have recommended that attaining basic linguistic competencies and subsequently gaining proficiency in one's mother tongue should be set as benchmark for children in preschool as well as in primary school. Teacher trainings (pre and in-service) need to be directed towards advancing teachers' expertise in MLE to enable them to engage children in pedagogically and culturally appropriate manner.

Research on perception of teachers regarding children's use of home language in early childhood centres, has shown that teachers regard children's use of home language as beneficial for transition to primary grades (Hu, Torr, & Whiteman, 2014). Additionally, teachers employ various strategies to handle parents' request to encourage children to speak in English in ECE settings. For instance, one of the teachers, from Australia, reported that that she encouraged children to speak in their home language at preschool and subsequently explained the significance of using mother tongue to parents to build awareness among them. Visual materials were put on display and were annotated with different languages. Moreover, assistance of bilingual staff was taken to engage children, for instance, bilingual staff read stories to children. However, some teachers had to give in to parents' fanatical requests to make their children speak in English (Hu et al., 2014).

To conclude, in order to ensure that MLE programmes yield favorable outcomes and particularly, teaching learning aspect of the programme functions optimally, various societal factors need to be considered. For instance, in context of rural Kenya, Graham (2010) found that first, early childhood educators were forced to use English as medium of instruction because parents and grade 1 teachers, strongly criticized the usage of mother tongue during early years. Additionally, prevalence of poverty resulted in absenteeism among children, because, either they were ill or could not afford early childhood education. To complex the situation further, children's ability to understand and engage in various activities was affected because of malnourishment. Lastly inadequate provision of resources lowered the motivation among early childhood educators, as they often had to arrange for resources themselves. All these factors mandated a collective redressal to ensure successful implementation. Further, parents' position as 'first teachers' need to be promoted to ensure children gain command over basic rules of their mother tongue (Ball, 2010).

As mentioned above, along with teachers' trainings parents also need to be sensitized regarding importance of usage of mother tongue. Verdon & McLeod (2015) documented that if caregivers used an indigenous language, then young children were more likely to use that language. Being the vehicles of learning for children, all the caregivers need to be made aware that gaining competence in one's mother tongue would further assist children in gaining command over the dominant languages (Hu et al., 2014).

1.3 Capacity Building, and Mentoring of Teachers to Impart Quality Mother Tongue Based Multilingual Education

In Indian context, professional development (PD) of early childhood educators for effective implementation of Mother Tongue based Multilingual Education is the need of the hour. Research have documented that PD programs foster the skills of the educators to transact activities in multilingual settings. In Luxembourg in Germany, Kirsch provided PD program to 44 early childhood educators and caregivers and established that improvements were evident on three aspects, namely, understanding of how children learn languages, acceptance and responsiveness towards multilingual education, and conducting and engaging children in various activities. Further, educators and caregivers who participated in the PD were able to take into

consideration the language related needs of the children and conduct planned activities for them. One of the strategies of the PD involved the video recording of these practitioners' language related practices in classrooms and subsequently, practitioners co-analyzed their own videos along with experts. This component, especially, assisted the practitioners to plan for various activities in such a manner so that all children received the opportunity to use their mother tongue. Further, components such as understanding children's language acquisition and learning, establishing partnership with parents to get an insight of children's home environment warrant incorporation in the PD for educators. Importantly, the assessment mechanisms need to be based on child observations, which would inform about children's language production. To optimally execute all the above components, both teachers as well as parents need to be trained so that they acknowledge and understand nuances of children' language development (Michael-Luna, 2013). Along with teachers' trainings, parents need to be sensitized about the importance of usage of mother tongue. Verdon & McLeod (2015) documented that if caregivers used an indigenous language, then young children were more likely to use that language.

In India, a number of policy documents have emphasized that regular mentoring and supervision are critical for quality ECE programmes. For instance, the National Early Childhood Care and Education (ECCE) Curriculum Framework, has stressed on consistent onsite mentoring to early childhood educators as well as caregivers in Anganwadis (Ministry of Women and Child Development [MWCD], 2013). A UNICEF's Handbook titled 'Quality in Early Childhood Care and Education-Pictorial Handbook for Practitioners', advocated that guided hands-on session with early childhood educators should be held. The opportunities to engage children in varied activities, under the observation of experts, as well as demonstration of appropriate ECE practices by the experts, would allow the early childhood educators to pick up the nuances of curriculum transaction (United Nations Children's Fund [UNICEF], 2014).

Regular mentoring and Supervision by critical stakeholders have lead to optimal functioning of programmes directed at children in early years, for especially those in disadvantaged areas. For instance, in Indian context, in relation to a breastfeeding programme, which was implemented in Lalitpur in Uttar Pradesh, it was documented that mentoring and supervision had positive impact on breastfeeding practices of nursing mothers. Here, 1,286 Mother Support Groups (MSGs) were formed. Each of such groups had an AWW, an ASHA worker and either of the three, an

Anganwadi Helper (AWH) or a birth attendant or a local woman who was respected by the villagers. Further, 48 Counselors were employed to form, train and monitor these groups. The execution of the programme was supervised by project director, project coordinator and eight block monitors. Meanwhile, Counselors supervised the MSGs, once a month. Besides, these groups participated in monthly review meetings, which were presided by block level officials and ICDS sector Supervisors. Besides, these groups were provided appreciation during public events and on media platforms (National Institute of Public Cooperation and Child Development [NIPCCD], 2013).

Further, in order to strengthen ECE, the state of Rajasthan has worked in the direction of establishing community based intervention. Yet another success was observed when monitoring of health services in the Andhra Pradesh. Here, Geographical Management Information System (GMIS) was put to use for monitoring purposes. AWWs were trained to enter data and track the beneficiaries in aspects like immunization, home visits to at families in need of health care services. These were the sector level data and were uploaded on the software for perusal by Supervisors and CDPOs, for keeping a tab on the progress and developing future course of action (NIPCCD, 2013). Under ICDS mission, 'Jan sunvai', was envisaged to be one of the strategies for community based monitoring. It was ideated that under 'Jan Sunvai', monitoring teams would visit the areas which reported high levels of under nutrition. These teams, which would consist of National, State as well as District levels officials and Voluntary Action Groups, would interact with community members, parents and families and engage these critical stakeholders in the Focus Group Discussions (FGDs). This in turn would help in discerning various gaps and loopholes in the planning and implementation of interventions. Furthermore, this would bring about necessary improvement in the various aspects of the interventions. Besides, the responsibility of supportive supervision to Supervisors and AWWs was entrusted to Block Mission ICDS committee, which would meet once every month.

Therefore, in tandem, these examples illustrate two points. First, the fact that consistent and concerted effort towards mentoring and monitoring would lead to optimal functioning of the programme. Second point was various ways through which stakeholders undertake monitoring or envisaged to undertake monitoring. Similar monitoring efforts need to be directed at Preschool Education component of ICDS.

1.4 Benefits of Involving Parents in Early Learning

Parents are the primary educators of their child. Children learn from their experiences and interactions with their family members. When the child steps out for the first time from home to a preschool, the environment is unfamiliar to them. Parents provide the critical link to ensure continuity between home and preschool. Hence, parental partnerships with teachers are critical for smooth transitions and better outcomes for children.

Parent involvement could be put forth as parental engagement in children's development and education, from the time children are born, considering the fact that parents are the most influential entities in children' lives (Centre for Early Childhood Development and Education [CECDE], n.d.).

NCERT has put forth that parent engagement in early childhood education is a bidirectional process, i.e. parents should be regarded as partners and they should also be educated in the process. The parents should be educated about the relevance of early years education, what and how children need to learn and behaviour problems of children. Parent engagement in early childhood education centres will enable to parents to get hold over how activities are conducted with children and parents could also devote their time arranging cultural activities for children, volunteer in taking children to excursions, fairs and field trips (National Council for Educational Research and Training [NCERT], 2018). Research informs that responsive parenting has a significant effect on children's outcomes. International research on parent involvement in Early Childhood Education (ECE) has established that parent involvement positively impact the early leaning, improves social relations and enhances young children's efficaciousness (Fagbeminiyi, 2011). It has been established that parents influence early learning of their children by providing literacy rich home environment, stimulation, especially in form of cognitive stimulation (International Child Development Initiative [ICDI] and Bernard VAN Leer Foundation [BvLF], 2012). Findings from a longitudinal study conducted in Tribal Odisha informed a positive correlation between father's involvement and children's performance outcomes and it was significant for both the School Readiness Instrument and items of mathematics (Gupta, Rajesh, Pai-Samant & Gupta, 2019). Mishra (2012) conducted a research study to examine the role of parents in early childhood years in Dhenkanal District in Odisha and put forth that parental

involvement in terms of emotional care and support has positively impact the performance of children in early years.

Good practices of parents engagement in early childhood education

Muktangun, a non-profit organization, which is based in Central Mumbai, provided child centered inclusive education to disadvantaged children. The techniques such as home visit, parent meeting, parent interview, workshops, teachers education, participation in informal activities have been employed by Muktangan to advance parent education in preschool education. Despite these activities being conducted, most of the parents did not have major change in their perception towards preschool education. For instance, parents supported provision of homework (85 percent), rote memorization of alphabets (60 percent) and writing (60 percent), and some parents were of the view that children should be able to recite poems from memory (60 percent of the new parents). Findings from the research will help the organization to re-work their strategies in order to advance parents' involvement in preschool education, for instance, workshops on parent-school partnership (Jadhav& Borges, 2017).

Pratham, an innovative learning organization with a mandate to improve quality of education in India (Pratham Education Foundation, 2018b), regards family as having foremost significance for child development. At Pratham, mothers were engaged through building and enhancing their awareness about food and feeding practices, basic health and child's holistic development. Meetings and interactive sessions with mothers were arranged at regular intervals. An array of games, activities and discussions were planned and organized with parents. Discussion cards were developed and used to facilitate discourse on topics such as early years and domains of development. Teaching learning materials such as visual and story cards were distributed for mothers to use with children (Pratham Education Foundation, 2018a).

Parents and community can be encouraged to be involved in preparing resource materials, assist in monitoring and supervision to ensure quality preschool programmes for their children. In the document titled '*Potential Good Practices: The ICDS Experience'*, few good practices pertaining to parent and community involvement in Anganwadi centres were highlighted. In Kerala, Village level monitoring and Panchayat level monitoring of AWC was conducted by ward members and

health education committee, respectively. While, in Tamil Nadu, two members per committee were entrusted with responsibility of two Anganwadi centres and one of their responsibilities was to bring children to AWCs, contribute by providing play materials, construction and upkeep of kitchen garden. Also, examples of good early childhood education practices were cited, for instance, the Gujarat Government had commenced Mobile Anganwadi Vans to reach those children which were situated in remote areas, by employing state budget. In the state of Haryana, preschool education to children of migrant labours was provided through mobile Anganwadi centres, named 'Bhatta Patshala'(Ministry of Women and Child Development & NIPCCD, 2013).

Parental engagement creates awareness among parents. The parents become familiar with the type of play activities and learning experiences that are organized in Anganwadis/ preschool and are able to replicate and extend these learning activities at home. This helps in promoting a stimulating environment at home and they are able to contribute to their child's holistic development. Teachers' engagement with parents and community helps building responsibility towards their children and their role in promoting the development of their children. They begin to appreciate the need to provide a quality and stimulating environment which allows children to play, explore and discover.

1.5 Awareness Generation for Parents on Mother Tongue Based Multilingual Education

Indian as well as international researchers have shown that parents strongly prefer *English* as *medium of instruction* and want their children to learn English and interact with peers in English in early childhood centres (Ephias, Newman, & Lilian, 2015; Hu et al., 2014; Kaul et al., 2017) For example, in India, 'The India Early Childhood Education Impact Study' documented that parents gravitated towards private preschools, where presumably, English was used as *medium of instruction*. Unfortunately, parents considered *practicing and copying English alphabets* as *learning* English. Likewise, parents (of children in early grades, viz grade 1 and 2) often held the perception that children need to be well conversant with the language taught in schools, i.e., the state language. Besides, some parents put emphasis on Hindi and especially English (Panda et al., 2011).

Research has emphasized on the importance of involving parents and community members in mother tongue based early learning programmes of their children . A research recommendation put emphasis on organizing *melas* to showcase parents and community members the curricular and co-curricular activities undertaken by the children (NEG-FIRE & RSK, 2015). Though, this particular recommendation was made in context of parents of children in early grades, the same could be beneficial for parents of children attending Anganwadis. Therefore, in context of Anganwadis, events such as *melas*, *groups meetings* and *awareness campaigns*, ought to be organized for parents. These opportunities will help parents build their capacities and understanding of significance of mother tongue and why it needs to be strengthened in the early years. On-going parental involvement and sensitization facilitates parental support and concurrence for mother tongue based early learning (Heugh & Mulumba, 2013).

1.6 Is Sustainability a Difficult Pursuit?

The answer to this question is NO. Sustainability of an early childhood education intervention or an innovation is achievable though an integrative approach. This approach would involve systematic convergence of efforts of all the stakeholders, including, funding agencies, government officials as well as those directly involved in the oversee and implementation of the intervention at ground level, for instance, early childhood educators, primary school teachers, Headmasters/ Headmistress, and community members. To illustrate, Abiyo (2017) established that in Kenyan context, factors such as pre-service teacher trainings, extensive engagement of community members and provision of materials such as books in children's mother tongue would facilitate optimal implementation of the mother tongue based multilingual early childhood education programme in the long run. Meki Kombe & Herman (2017) conducted a research to investigate the factors that facilitated and hindered the endurance and sustainability of a donor supported educational programme. A case study of Primary Reading Programme (PRP) was undertaken. This programme was implemented with an intention to improve the literacy skills of primary school students in Zambia. Both project related factors and context related factors were into play. Robust and effective school leadership was one factor which ensured continuation of the PRP after the donor support was withdrawn. Some of the dedicated Headmasters sent teachers for trainings; consistently monitored teachers' teaching processes and ensured materials required during teaching learning were readily available. However, the authors reported that

these good practices were only carried out by few Headmasters and were uncommon. Next, factors that impeded the sustainable functioning of the programme were for example, first, teachers were unable to plan and execute activities for children due to large number of children in the classroom and lack of one to one interaction with them. Second, since the improvements registered in children's performance declined in the later stages of the programme, hence, a tendency developed among the stakeholders to withdraw their support. Third, the authors were of the opinion that donor supported interventions become irrelevant, as they often get implemented under contrived situations, for instance, finances might be available in abundance which may not be the case after the support is withdrawn or during the support, well trained personnel may be on board to implement the intervention, however, this might not be endured. Fourth, teachers' views on programme design and implementation were not sought. This resulted in teachers' lack of sense of ownership towards the programme. All these were project related factors. Contextual factors posing as hindrance were scant provision of materials and sparse monitoring and capacity building initiatives. Meki Kombe & Herman (2017) further highlighted 'project mentality'. The phenomenon of project mentality was that initially, these educational projects would yield positive results and funds would also be readily available for various activities, materials and operations, however, due to termination of donor's support various incentives, especially, the financial incentives would be withdrawn and hence the motivation of the stakeholders also impeded. Therefore it is important to customize projects according to contextual needs and in coordination with local administration, community members as well as field level teachers and personnel as warranted. The researchers further suggested that the donors should assess the capacity of the host country to facilitate intervention of similar nature through conducting situation analysis.

In India context, MacKenzie (2009) informed that in Andhra Pradesh and Odisha, teachers had been engaged in development of MTB-MLE programme from the outset. These teachers promoted the programme within their own communities and this resulted in community members' acceptance of the programme. Also, regular monitoring, in form of resource persons' observation of teachers' practices with children, regular reviews undertaken by teachers as well as providing feedbacks to newly recruited teachers also boosted the sustainability prospects of the program. Nonetheless, instances, such as, unplanned exit of officials who support the programme, non-enthusiasm and paucity of support from mid-level officials, coupled with lack

of synergy among various departments of the government, marred the efforts undertaken towards ensuring sustainability. MacKenzie (2009) advocated launching of pan India trainings for field workers and officials handling education related matters in national and local governments, so that good practices in field could be shared with key stakeholders at all levels.

The state of Odisha is a home to the third highest percentage of tribal population in the country. Intensive efforts by the State Government are in progress to preserve the language and culture of the diverse tribal communities, located in the State. With the above perspectives in place, Government of Odisha wants to ensure the quality in Early Childhood programmes by promoting usage of mother tongue in the tribal areas of Odisha, thus providing a platform that ensures better enrolment, participation and success for children at preschool and school. Simultaneously, Bernard van Leer Foundation (BvLF) has supported the campaign for a policy on mother tongue based multilingual early childhood education for tribal children in Odisha since 2007. The organization firmly believes that quality pedagogy plays a crucial role for children in their early years. Guided by a similar vision, to ensure that children of Odisha have access to quality preschool environment and where children receive early learning in their mother tongue, Government of Odisha partnered with BvLF to implement the Mother Tongue Based Early Learning and Parents+ (MTELP+) programme. The MTELP+ programme was envisaged to design teaching-learning practices in mother tongue of children, especially at the early childhood level to ensure better outcomes for children. The partnership thus facilitated strengthening of the existing Government systems to ensure the success and sustainability of the programme. In an attempt to have the culture and language of ethnic and minority communities become the basis of early childhood education, the partnership endeavored building of collaboration with parents and community.

2. The Study

The purpose of this research study was to conduct an evaluation of the (MTELP+ programme, initiated in 2016. The MTELP+ programme was implemented by the Programme Management Unit (PMU) at the Department of Women and Child Development and Mission Shakti (DWCD), Government of Odisha and was funded by BvLF for a period of three years. The PMU comprised of Programme Manager, Knowledge Manager, Admin officer, Accounts officer and 10 District Coordinators. DWCD, Government of Odisha, in partnership with BvLF had come together to scale up a field tested model of MTELP+ programme in 7,202 Anganwadis in 10 tribal languages serving nearly 2,50,000 under six children in 12 districts.

A Programme Management Unit (PMU) within the DWCD was formulated to support the endeavor. The PMU was responsible for:

- Scaling up a model of mother tongue-based multilingual early childhood education in 7,202 Anganwadi centres (Anganwadis), so that children experience improved learning environments, demonstrate better language proficiency, and make successful transitions to primary school;
- Strengthening the skills and capacities of government policymakers, managers and frontline workers to deliver high quality mother tongue-based early learning programmes; and
- Strengthening the use of Anganwadis as platforms for parental and community engagement focused on the holistic development of children under six years of age.

Post three years, BvLF with the support of WCD, Odisha commissioned the evaluation study to understand the progress and achievements of the MTELP+ programme.

2.1 Objectives of Study

The first phase of the evaluation involved an in-depth review of the MTELP+ programme and its interventions. Based on the desk review the research design and tools were developed and finalized. An expert meeting was organized in consultation with BvLF to review the objectives, research design and the tools for the forthcoming evaluation. The expert committee comprised of renowned early childhood care and development (ECCD) and Language experts at the National and University level who served as independent consultants.

Suggestions from experts from the meeting included revision of the objectives laid out in the Terms of Reference (TOR) during the Request for Proposal (RFP) process. To ensure an effective evaluation, the objectives of the study were aligned with the trainings provided to different Anganwadi functionaries in order to conduct the evaluation study. The revised objectives of study are listed below:

1. Evaluate the effectiveness of delivery of the MTELP+ programme including:
    a. Effectiveness of training of Anganwadi workers (AWWs), Lady Supervisors (LSs) and Child Development Project Officer (CDPOs) trained as an integral part of MTELP+ programme.
    b. To assess the capacities of AWWs trained as an integral part of MTELP+ programme to transact quality Early Childhood Education (ECE) with a focus on mother tongue based multilingual early childhood education.
    c. Examine the capacities of AWWs to engage parents and community in Anganwadis.
2. Evaluate the extent to which the partnership between Department of Women and Child Development and Mission Shakti, Government of Odisha and BvLF has built the implementation capacity of the Government of Odisha to deliver quality early childhood education with a special focus on MTELP+ programme.
3. Highlight innovative, evidence-based, good practices in mother tongue-based early learning in intervention districts.
4. Evaluate the progress of key programme activities vis-à-vis the MOU and programme implementation framework (documenting deviations, if any) and assess the efficiency or drawbacks due to deviations (Desk review based secondary data).

5. Provide recommendations to inform practice and policy in the area of mother tongue based early learning and parental engagement in ECE.

3. Methodology

The present study intended to measure the extent to which the MTELP+ programme, implemented by the PMU of Department of Women and Child Development (DWCD), Government of Odisha was able to promote/ advocate Mother Tongue based multilingual learning to the children in intervention districts. The study was also planned to measure effectiveness of the trainings provided to AWWs and LSs to deliver MTELP+ in the intervention districts and extent of parents and community participation. The study also captured innovative, evidence-based, best practices in Mother Tongue-Based Early learning from ground.

3.1 Sample

In 2016, a baseline assessment was conducted in 7202 Anganwadi centres (hereafter Anganwadis) located in 12 different districts of Odisha. The sample size of 1440 Anganwadis was calculated via using scientific method which was equivalent to 20 percent of the population. The 20 percent sample represented the 5^{th} quartile of the total population. In order to get the representation from all the blocks in 12 districts, stratified random sampling technique was used to map-out the total sample out of 7202 Anganwadis belonging to 101 blocks of 12 different districts of the state. Typically, the acceptable margin of error would be 5 per cent but here the sample of the proposed study was large, therefore 1.85 (approx. 2%) of error was accepted at the confidence level of 95 per cent. Additionally, the sampled 20 percent of 7202 Anganwadis for all the districts for the forthcoming evaluation facilitated effective data collection within limited and stringent timeline of the evaluation.

As the MTELP+ evaluation was contingent to language based intervention in 12 tribal districts of Odisha, the baseline population was split into strata. Both the strata at the district level and the usage of languages were distinct and important to understand. Hence both the data at the district level and languages (mother tongue of children, also the language of curriculum transaction) were considered as the major criteria for selecting the sample. The population was stratified at two levels, the first being at district level (Kandhamal, Kalahandi, Malkangiri, Rayagada,

Gajapati, Koraput, Ganjam, Mayurbhanj, Sundergarh, Keonjhar, Sambalpur & Dhenkanal). The 20 percent sample from 12 districts was first selected proportionally keeping the baseline data as total population. At the second level, the criteria of 10 languages (Santal, Soura, Kui, Munda, Kissan, Kuvi, Koya, Juang, Oram & Bonda) was also taken into consideration while selecting the sample randomly. While the initial proposed sample was 1440 Anganwadis, in actual 1448 Anganwadis were observed and data for the same were analyzed. Due diligence was observed for selection of MTELP+ Centres. Below is a detailed description of how the list of Anganwadis was finalized in discussions with the DCs, CDPOs and LS. Guidance from DCs, CDPOs and LS was important to ensure that the selected sample of Anganwadis were a part of the MTELP+ programme and the AWWs had participated in MTELP+ trainings.

Selection of the MTELP+ Centres

i. Step 1: The list of Anganwadis and villages was shared by PMU via BvLF.
ii. Step 2: A total of 1474 Anganwadis were randomly selected by CECDR/ Sigma team and shared with PMU for their concurrence.
iii. Step 3: Given that PMU was closely engaged with the Anganwadis where interventions were in place, they supported by reviewing and finalizing the list of 1466 Anganwadis to be included in the sample. The re-examination of Anganwadis by PMU was to confirm the following:
    - Selection of MTELP+ Anganwadi
    - Presence of trained MTELP+ AWW
iv. Step 4: The revised list was utilized by CECDR team and Sigma senior field executive to develop a plan for data collection in different districts, keeping in mind the election schedule[1] for various districts. This plan was shared with the DCs for contact details of LS. At this point, a few Anganwadis were once again replaced by the DCs due to following reasons:
    - Non-MTELP+
    - AWW on leave/ transferred
    - Hard to reach/ Naxal area

[1] The election dates were scheduled for April 2019 in the selected districts. The dates for data collection on field were thus decided to ensure that data collection was not impacted by the elections and ensure that the respondents were not disturbed for data collection on the day scheduled for elections.

- Health issues of AWW and Anganwadis closed

v. Step 5: The re-revised updated field plan with name of Anganwadis and contact details of LS were shared with Sigma supervisors at the district level.

vi. Step 6 – As mentioned above the situation at the field level was dynamic and there were continuous back and forth in selection of Anganwadis. Continuous engagement with DCs, LS and CDPOs, were made to ensure that the AWW at the selected Anganwadi had received MTELP+ training. Nonetheless there were a few instances when the field team would reach Anganwadis and would be informed that the AWW was not trained in MTELP+ as she had been transferred or recently appointed. In a few locations, the team managed to replace the Anganwadi in consultation with LS and CDPOs. However, a small percentage of Anganwadis were included in the sample where the AWW did not receive MTELP+ training.

The proposed 20 percent Anganwadis were considered for purpose of assessment on different parameters of quality provisions of Early Childhood Education MTELP+ programme. AWWs from respective centres were considered as representative sample for assessing their capacities after the first phase of intervention/ training. 42 LSs and 23 CDPOs from the 12 districts were also part of the evaluation (see Figure 3.1). Purposive Sampling technique was used to select the LSs and CDPOs depending on their availability and geographical proximity.

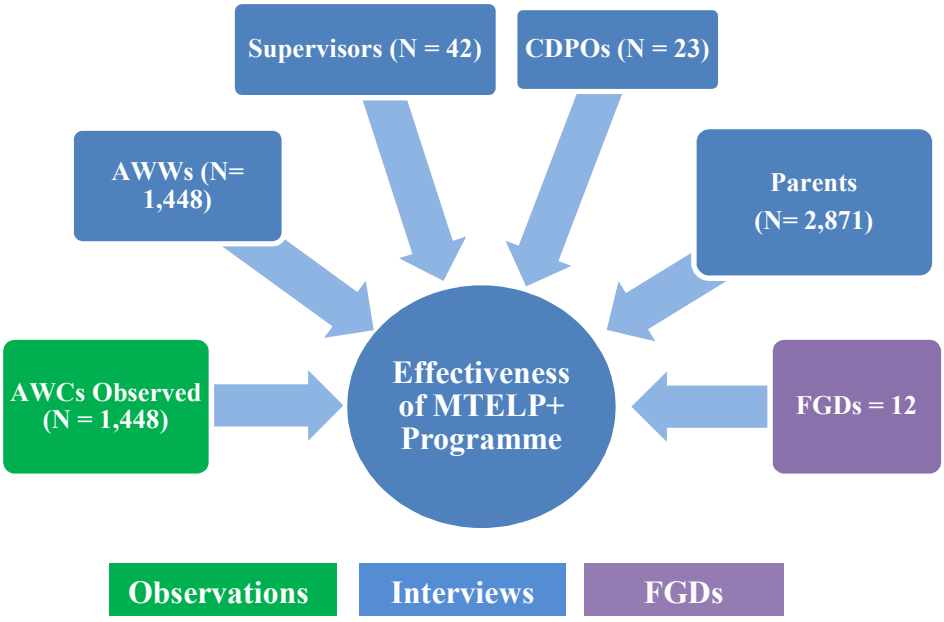


Figure 3.1: Sample Size of Anganwadis/ different Stakeholders across 12 Districts

Parents having children less than six years of age were also the part of the study in order to understand their perception towards brain development, early learning, language proficiency and the social and cognitive development of the Children. Convenience sampling technique was used in order to select two parents from each Anganwadi Centre depending on their availability. Every Anganwadi has the list of the parents whose children are below 6 years of age. From that list, two parents were identified to be included as sample for the evaluation. The criteria for selection of parents were, identifying parents whose children were attending that particular Anganwadi and also their availability for face to face interviews. The community members were also taken into consideration for purpose of data collection under the proposed study. Their perception towards role of ECE/ Anganwadis and how they facilitated implementation of policy at their level, was assessed.

3.2 Geographical Outreach of the Sample

The PMU and Government of Odisha with support from BvLF provided interventions on MTELP+ in 7,202 Anganwadis located in 12 districts in which AWWs were trained on mother tongue pedagogy. The 12 districts selected for the purpose of evaluation were namely, Kandhamal, Kalahandi, Malkangiri, Rayagada, Gajapati, Koraput, Ganjam, Mayurbhanj, Sundergarh, Keonjhar, Sambalpur and Dhenkanal. The data was collected from the tribal, rural & urban areas of the following districts (See Figure 3.2).

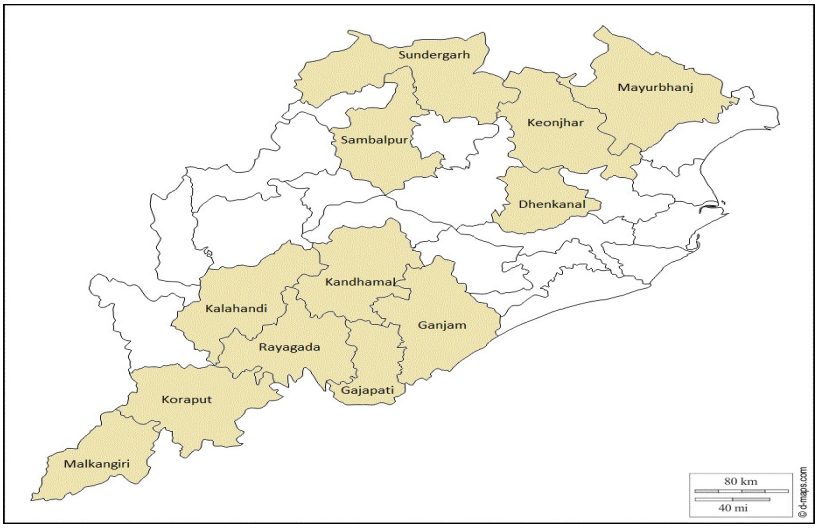


Figure3.2: Map of Odisha, depicting various districts included in the study

The geographical spread of the research study included 101 blocks of 12 different districts of the state (see Table 3.1). Below is presented the proposed numbers for the study. The actual numbers and data is presented later in section 4.1.3 as the evidence from data informs that Odia along with other MTs was spoken at the Anganwadis in 12 districts.

Table 3.1: Sampled Anganwadis Observed in 12 Districts and Usage of Languages

Sampled Anganwadis Observed in 12 Districts and Usage of Languages (N=1448)														
Sl No	**District**	**Santali**	**Soura**	**Kui**	**Munda**	**Kissan**	**Kuvi**	**Koya**	**Juang**	**Oram**	**Bonda**	**Odia**	**Other lang.**	**Total**
1	**Kandhamal**			159								28	1	**188**
2	**Kalahandi**			12								24	0	**36**
3	**Malkangiri**							68			4	2	6	**80**
4	**Rayagada**		27				138					54	6	**225**
5	**Gajapati**		185	14								14	7	**220**
6	**Koraput**						88					1	0	**89**
7	**Ganjam**		4	4								7	0	**15**
8	**Mayurbhanj**	257			52							13	36	**358**
9	**Sundergarh**				36					4		18	6	**64**
10	**Keonjhar**	35			37				13			33	28	**146**
11	**Sambalpur**				1	2						4	0	**7**
12	**Dhenkanal**	4			5				4			2	5	**20**
		296	**216**	**189**	**131**	**2**	**226**	**68**	**17**	**4**	**4**	**200**	**95**	**1448**

3.3 Research Design

Pre-Post study research design was used in this study. However, given the access to availability of data from baseline study it could be successfully utilized in a few sections. The study attempted to examine whether participants in the intervention (MTELP+ programme) improved or did not show any improvement. A mixed method approach including both qualitative and quantitative measures was adopted which involved multiple methods of data collection for measuring the extent up to which MTELP+ programme delivered the quality mother tongue based early learning programme.

3.4 Tools/Measures

Data was collected using varied methods and tools. The Research team carried out a systematic process for the developing tools keeping in mind the research objectives. Different tools were developed namely an Observation schedule, Interview schedules and a Focused Group Discussion protocol. Observation schedule titled 'Anganwadi Assessment Scale'(AAS) tried to capture the 'Pre-school environment', 'Curriculum transaction', 'Classroom processes' and activities conducted in the Anganwadis. Interview Schedule included structured interview for the AWWs and parents and Semi Structured interview schedules for the CDPOs and LSs.

3.5 Observation Tool

Anganwadi Assessment Scale (AAS) developed by CECDR was adapted for observing the Anganwadis. The tool had several parts. Part I & II in the observation tool captured the background information of Anganwadis and the children, respectively. The part III in the observation tool focused on the ''Child friendly environment' (A total of 7 items that included components like overall set-up of Anganwadis, organization of activity corners, appropriate display of charts, pictures and materials prepared by children, availability of PSE kit, and mat for children); 'Curriculum transaction' (A total of 16 items that included components like seating arrangement of children, medium of instruction/ languages used by AWW, availability of weekly schedule, participation of children in activities, planning of PSE activities by AWW, planning and conducting activities in different domains of development, appropriate TLM and its usage and play way or activity method); 'Teacher child interactions' (A total of 9 items inclusive of

components like calling children by their name, encouraging children, providing positive reinforcement to children, inclusive environment and disciplining of children) and 'Safety of children' (A total of 5 items inclusive of safety level of the Anganwadi building, cleanliness, hazardous conditions around Anganwadi, handing of children to adults and presence of first aid box). It was 3 – point Likert scale which contained 38 items. Part IV included a list of 19 Teaching Learning Materials (TLMs). The observer was required to rate the item on availability of TLMs and their usage. The responses on availability of TLMs were recorded as 'Yes' or 'No' and the responses for utilization of the materials was recorded in three point rating ranging from 'No material was used =1', 'Few materials were used= 2' and 'Mostly all materials were used = 3'. Language used in TLMs was also recorded in the tool, that is, whether a particular TLM was in Mother tongue (MT), Odia, Hindi/English or any other language. Section – V of the tool was utilized to detail out information regarding transaction of activities conducted at Anganwadis. It had a list of different activities, in which actual activities conducted in the Anganwadis, were observed and recorded. In addition to the type of activity, the language used by the AWWs to transact, language used by the children, language used by AWWs to respond to children, the TLMs used, the participation levels of children and duration of each activity were also documented.

3.6 Interview Schedules

Several interview schedules were developed specially for ICDS functionaries namely the AWWs, LSs and CDPOs. Across all the interviews, there were few common themes, for instance, 'Background information' (age, educational qualification, work experience, trainings received), 'Roles and responsibilities', 'Monitoring and Supervision', 'Parent and community engagement', to name a few.

Interview schedule for Parents was developed with focus on parental perception and attitude towards early learning and development, existing ECCE programmes in village, involvement of parents and community in the activities of Anganwadis and their stand on use of MT, while transacting curriculum in Anganwadis. It also captured basic demographic details and household information.

3.7 Focus Group Discussion

A suggestive interview guide was developed for conducting Focus Group Discussions (FGDs) with leaders, community members and parents to gather their perception towards the importance of pre-school education, Mother Tongue Based Early Learning and ways in which they contributed to the functioning of Anganwadis.

3.8 Piloting of Tools

All the tools were piloted on a small sample of Anganwadis around Bhubaneswar. The sample included observations of 10 Anganwadis, interviews with 10 AWWs, 10 parents, 2 Lady Supervisors and CDPOs. A Focus Group Discussion was also conducted to ensure it was comprehensive to capture the required nuances. Based on the responses several changes were made to reduce redundancy and ambiguity among the items and to shorten the length of tools.

Given the limited time, tools were simultaneously shared with BvLF and ECCE experts (Prof. Venita Kaul, Professor Emeritus, Ambedkar University, Prof Adarsh Sharma, Former Director, NIPCCD and Prof Rekha Sharma Sen Faculty of Child Development, IGNOU) to gather their views on developed tools. Subsequent to pilot testing, a one-day workshop was carried out with experts. Subsequently, the CECDR team incorporated changes from pilot testing and feedback received from experts. Redundancies were omitted to shorten the tools and they were modified accordingly. Common domains were placed across the different tools for the purpose of the triangulation of the data. After making necessary changes, final version of the tools were prepared for data collection. To quote a few specific examples from observation tool and AWW's interview schedule are provided below.

Based on suggestions from experts a couple of sections were added to observation tool and a few sections were edited from tool. The supplement section focused to capture the curriculum transaction processes and usage of language at Anganwadis. The sections deleted were on physical environment and WASH, as both the components were not part of MTELP+ programme interventions. The scale 'poor, average and good' for indicator '*overall set-up of AWC'* (item No. 27) and the scale 'never, sometimes and most of the time' for '*AWW conducts a mix of group and individual activities*' (item No. 40) were spelt out to remove ambiguity from listed scales.

In Q8. 'AWW's understanding of multilingual education' an option to highlight the usage of mother tongue was added. A question No. 23 on mentoring was added to the AWW interview schedule to capture the support received by AWW on field.

3.9 Translation of Tools

After incorporating all the inputs from pilot and expert review consultation the final version of tools were prepared and sent for translation to Odia. The tools were translated to Odia by language experts. Back translation for all the tools was done to ensure the accuracy and quality of translations. The tools were entered in Computer Assisted Personal Interviewing (CAPI). The platform (CAPI) facilitated reliable and accurate collection of data even in offline settings.

3.10 Measure Adopted for Quality Data Collection

Ensuring quality of evaluation was a top most priority for CECDR. Consistent and continuous efforts were made from beginning of the study to maintain quality of evaluation. The evaluation mandated recruitment of a research agency with networks to facilitate rapid and quality data collection in the stipulated time period. In order to facilitate the process of data collection in Odisha, CECDR signed a MoU with **Sigma Research and Consulting,** as a potential organization to support in data collection. Sigma, a research and consulting organization offering full-fledged research services in social and development sector, provides an all India data collection/ field and tabulation services across all sectors. Keeping in mind Sigma's present and past experience in collecting data for mother tongue research in far reached tribal areas, it was selected to conduct data collection at the ground level. Sigma supported in recruitment of field staff in consensus with CECDR. CECDR and Sigma monitored the process of data collection throughout the research.

Recruitment of Staff

In consultation with CECDR, Sigma recruited field staff with criteria listed below:

Essential

- graduates in social science
- experience of collecting education data in Anganwadi centres

- field staff from specific 12 districts who could understand and speak the tribal language.

Desirable

- experience in collecting data in tribal areas
- had an experience of collecting data for the baseline study for MTELP+ programme

Training of Field Staff

An intensive training both off-site and onsite for duration of 6 days was organized by CECDR and Sigma team. A team of 75 field investigators were trained on tools and methods of data collection at Bhubaneswar by both the teams. The technical inputs for data collection on observation schedule, interview schedules were provided by CECDR team. The group was divided in two groups and trained by Dr Anubha Rajesh, Chair Professor, CECDR and Dr Prachi Vashishtha, Senior Fellow, CECDR. The training included organizing training skills sessions where the staff were introduced to the objectives and significance of MTELP+ evaluation. Field investigators were familiarized with tools and process of data collection and important pointers to be kept in mind. This was followed by mock practice sessions, role plays and finally hands on experiences by visiting and collecting data in Anganwadis. The technical training session for content of data concluded with sessions for reflections, where field staff discussed the process of data collection and issues faced by them during data collection.

Field mapping, placements, protocol, roles and responsibilities along with strategies required for quality data collection on Android App were provided by Sigma team. The fourth and the last day were dedicated to use of CAPI to collect data, practice data entry and explain processes that ensured complete data collection. The team of field investigators was trained on administering, coding and consolidating data.

Formal permissions from the relevant government departments were facilitated by PMU at both state and district level. The PMU set in the Government office in Odisha, coordinated the process of data collection in the Anganwadis. They supported the process by providing guidance and contact details of relevant field staff at the district and block level to ensure smooth data collection. The PMU staff at the respective locations was responsible for introductions and ensuring that data collection teams could continue with data collection without any pitfalls.

Members from the core team monitored and supervised the process of data collection throughout. A Research Officer and Research Associate from CECDR were stationed in Odisha for a period of 28 days. They visited and resided in four districts of Odisha -, Gajapati, Kandhamal, Koraput and Rayagada for providing refresher training, handholding of the field staff and to monitor the quality of data being collected by the Sigma team. Additionally they were responsible for capturing the good practices from the AWCs and facilitate the process of data collection. The core team from CECDR also visited Keonjhar during data collection to monitor data collection and capture good practices from field.

In order to ensure the quality of the data, the CECDR team: -

- Organized meetings with field team of each district and briefed them about objectives of the project
- Planned and coordinated the field plan on regular basis between the DCs, CDPOS, LS and field staff
- Re-trained the team for the process of data collection and provided hand-holding as and when required on field
- Provided clarifications on concerns and doubts of field investigators
- Provided field exposure to the teams who joined post the training
- Monitored the quality of data by random checks on entry done by field investigators in CAPI.

3.11 Data Management and Analyses

After completion of data collection work, obtained data were sorted into two categories and the scoring of all the tools were done accordingly. The normalcy of data distribution was checked and it met all the assumptions of parametric statistical analysis. Thus the obtained data was subjected to descriptive statistical analysis and to a small extent of inferential statistical analysis. The data obtained from FGDs and interviews were qualitatively analyzed. The data were analyzed in the light of various research objectives. For the purpose of analyses, the data was entered into Microsoft Excel 2010 spread sheet and analyzed by using Statistical Package for Social Science (SPSS) Version 21.0.

3.12 Challenges Faced during the Evaluation

Despite planning of the research and its various stages, some apparent limitations were:

- Due to unforeseen circumstances, permissions for data collection got delayed.
- Process of data collection got interrupted due to Elections and **Fani** cyclone in Odisha.
- Some of the Anganwadis had to be replaced due to geographical barriers.
- Despite repeated efforts (continuous checks with DCs, CDPOs and LS and a replacement strategy in place) to include AWWs who received MTELP+ training, a limited number of AWWs, not trained on MTELP+ had to be included in the sample.
- Language barrier, as some of AWWs knew only the tribal language.
- Communication gap due to erratic network coverage that prevented teams to communicate with each other as and when required. This was specifically a challenge when the field staff would reach an Anganwadi to find that the AWW of the selected Anganwadi was not trained.
- Geographical spread of the Anganwadis
- Prevalence of insurgency/ Maoists activity in some areas.
- Some issues like selection of Non-MTELP+ Anganwadis was reported by District Coordinators (DCs) and PMU. Corrective measures were taken and data was recollected from 10 MTELP+ Anganwadis.

3.13 Limitations of the Study

- While the parents+ interventions were in progress, the DWCD, GOO and BvLF had recently launched a Parents+ module for strengthening the component of parent engagement for ICDS functionaries, specifically the AWWs with a focus on children in age group of 0-3 years. These ongoing efforts navigated through the partnership are commendable to ensure fidelity of parental involvement and hence necessitate a comprehensive evaluation at the end of the implementation. The good practices that emerge from these interventions will provide valuable evidence for the ECCE fraternity.
- The evaluation study did not engage in face to face interactions with Government officials.

4. Results and Discussion

Findings for the evaluation are drawn from structured and unstructured interview schedules developed for various functionaries of ICDS namely, AWWs, LSs and CDPOs and observation schedule for Anganwadis (Anganwadi Assessment Scale).

All the tools had items that focused on select components like quality ECCE, MTELP+, development and usage of contextual TLMs. Majority of items for AWWs and parents were structured with a judicious mix of single response and multiple response options. Interview schedules for LSs and CDPOs comprised of open ended questions intended to draw in-depth information on particular themes. Univariate analysis technique utilizing descriptive and inferential statistical analysis for both disaggregated and aggregated data was used for analyses. The analyses for disaggregated data provided detailed district wise information. The findings are presented below:

4.1 Effectiveness of Training of ICDS Functionaries (AWWs, LSs & CDPOs)

The Anganwadi workers (AWWs) are cornerstones of the Integrated Child Development Services (ICDS) scheme. These field level functionaries are engaged in providing all the six services of ICDS and work towards providing quality services to all beneficiaries, which include young children. Preschool education is one of the six services provided by AWWs to children in the age range of 3-6 years. Moreover, in the context of multilingual education, the responsibilities of AWWs become more critical, as they have to attend to children who have different mother tongue. A total of 1,448 AWWs from 12 districts were interviewed in order to understand the improvement in their capacity in delivering quality mother tongue-based learning and their engagement with parents and community.

A Supervisor is a cluster level officer who assists AWWs in optimal delivery of ICDS services and provides trainings to AWWs as per their needs. A total of 42 Lady Supervisors (LSs) from 12 districts were interviewed in order to evaluate their increased capacity after receiving MTELP+ trainings. The LSs shared their major role and responsibilities. They had a comprehensive understanding about the six services provided by the ICDS.

LSs recognized their responsibilities to ensure successful implementation of quality ICDS and pre-school education. They shared that they continuously engaged in monitoring and supervision support for AWWs who were primarily responsible for imparting education in the Anganwadis. They also acknowledged their role in strengthening capacities of AWWs to deliver quality Pre-school Education (PSE) for children between 3-6 years of age. LSs were also responsible for promoting Health and Nutrition services, conducting ECCE programmes, creating a favorable environment to increase the participation of parents and community in the activities of Anganwadis, counseling of parents and referral services. LSs also talked about their administrative roles such as maintaining records and registers, data entry, tally, making, membership of vigilance committee[2], conducting sector meeting, ensuring celebration of Mamta Divas[3] & ECCE days[4] and overseeing the activity of Gram Kalyan Samiti[5].

A CDPO is a block level supervisory head of an ICDS project. He/she has the responsibility of planning, facilitation and coordination and implementation of various services, for instance, formulation of plans to meet the needs of the children in the Block, work in tandem with District administration for release of finances for various purposes and facilitate coordination among various functionaries. A CDPO is assisted by a group of four to five supervisors to monitor and supervise AWWs and Anganwadis. The entire team is expected to work in tandem to effectively deliver quality ECCE services.

23 CDPOs from 12 Districts were interviewed in order to understand their capacity to monitor and supervise the LSs and AWWs in delivering quality mother tongue-based learning and to get the overall picture of the MTELP+ programme. All CDPOs who were interviewed had received orientation on MTELP+. Some of the components covered in the orientation were importance of mother tongue for early learning, involving parents and community in the activities of the Anganwadis, early stimulation and importance of preschool education.

2

[3] It is a joint initiative to strengthen the ongoing Mother and Child Health Services by the Department of Health and Family Welfare and DWCD. This is held throughout the State at AWCs once in a month.

[4] The Fixed Monthly ECCE Day is a platform for interface between the Anganwadi Worker and the parents/community. The ICDS functionaries organize the ECCE day once a month, to strengthen partnerships with parents and community by including activities for advocacy, awareness generation and involvement of parents and community.

[5] This is a revenue village level institution constituted by the community as a simple and effective management structure for improvement of health and sanitation standard of the villages as a part of National Rural Health Mission initiative.

Interviews conducted with CDPOs and LSs revealed that they were well versed with the difficulties and challenges that AWWs encountered on a daily basis.

The section below highlights the profile (age, education qualification and work experience), and perspectives of AWWs regarding language usage in Anganwadis, their knowledge about early learning and National ECCE Policy. Other aspects such as trainings and mentoring received by AWWs, pedagogical strategies and activities used by them have also been discussed. Equally important, increase in the awareness and knowledge of AWWs about early learning have been presented. The section concludes with a brief write up on LSs' understanding of ECCE and MTELP+ programme.

4.1.1 The Anganwadi Workers: Emerging Gains

Profile of AWWs

A total of 1,448 AWWs were interviewed during data collection. One-fourth of AWWs (24.72 percent) were from Mayurbhanj. On other hand, only seven AWWs (0.48 percent) were from Sambalpur. Figures 4.1, 4.2 and 4.3 inform about age, educational qualification and work experience of AWWs, respectively.

Two-fifth (40.06 percent) of AWWs were in the age range of 31-40 years. More than one-fourth of AWWs (26.04 percent) were in the age range of 21-30 years. Similarly, 25.69 percent AWWs were in age group of 41-50 years. Few proportion of AWWs (7.87 percent) came under 51-60 years age range. Merely five AWWs (0.35 percent) were 20 years of age or below.

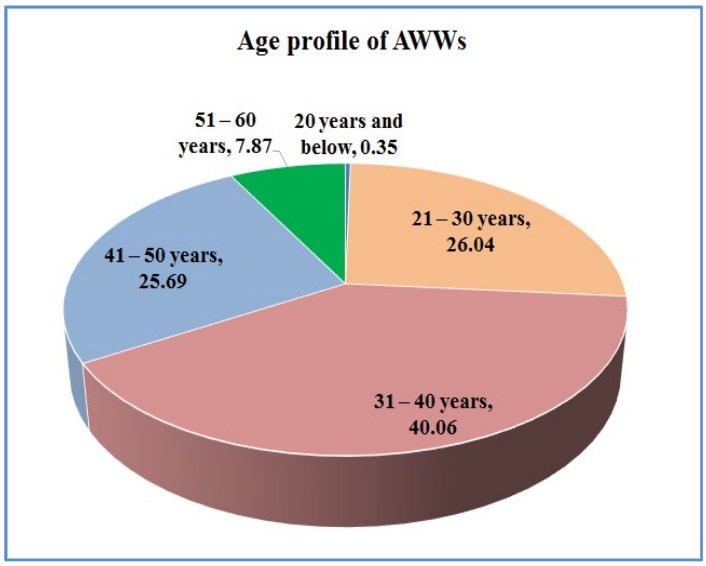


Figure 4.1: Age profile of AWWs (N=1448)

Two-fifth of AWWs (41.37 percent) were educated till class 10. Close to one-third of AWWs (31.56 percent) had schooling in range of class 6^{th}-9^{th}. A small percentage (14.09 percent) of AWWs had completed their formal schooling till class 12^{th} and only one tenth of AWWs (9.25 percent) were graduates.

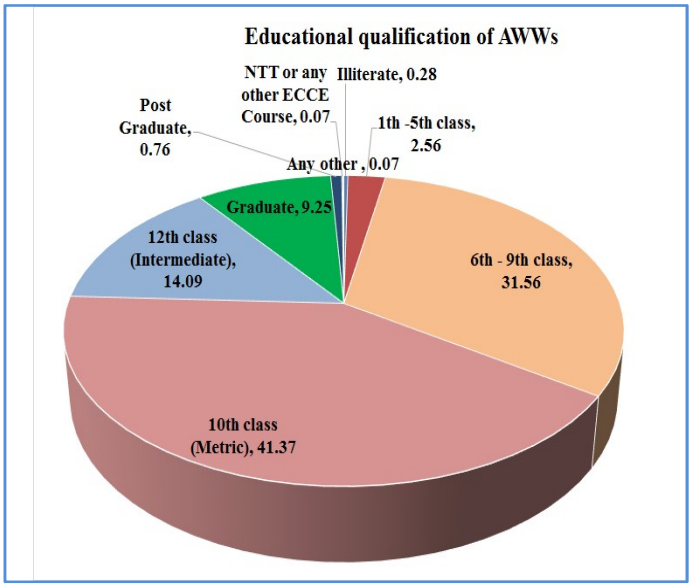


Figure 4.2: Educational qualification of AWWs (N=1448)

With regard to work experience, nearly two-fifth AWWs (37.09 percent) had experience in the range of 5-10 years. One-fourth AWWs (24.93 percent) had more than twenty years of experience as an AWW. One-fifth of AWWs (19.13 percent) held experience in the range of 10-15 years.

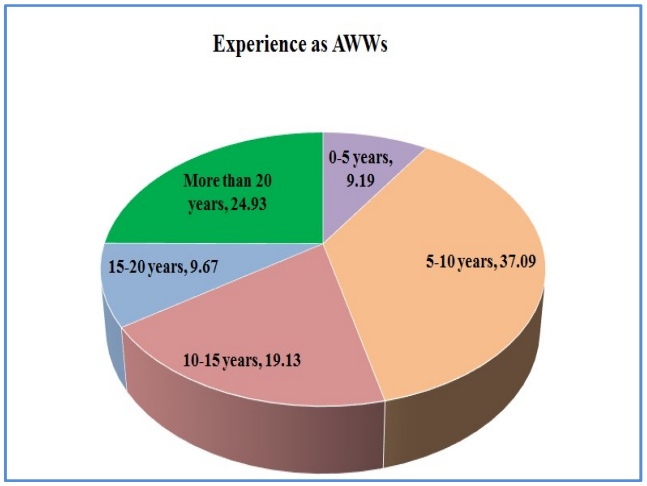


Figure 4.3: Experience as AWW (N=1448)

Distance between AWWs' home and Anganwadi centres

Selecting AWW from community itself was advantageous as she was familiar with the context, culture and language. Figure 4.4 informs about the distance between AWWs' homes and Anganwadis. For majority of AWWs (82.46 percent), the distance between their homes and Anganwadis was less than 2 KMs. For one-tenth of AWWs (9.60 percent), the distance between the two was in the range of 3-5 KMs. For 4.56 percent AWWs, this distance was in range of 6-10 KMs. For 3.38 percent AWWs, this distance was more than 11 KMs.

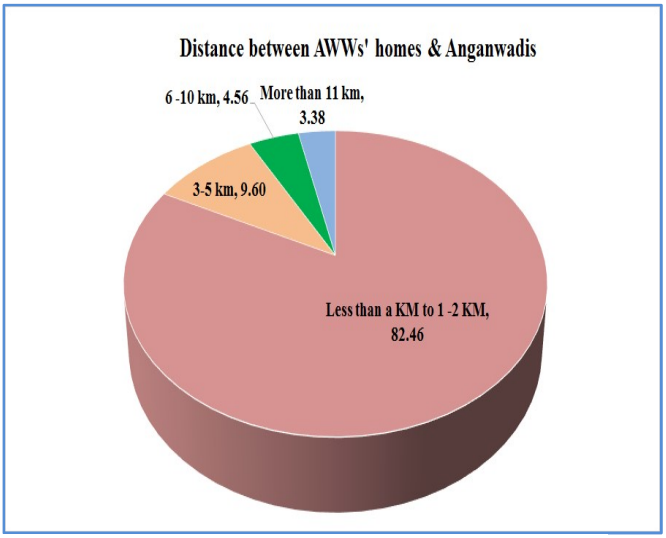


Figure 4.4: Distance between AWWs' homes and Anganwadi centres (N=1448)

MTELP+ Trainings Received by the AWW

Through the MTELP+ programme, DWCD, Government of Odisha had trained a total of 7,020 AWWs. Given that Anganwadis were randomly selected through stratified proportionate sampling, efforts were made to ensure that the selected Anganwadis had AWWs trained in MTELP+ methodology (as detailed above in Methodology). Nonetheless, there were Anganwadis where the field investigators had to collect data for the assigned Anganwadi. Hence the sample is inclusive of both trained and untrained AWWs. During the interviews, majority of AWWs (86.95 percent), confirmed that they had received MTELP+ trainings (see Figure4.5). There was an increase in the proportion of MTELP+ trained AWWs, from 75 percent in baseline to 86.95 percent in evaluation study. Slightly, over one-tenth AWWs (13.05 percent) revealed that they

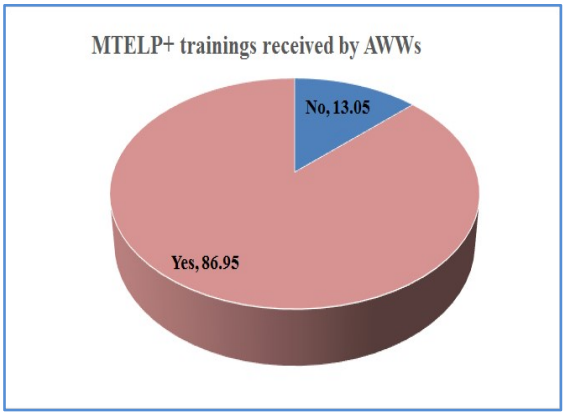


Figure 4.5: MTELP+ training received by AWWs (N=1448)

did not get any MTELP+ training. The possible reasons for not having received the training could be that the AWWs were on leave when training was conducted, or were transferred from one location to another, or were newly recruited.

Range of topics covered during MTELP+ training

Figure 4.6 presents topics covered in trainings in MTELP+. Majority of AWWs (85.46 percent), reported that they were trained on Mother Tongue Based Early Learning. Close to two-third of the AWWs (63.38 percent), indicated that they received training on child development. Close to half of the AWWs shared that they were provided training on designing and usage of TLMs (49.80 percent) and early literacy and numeracy (47.18 percent). As reported by AWWs, other useful topics on which trainings were organized were planning and conducting activities pertaining to various development domains (38.52 percent AWWs), developing partnership with parents and community (33.28 percent), and monitoring & assessing children's learning and development (28.36 percent

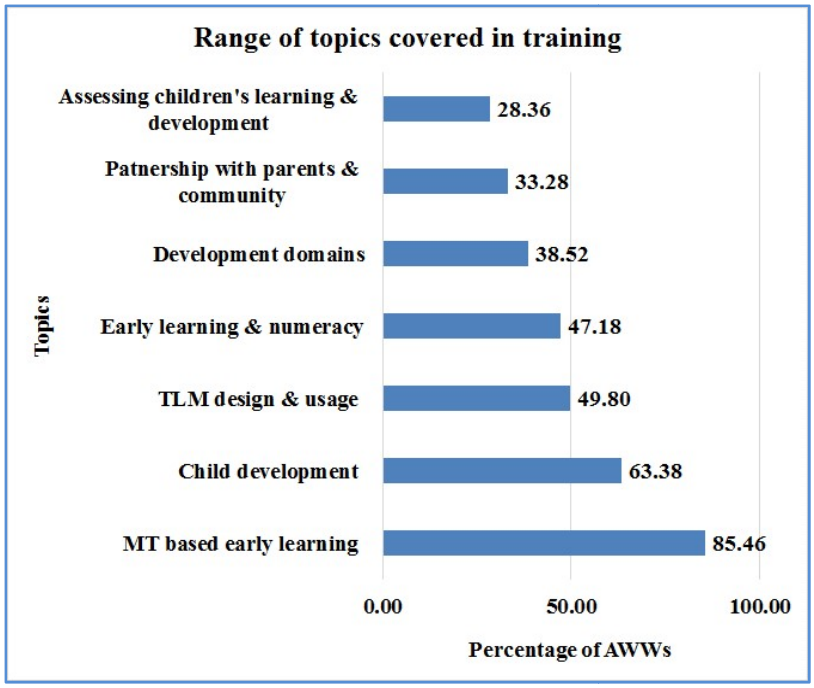


Figure 4.6: Range of topics covered during MTELP+ training

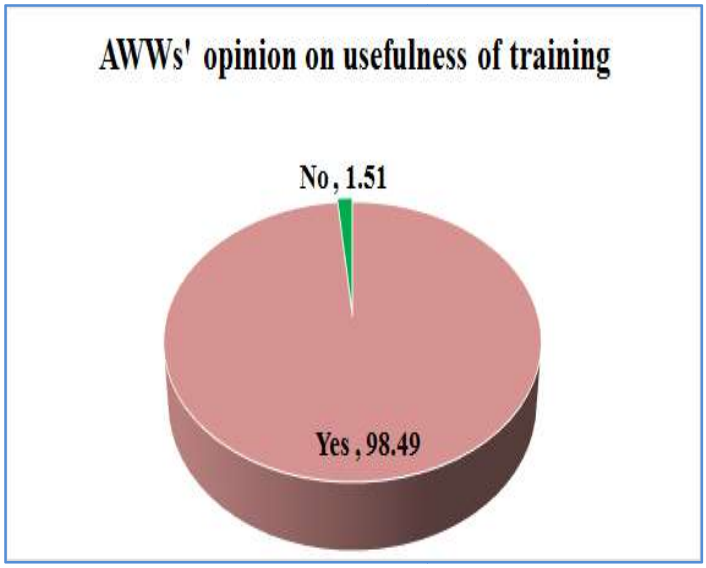


Figure 4.7: AWWs' views on usefulness of trainings (N=1448)

AWWs). Subsequently, majority of AWWs (98.49 percent) expressed that training was fruitful, and they were able to apply their learning from the training while transacting the curriculum (see Figure 4.7).

Languages to be used with children when they enter Anganwadis

Figure 4.8 presents the AWWs' opinions on languages to be used with children when they first come to Anganwadis. Most of the AWWs (81.77 percent) favored usage of children's mother tongue. This percentage showed an increase compared to 76 percent of AWWs during the baseline. A lesser percentage of AWWs, one-fifth AWWs (17.20 percent) were of the opinion that state language, viz, Odia should be used. Merely, two AWWs (0.14 percent) viewed Hindi/English as important.

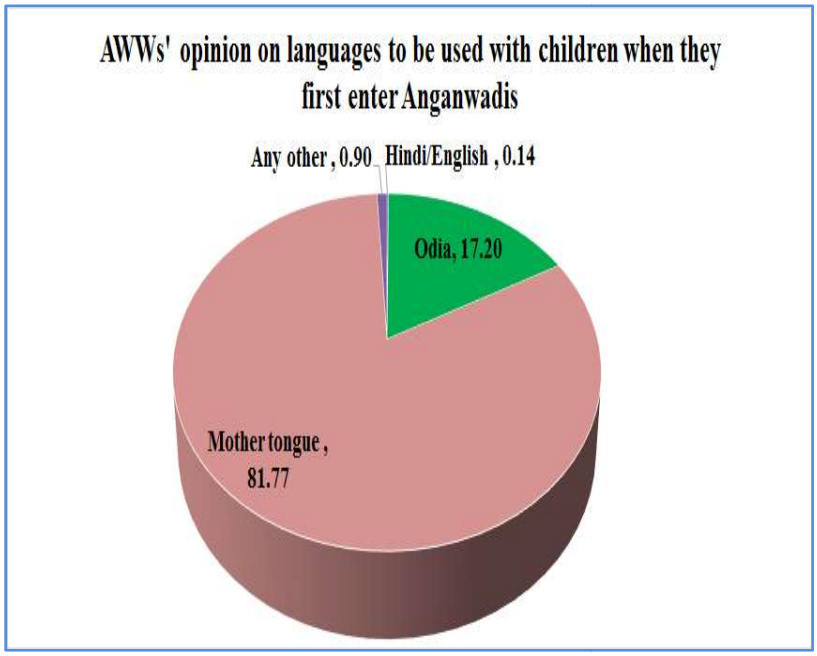
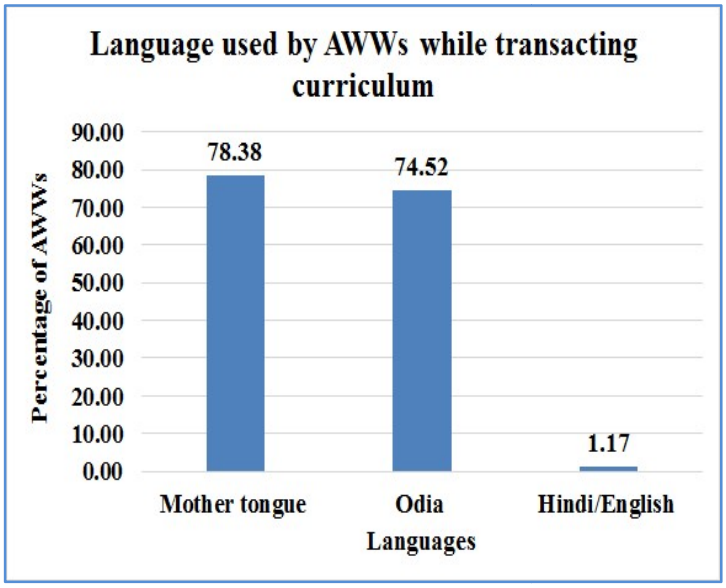


Figure 4.8: AWWs' opinions on language to be used with children when they enter Anganwadi (N=1448)

Language used by AWWs during curriculum transaction

Figure 4.9 presents that close to four-fifth AWWs (78.38 percent) shared that they spoke mother tongue while conducting various activities with children. Likewise, three-fourth AWWs (74.52 percent)



informed that they used Odia, while engaging children in varied activities. Meanwhile, 17 AWWs (1.17 percent) put forth that they also used Hindi/English.

Advantages of using tribal language/MT of children in Anganwadi

Over the discussions, AWWs shared their opinions on advantages of communicating and transacting curriculum in the mother tongue of children. Close to three-fourth of AWWs (71.41 percent), mentioned that the usage of children's mother tongue during curriculum transaction had enhanced children's participation in activities conducted in Anganwadis. They shared that the children were attentive when listening and expressive when speaking. Additionally, the increased participation levels aligned well with the AWWs' observation of children being comfortable and cheerful when attending the Anganwadis. Close to two-third of AWWs (62.36 percent), were of the opinion that children were less fearful when a familiar language was used. However, more than one-third of AWWs (37.98 percent) perceived children's mother tongues to be merely useful for translation purposes and did not contribute to their understanding of varied concepts. The findings reveal the need for additional and continuous trainings to build a deeper understanding for all AWWs. A small number of 56 AWWs (3.87 percent) asserted that there were no advantages of such a practice (see Figure 4.10).

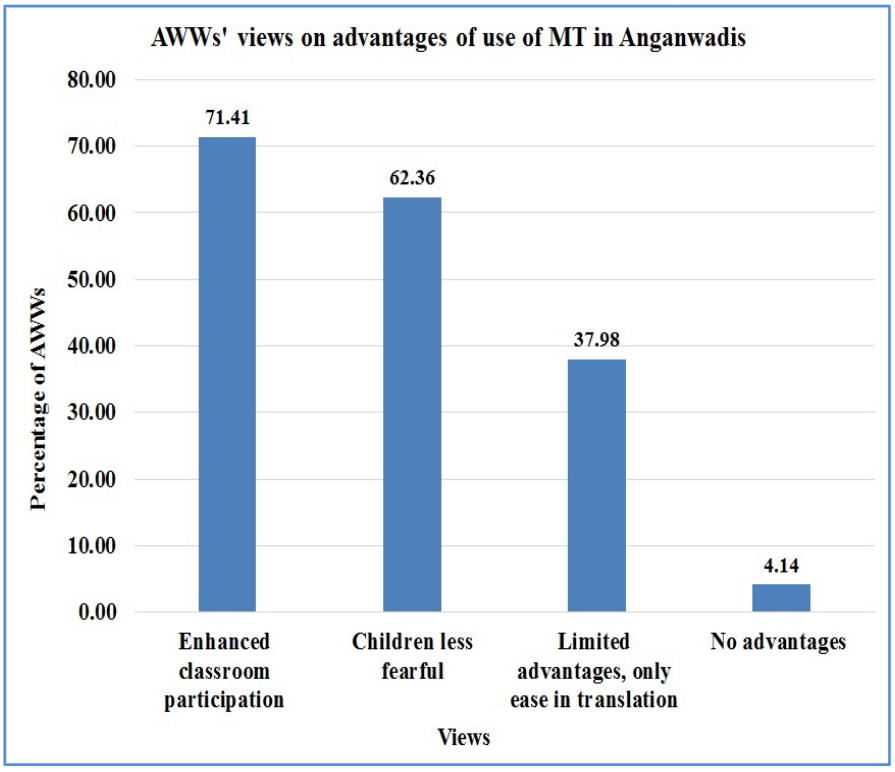


Figure 4.10: Advantages of usage of tribal languages/ MT in AWCs (N=1448)

Awareness about ICDS

AWWs already had fair awareness about the ICDS programme, which was further augmented by three percent points, from 92.00 percent to 95.1 percent. Likewise a decrease from 8.00 percent to 4.90 percent, in AWWs who did not possess information regarding ICDS was recorded.

Awareness about National ECCE Policy

The intervention programme was noted to have positive impact on the AWWs' awareness regarding National ECCE Policy, which saw an increase to 91.99 percent from 85.00 percent (see Figure 4.11). Similarly, a seven percentage point decrease in proportion of AWWs, who were unaware about National ECCE Policy, was recorded.

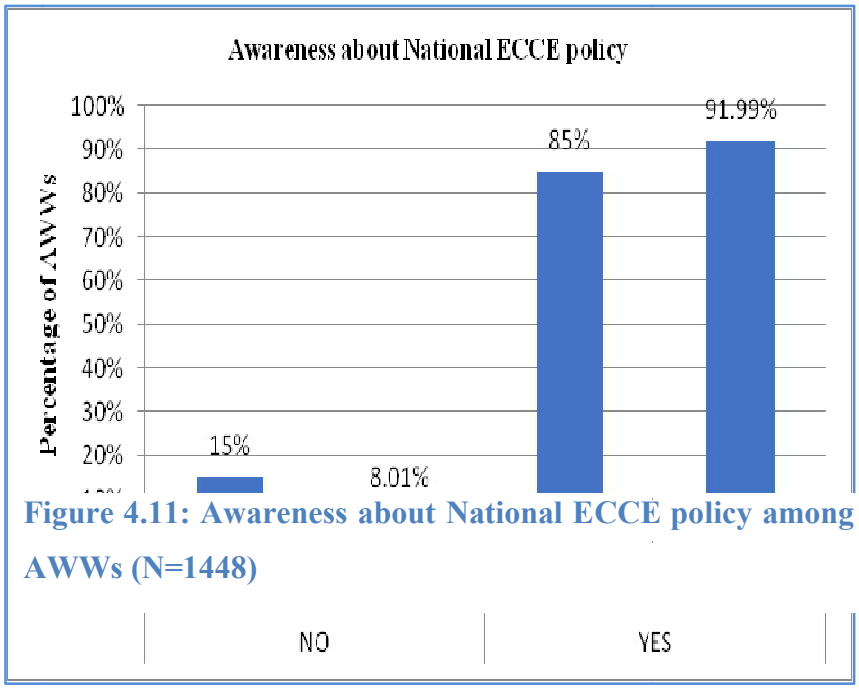


Figure 4.11: Awareness about National ECCE policy among AWWs (N=1448)

Further, there was noticeable increase in the AWWs (from 55.90 percent to 79.90 percent) who indicated that policy addressed children in the range of 0-6 years (shown in Figure 4.12).

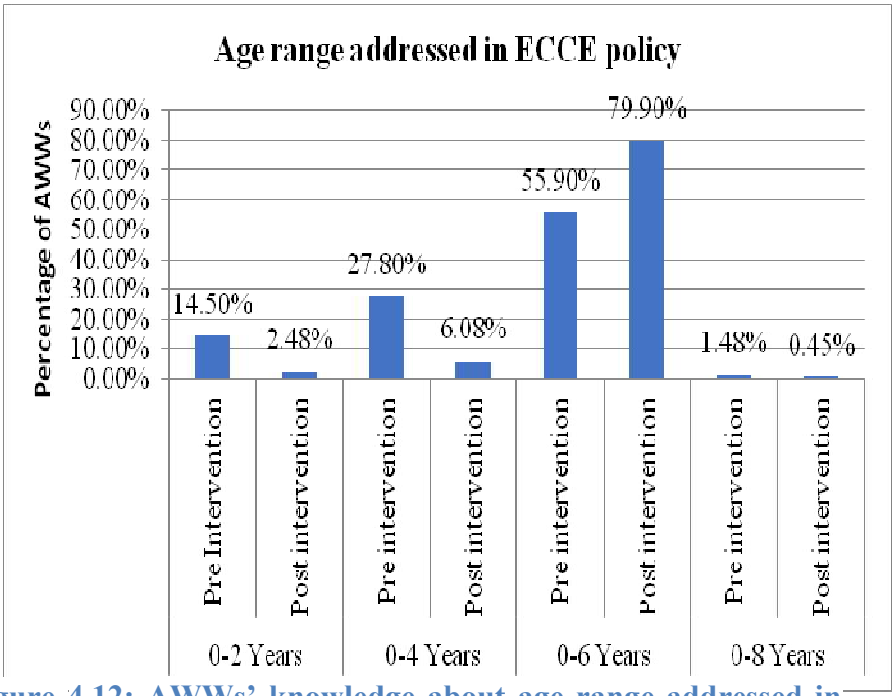


Figure 4.12: AWWs' knowledge about age range addressed in ECCE Policy (N=1448)

Learning in Early Years

Post intervention showed that 32.96 percent AWWs expressed that learning began at birth, whereas, during pre intervention interviewing, AWWs favouring this point were restricted to 12 percent. A clear indication of improving knowledge of AWWs regarding child development and early learning was reflected by 20.96 percent point increase in AWWs, indicating that learning commenced at birth (as given in Figure 4.13).

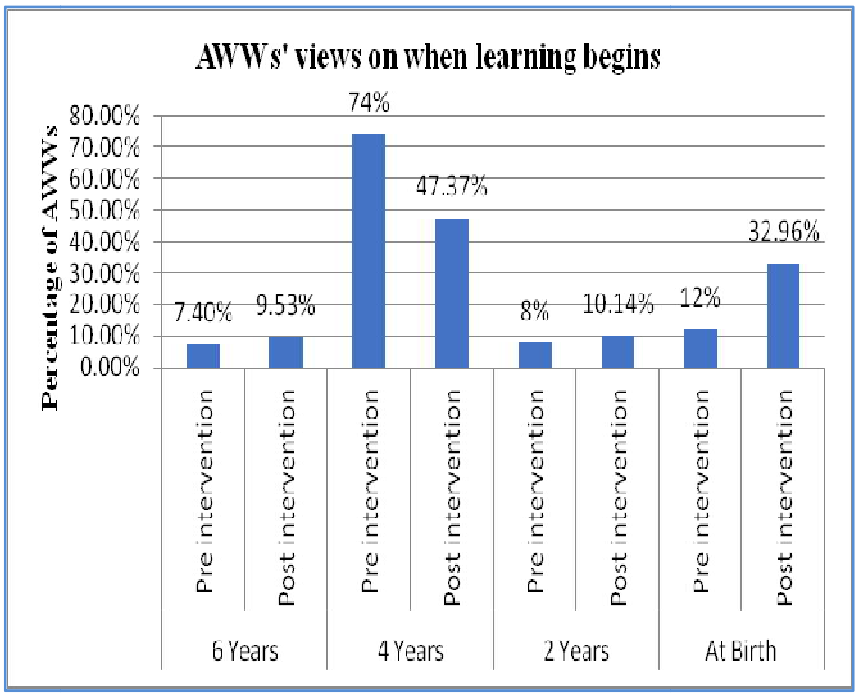


Figure 4.13: AWWs' views on when learning begins (N=1448)

Pedagogical Strategies in Early Years

More than half of AWWs (55.48 percent) expressed that engaging children through play and activities supported with guidance was an effective way to help children learn. One-fourth AWWs (25.90 percent) stated that use of 'play and activities' was adequate for the purpose. 14.41 percent of AWWs favored 'demonstrations' as a technique to engage children. Few proportions of AWWs (3.68 percent) perceived 'explanation' to be sufficient to engage children (Figure 4.14).

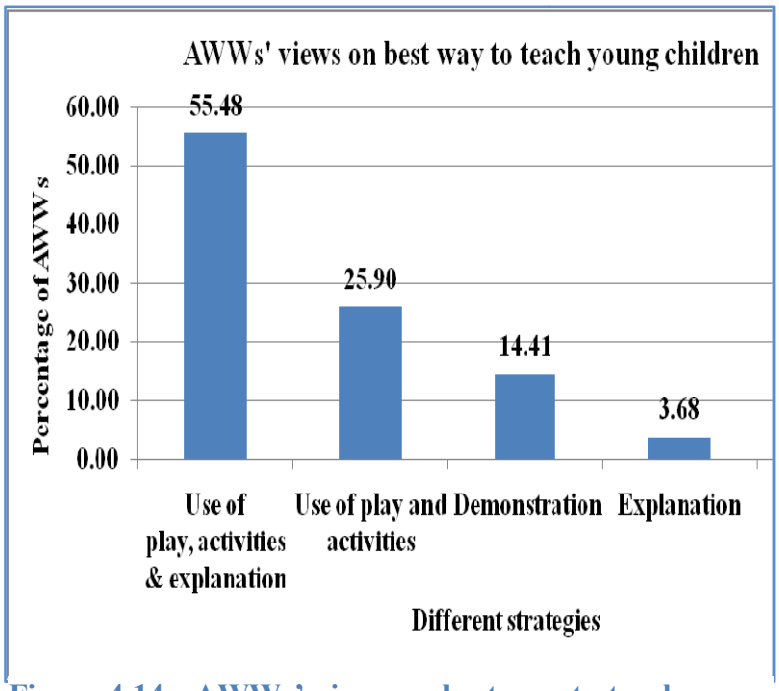


Figure 4.14: AWWs' views on best way to teach young children (N=1448)

Activities to Promote Language and Literacy Skills among Children

During the interviews, the AWWs were asked to share about activities they organized for promoting language and literacy skills among children. Over four-fifth of AWWs (81.35 percent), shared that they planned and organized various activities for oral development, for instance, poems, songs, rhymes, riddles, stories, and

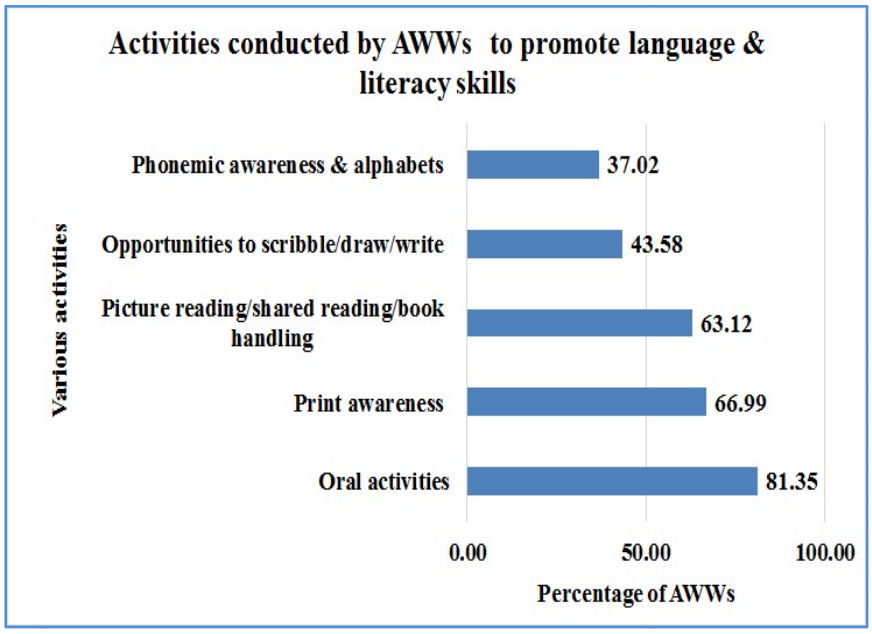


Figure 4.15: Activities AWWs organized to promote language & literacy skills in children (N=1448)

free & guided conversations to foster children's language and literacy skills. Two-third of AWWs (66.99 percent), expressed that they devoted time towards creating print awareness among children, through display of charts, and flash cards. Practices such as picture reading/ shared reading/book handling were adopted by nearly 63.12 percent of AWWs. More than two-fifth AWWs (43.58 percent) organized scribbling/ drawing/writing opportunities for children. More than one-third AWWs (37.02 percent) carried out activities to promote phonemic awareness and taught alphabets to children (see Figure 4.15).

Strategies Used to Make Children Learn Effectively

The AWWs were asked to share their views regarding the strategies used to ensure that children learnt effectively (Figure 4.16). More than two-third of AWWs (67.40 percent) informed that they repeatedly conducted various activities and provided opportunities to children to practice so that children learn and understand various concepts. More than three-fifth AWWs (62.02 percent) stated that they interacted with children in their respective mother tongue, to make children feel at ease and facilitate their understanding and learning. More than two-fifth of AWWs (44.48 percent) ensured that they organized a variety of activities to encourage children to learn a particular concept. Over one-third of AWWs (36.12

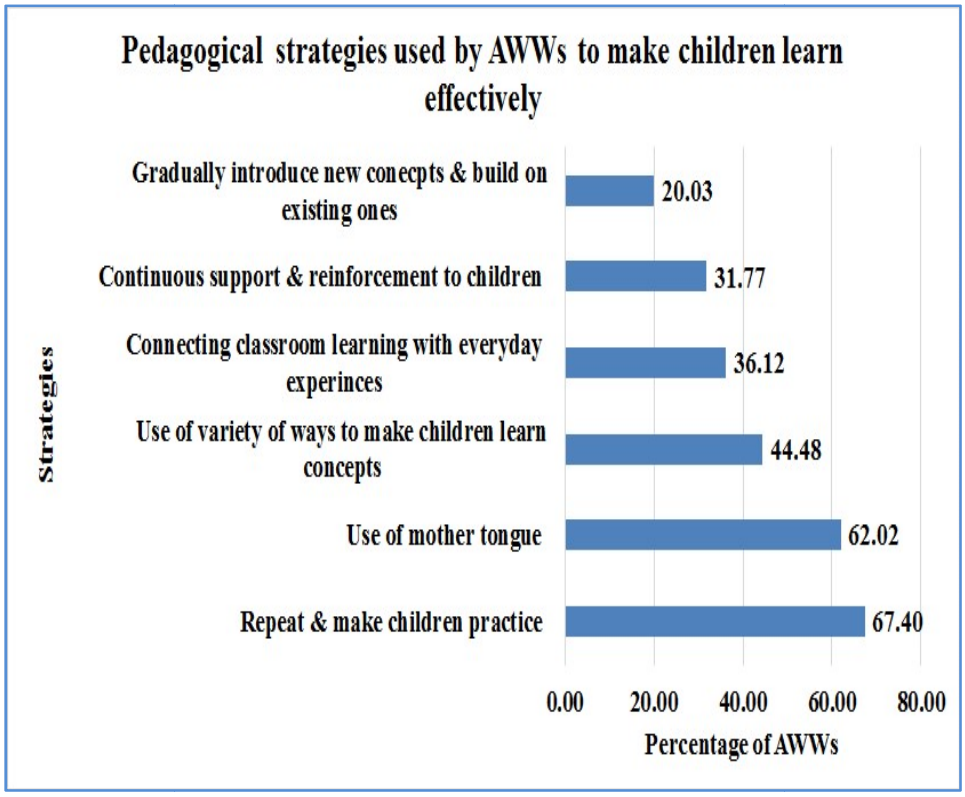


Figure 4.16: Pedagogical strategies used by AWWs to make children learn effectively (N=1448)

percent) stated that they tried to connect children's classroom learning with their everyday experiences. A little less than one-third AWWs (31.7 percent) expressed that they provided continuous support and reinforcement to children in order to encourage them to explore, to spark curiosity in them. One-fifth of AWWs (20.03 percent) informed that they worked along with children to strengthen their existing understanding of various concepts and subsequently, gradually introduced new concepts.

Benefits of Children Attending Anganwadis

Majority of the AWWs opined various positive learning(s) of children attending Anganwadis (as presented in Figure 4.17). Over two- third of AWWs (67.54 percent) were of the opinion that children picked up self help skills in Anganwadis. Further, more than three-fifth AWWs (62.91 percent) shared that the exposures at Anganwadis facilitated young children' pre-number, pre-reading, and pre-writing skills. Close to three-fifth of AWWs (59.67 percent) viewed Anganwadis as a place where children learnt alphabets and numbers. Half of the AWWs (51.38 percent) opined that Anganwadis prepared children for formal schooling. A little less than half of AWWs (47.86 percent) viewed Anganwadi exposure as imperative for strengthening children's communicative skills, for instance, the children learnt to express themselves clearly. Similar proportion of

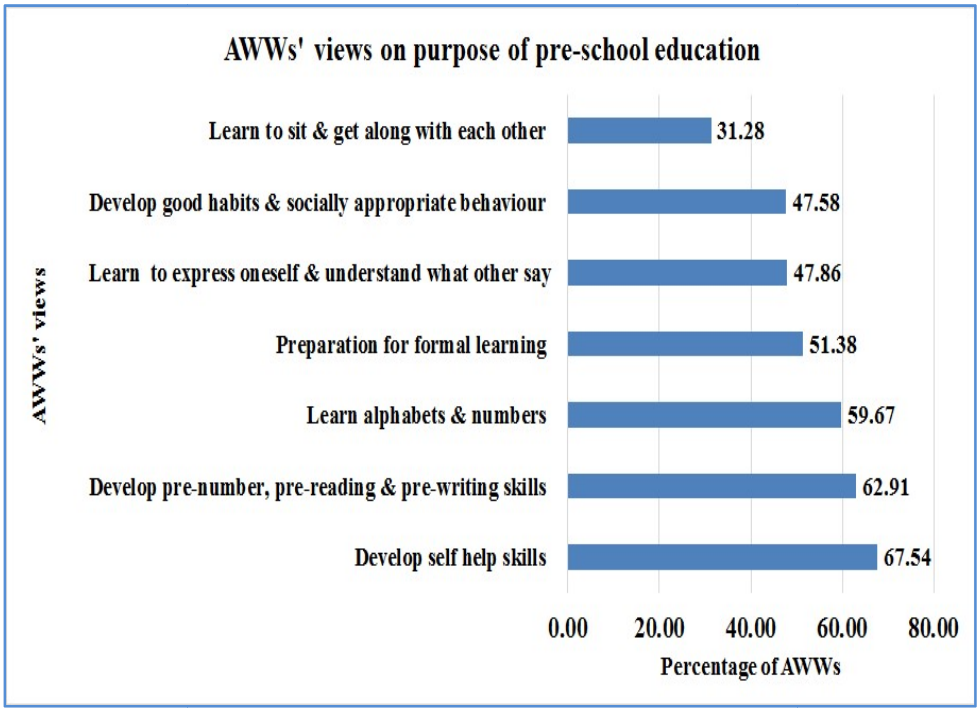


Figure 4.17: AWWs' opinions on purpose of preschool education (N=1448)

AWWs (47.58 percent) believed that children acquired socially appropriate behaviors and mannerism. Furthermore, about one-third AWWs (31.28 percent) echoed similar views that children learnt to get along with each other.

Linking Learning at Anganwadis with Children's Local Culture

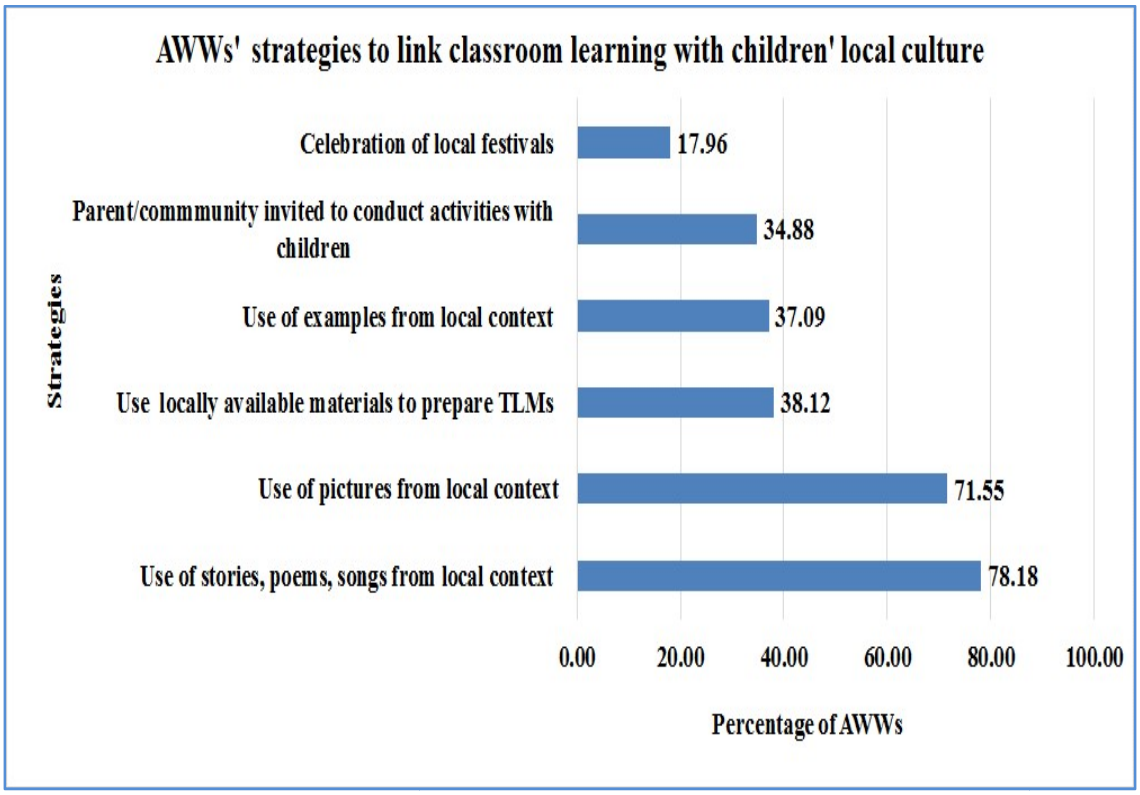


Figure 4.18: AWWs' strategies to link classroom learning with children's local culture (N=1448)

As indicated by Figure 4.18, AWWs reported using various strategies to establish a link between learning at Anganwadis with children's local culture to encourage meaningful and effective learning. More than three-fourth AWWs (78.18 percent) revealed that they incorporated locally and contextually relevant songs, poems and rhymes in daily activities with children. Nearly 71.55 percent of AWWs informed that they ensured that pictures from local contexts were included in TLMs, like charts, flash cards and picture cards. More than one-third of AWWs specified that they made use of locally available materials for preparing TLMs (38.12 percent), provided children with contextually relevant and hence easily meaningful examples (37.09

percent of AWWs). One-third of AWWs (34.88 percent) shared that they invited parents and community members to conduct various activities with children. Celebration of local festivals along with children to familiarize them with their culture, sustain their interest and curiosity was indicated by 17.96 percent AWWs.

4.1.2 Availability and Utilization of Teaching Learning Material at Anganwadis

TLMs facilitate effective learning and are an integral part of the ECE environment. They attract attention of children, make learning meaningful by providing concrete experiences and provide opportunities to effectively engage children. Having access to TLMs provides opportunities to children, where they can explore, manipulate and experiment. Appropriate TLMs provide fuel to children's imagination. While availability of TLMs is important in Anganwadis, it is equally important to ensure that available TLMs are accessible to the children and utilized by the teachers and children to ensure a successful ECE programme. Table 4.2 informs about the availability and utilization of TLMs in Anganwadis.

Table 4.2: Availability and utilization of TLMs by children in Anganwadis (N=1448)

Various kinds of TLMs	Availability of TLMs		Language in which TLMs were available					Utilization of TLMs		
	Yes	No	Tribal language/ MT	Odia	Hindi	English	N/A	No	Few	Most
Picture books	87.15	12.85	21.32	92.47	1.82	6.89	6.02	8.95	49.13	41.92
Story books	83.29	16.71	35.41	96.52	0.00	1.00	1.16	11.19	57.71	31.09
Balls	79.49	20.51	0.00	0.00	0.00	0.00	100.0	9.56	55.86	34.58
Poem/ Riddles/ Rhyme books	78.31	21.69	39.59	93.30	.62	1.76	3.62	11.64	56.79	31.57
Charts	77.90	22.10	10.82	94.77	3.10	24.11	4.17	11.71	49.85	38.44
Toys	73.34	26.66	6.21	36.44	.94	10.17	58.19	6.21	54.05	39.74
Activity Books	68.99	31.01	19.12	94.69	.40	1.40	3.70	11.71	49.85	38.44
Pebbles/ beads/stones/ thread	68.85	31.15	0.00	0.00	0.00	0.00	100.0	10.83	42.23	46.94
Colour/drawing book	68.37	31.63	9.09	76.97	.10	4.04	22.12	11.21	44.24	44.55
Dramatic Play	58.63	41.37	—	—	—	—	—	11.43	54.89	33.69
Abacus	58.36	41.64	3.73	23.34	.07	4.70	31.35	9.35	53.49	37.16
Blackboard	57.53	42.47	0.00	0.00	0.00	0.00	100.0	22.09	54.86	23.05
Art material	56.35	43.65	—	—	—	—	—	12.01	50.12	37.87
Clay/sand	56.08	43.92	0.00	0.00	0.00	0.00	100.0	10.84	47.91	41.26
Puzzles	49.38	50.62	2.24	47.69	.42	11.61	48.11	14.13	56.08	29.79
Slates	46.20	53.80	0.00	0.00	0.00	0.00	100.0	9.27	47.38	43.35
Flashcards	42.89	57.11	11.12	84.89	3.02	18.50	13.54	10.04	45.95	44.01
Blocks	37.64	62.36	3.12	44.40	.73	11.01	51.56	13.39	55.96	30.64
Puppets	32.04	67.96	0.00	0.00	0.00	0.00	100.0	18.10	49.78	32.11
Any other	20.17	79.83	9.93	42.12	.68	2.05	54.45	4.45	58.56	36.99

A variety of TLMs were observed to be used in Anganwadis. However the usage of TLMs varied from one Anganwadi to another. Some Anganwadis were observed to use TLMs for most of the activities, while some Anganwadis used TLMs during limited activities. The reasons for restricted usage of TLM may be AWWs inadequate skills to use TLM, absence of planning for activities by AWWs, or limited availability or access to TLM. The most commonly available TLMs were picture books (found in 87.15 percent Anganwadis and used in 41.92 percent Anganwadis), story books (found in 83.29 percent Anganwadis and were used in 31.09 percent Anganwadis), poems/ riddles/ rhyme books (availability was noted in 78.31 percent Anganwadis, while usage was recorded in 31.57 percent Anganwadis) and activity books (availability was recorded in 68.99 percent in Anganwadis and usage was registered in 38.44 percent Anganwadis).

> Most of the stories were read out/ narrated to children from the Arunima. The story was written on one page with a small black and white picture. While narrating stories the books were not shown to children. In a couple of other Anganwadis a story card(s) with the story displayed in six boxes was used.
>
> Observer, Kandhamal, Gajapati, Rayagada.

> "Most of the AWWs were well versed in children's mother tongues and self-sufficient in making Low cost No cost TLMs from locally available materials. AWWs taught from Odia book by translating in children's mother tongues and also made charts in the tribal languages." A Lady Supervisor, from Ramnaguda, Rayagada
>
> "Use of materials from PSE kits such as flash cards, charts, models etc., had increased to a great extent. There was also a remarkable increase in the use of examples from the local culture, use of locally available materials such as vegetables, tools etc., and the use of socio-cultural context while transacting the curriculum in the classroom." A Lady Supervisor, from Raikia, Kandhamal

Next, charts were found in 77.90 percent Anganwadis, whereas, in 38.44 percent Anganwadis, they were been utilized. Presence of coloring/ drawing books was recorded in 68.37 percent Anganwadis, and its use was noted in 44.55 percent Anganwadis. In addition to variety of books, other materials such as balls, toys, pebbles/beads/ stones/ threads were seen in various Anganwadis. To be specific,

balls were seen in 79.49 percent Anganwadis and its utilization was evident in 90.44 percent Anganwadis. Further, toys were available in 73.34 percent Anganwadis and their utilization was found in 34.58 percent Anganwadis. Besides, pebbles/ beads/stones/threads were available in 68.85 percent Anganwadis, while, its utilization was registered in 46.94 percent Anganwadis. However, materials such as blocks and puppets were available in fewer proportions of Anganwadis. Availability of blocks was marked in 37.64 percent Anganwadis, and the usage was seen in 30.64 percent Anganwadis. Availability of puppets was confirmed in 32.04 percent, while its use was evident in 32.11 percent Anganwadis. Next, the blackboard was least used material by children as its usage was evident in 23.05 percent Anganwadis out of its availability in 57.53 percent Anganwadi.

With regard to Languages, the content of Poem/ Riddle/Rhyme Books was in Tribal languages / children's mother tongues in two-fifth Anganwadis (39.59 percent). Nonetheless, in most of the Anganwadis, the content of the TLMs such as storybooks (in 96.52 percent Anganwadis), charts (in 94.77 percent Anganwadis), activity books (in 94.69 percent), poem/riddles and rhyme books (93.30 percent), picture books (in 92.47 percent) was in state language, Odia. On other hand, mostly, the usage of English language was observed in charts, in about one-fourth of Anganwadis (24.11 percent). Likewise, the usage of Hindi in charts and flashcards was found in negligible Anganwadis (3.10 percent and 3.02 percent respectively).

4.1.3 Diverse Activities and Usage of Language Observed at Anganwadis

The CECDR had proposed to consider 10 tribal languages, namely, Bonda, Juang, Kissan, Koya, Kui, Kuvi, Munda, Oram, Santali, and Soura, for the research project. Nonetheless, apart from these languages, the data from the field showcased presence of a number of other tribal languages (Mother Tongue of children), although in negligible numbers if each MT was taken separately. Moreover, in 13.81 percent Anganwadis (200 Anganwadis), Odia was reported to be the MT of children (Fig 4.3).

Table 4.3: Actual Sample Observed in 12 Districts with Usage of Languages

Actual Sample Observed in 12 Districts with Usage of Languages (N=1448)														
Sl No	District	Santal	Soura	Kui	Munda	Kissan	Kuvi	Koya	Juang	Oram	Bonda	Oriya	Other lang.	Total
1	**Kandhamal**			159								28	1	**188**
2	**Kalahandi**			12								24	0	**36**
3	**Malkangiri**							68			4	2	6	**80**
4	**Rayagada**		27				138					54	6	**225**
5	**Gajapati**		185	14								14	7	**220**
6	**Koraput**						88					1	0	**89**
7	**Ganjam**		4	4								7	0	**15**
8	**Mayurbhanj**	257			52							13	36	**358**
9	**Sundergarh**				36					4		18	6	**64**
10	**Keonjhar**	35			37				13			33	28	**146**
11	**Sambalpur**				1	2						4	0	**7**
12	**Dhenkanal**	4			5				4			2	5	**20**
		296	**216**	**189**	**131**	**2**	**226**	**68**	**17**	**4**	**4**	**200**	**95**	**1448**

The evaluation included an in-depth observation of activities being conducted at Anganwadis. A variety of activities were conducted by AWWs at the Anganwadis. Figure 4.19 informs that in about three-fourth Anganwadis (74.65 percent), rhymes and

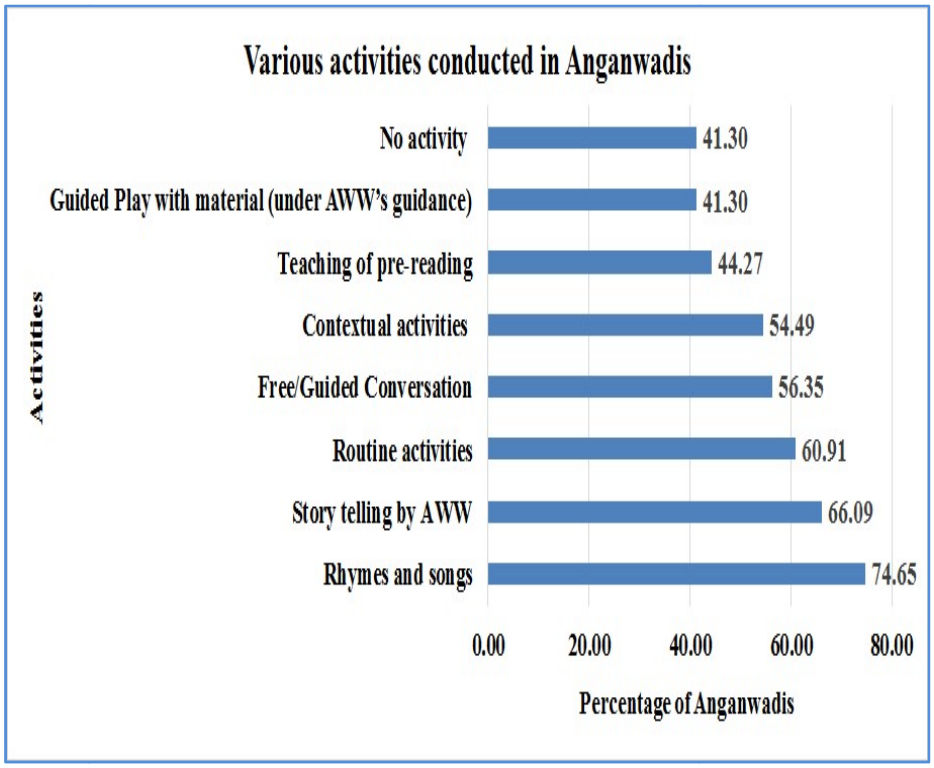


Figure 4.19: Proportion of AWCs with various activities (N=1448)

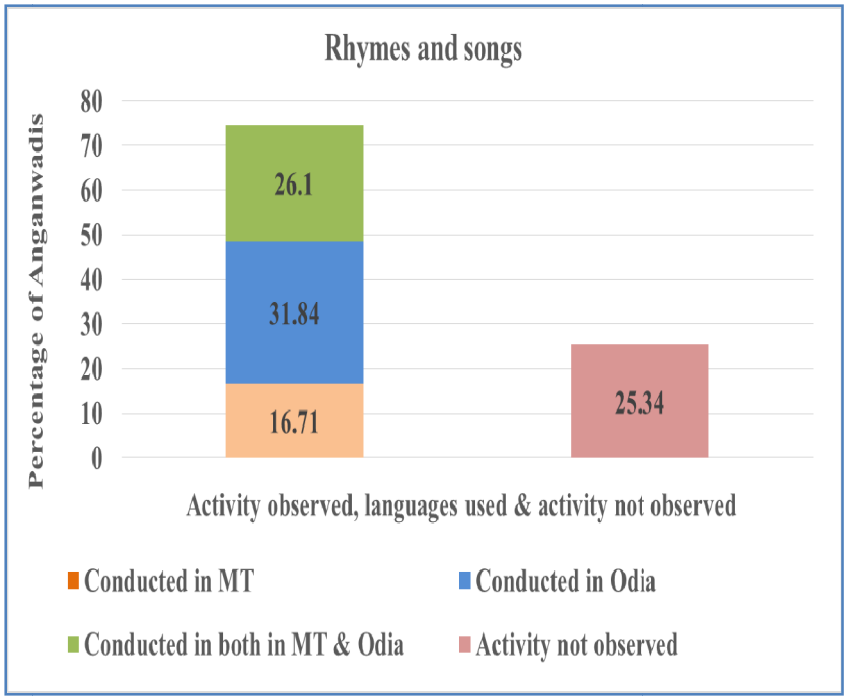
songs were the most common activities. In two-third Anganwadis (66.09 percent), primarily, storytelling by AWWs was undertaken. In 60.91 percent Anganwadis, routine activities such as upgrading registers, distribution of food, taking attendance, and so on, were held. In more than half of the Anganwadis (56.35 percent), children were observed to be engaged in free/ guided conversation (Figure 4.19). The observations informed that in 82.80 percent Anganwadis, children did not engage in clay work on the day of observation (Table 4.2).

Language being the focus, emphasis was also laid to understand usage of language while activities were being conducted. Activities were observed to gain an understanding of languages spoken by AWWs and children and languages used by AWWs to respond to children at the Anganwadis. The observations also included information on whether TLMs were used while conducting activities and level of children's participation in varied activities. The Table 4.4 below further details the activities conducted at Anganwadis and language spoken during transaction of the activities.

Table 4.4: Various activities observed in Anganwadis & AWWs' usage of varied languages

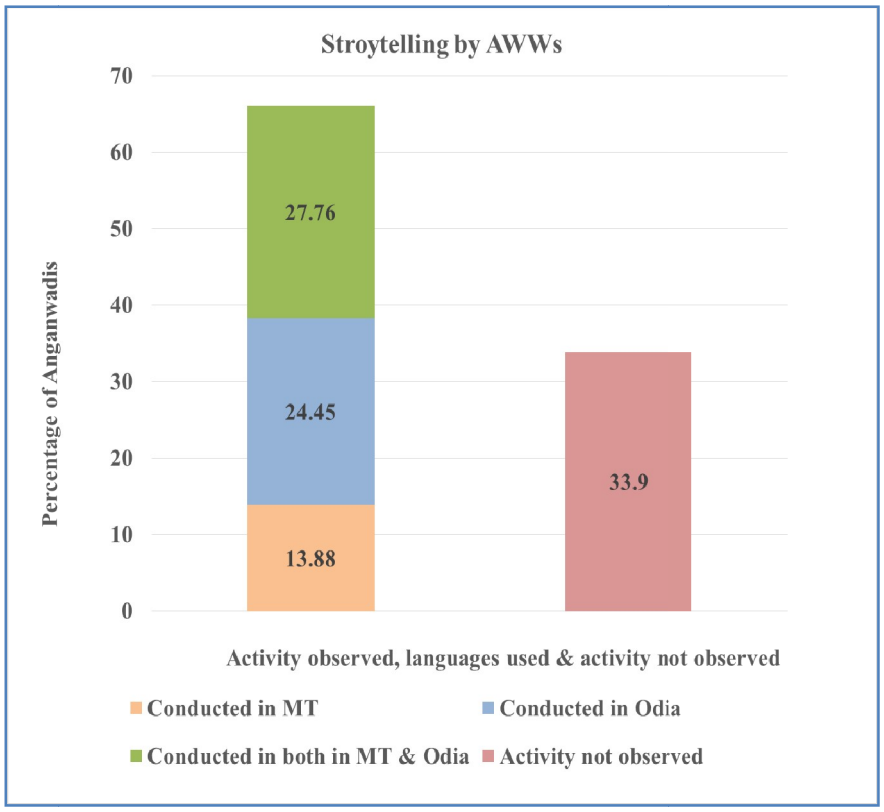
Various activities observed in Anganwadis & AWWs' usage of varied languages (N=1448)										
Activities	**Observed**		**Activity conducted in MT**		**Activity conducted Odia**		**Activity conducted in both MT & Odia**		**Not observed**	
	n	%	n	%	n	%	n	%	n	%
Rhymes and songs	1081	74.65	242	16.71	461	31.84	378	26.10	367	25.35
Story telling by AWW	957	66.09	201	13.88	354	24.45	402	27.76	491	33.91
Free/Guided Conversation	816	56.35	178	12.29	289	19.96	349	24.10	632	43.65
Inclusion of children's socio-cultural context in classroom transactions	789	54.49	161	11.12	277	19.13	351	24.24	659	45.51
Teaching of pre-reading	641	44.27	90	6.22	262	18.09	289	19.96	807	55.73
Guided Play with material (under AWW's guidance)	598	41.30	132	9.12	195	13.47	271	18.72	850	58.70
Free Play with materials (without AWW's guidance)	570	39.36	139	9.60	224	15.47	207	14.30	878	60.64
Indoor games	553	38.19	132	9.12	228	15.75	193	13.33	895	61.81
Story telling by Children	495	34.19	146	10.08	215	14.85	134	9.25	953	65.81
Teaching of formal reading	481	33.22	44	3.04	243	16.78	194	13.40	967	66.78
Coloring /drawing /painting	469	32.39	116	8.01	184	12.71	169	11.67	979	67.61
Dramatization/role play/puppet play	453	31.28	83	5.73	216	14.92	154	10.64	995	68.72
Teaching pre-writing	404	27.90	75	5.18	184	12.71	145	10.01	1044	72.10
Outdoor Play	370	25.55	112	7.67	139	9.60	119	8.22	1078	74.45
Teaching pre number	368	25.41	88	6.08	155	10.70	125	8.63	1080	74.59
Teaching of formal writing	327	22.58	27	1.86	173	11.95	127	8.77	1121	77.42
Clay work/sand play	249	17.20	68	4.70	90	6.22	91	6.28	1199	82.80
Teaching of formal number	185	12.78	12	0.83	115	7.94	58	4.01	1263	87.22

In addition to activities being conducted, the section below details activities conducted in Anganwadis and various languages spoken by AWWs during those activities.



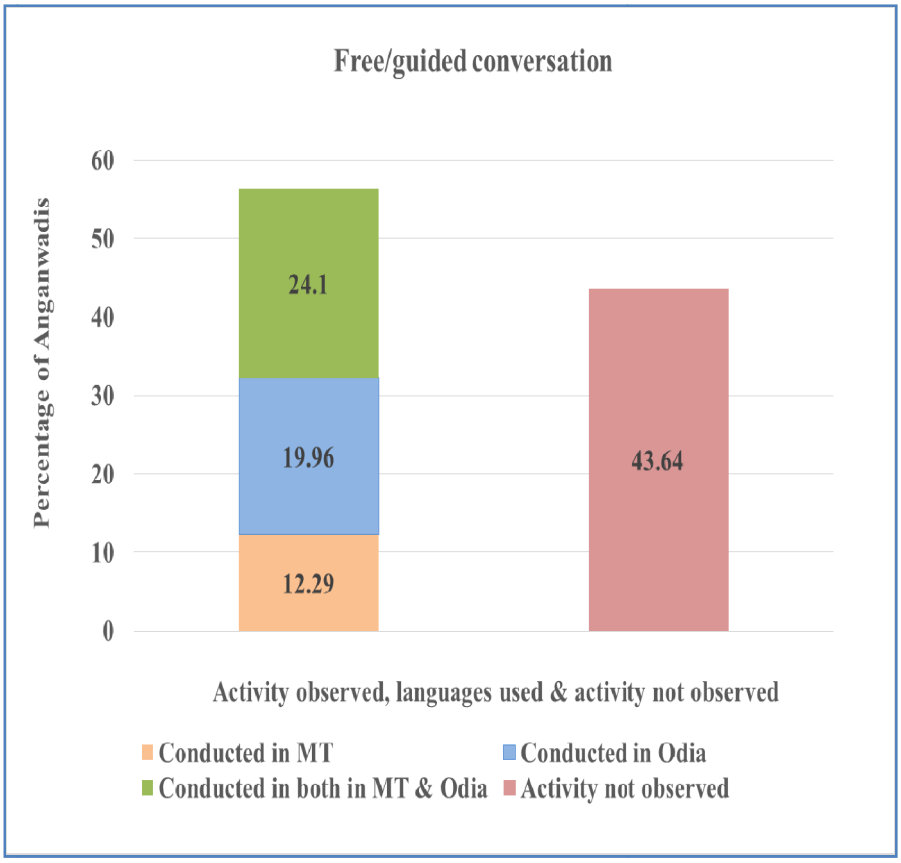
In most of the Anganwadis (74.65 percent), rhymes and songs were observed on the day of the observation. Out of these, in a little less than one-third Anganwadis (31.84 percent), AWWs conducted rhymes and songs only in Odia. In little over one-fourth Anganwadis (26.10 percent), AWWs conversed both in mother tongue as well as Odia. Some examples of mother tongue which were used along with Odia were Koya, Santali and Soura. Another trend showcased that multiple tribal languages were used along with Odia. To illustrate, Koya was used with Desia, Durua and Halvi along with Odia. However, Anganwadis where multiple tribal languages as well as Odia were spoken were of negligible proportion. Further, in more than one-tenth Anganwadis (16.71 percent), tribal languages were exclusively spoken as mother tongue and some of the examples of mother tongue were Santali and Soura. Moreover, there were few Anganwadis, where AWWs used more than one tribal language, for instance, Santali and Munda were spoken together in two Anganwadis. Furthermore, in one-fourth Anganwadis (25.35 percent), rhymes and songs were not seen on the day of observation.

Storytelling sessions by AWWs were observed in more than three-fifth Anganwadis (66.09 percent). Of these, in more than one-fourth Anganwadis (27.76 percent), AWWs narrated stories in both mother tongue and Odia. Some of the examples of the tribal languages which were spoken as mother tongue along with Odia were Santali, Soura and Koya.

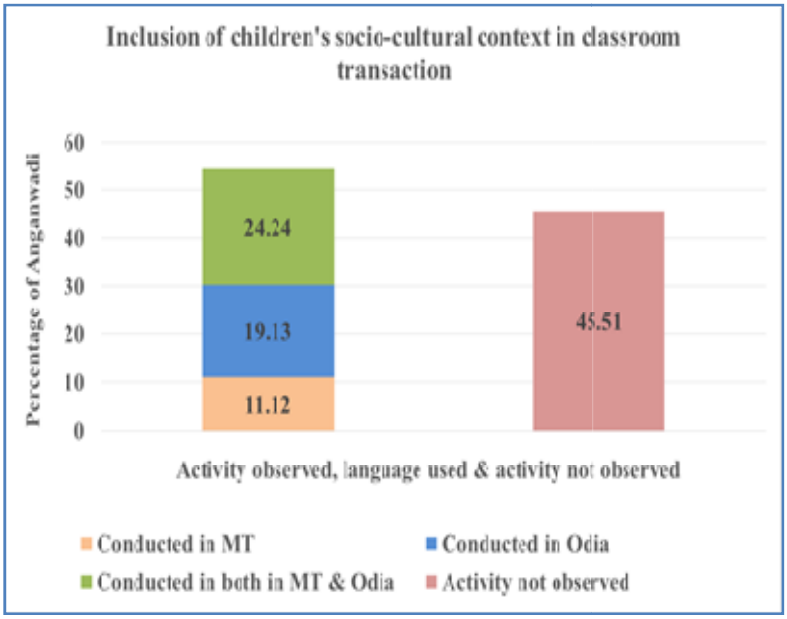


In about one-fourth Anganwadis (24.45 percent), AWWs only used Odia for narrations. Further, AWWs only used mother tongue in over one-tenth Anganwadis (13.38 percent). To illustrate, AWWs narrated stories to children in Santali. Again, there were cases, where AWWs used more than one tribal language to engage children in storytelling. For example, Desia and Koya were used together, Santali and Ho were used in tandem and Desia and Durua were used together. However, again it is emphasized that Anganwadis, where more than one tribal language were spoken, were negligible in proportion. Furthermore, in one-third of Anganwadis (33.91 percent), AWWs did not undertake storytelling session with children. This may be due to storytelling sessions not planned on the day of observation, occasional storytelling sessions in these Anganwadis or AWW lacking skills for storytelling.

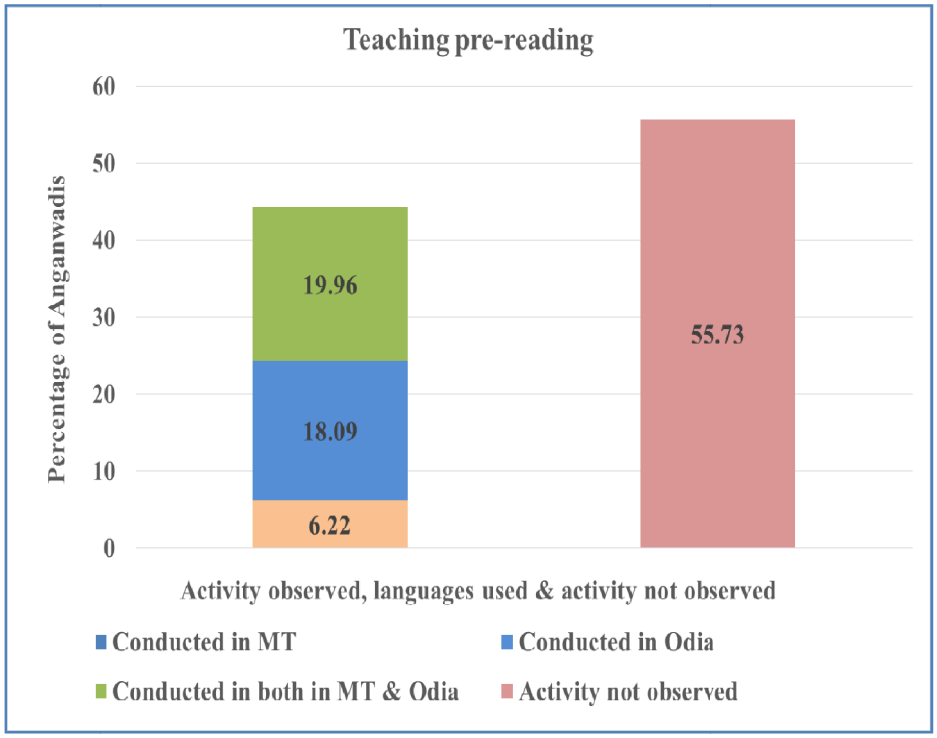
Free/guided conversation was next most observed activity and was recorded in more than half Anganwadis (56.35 percent). Out of these, in about one-fourth Anganwadis (24.10 percent), AWWs used both mother tongue and Odia. For instance, Munda and Santali were used along with Odia. In one-fifth Anganwadis (19.96 percent), AWWs only spoke Odia. In more than one-tenth (12.29 percent) Anganwadis, AWWs only used mother tongue. However, on the day of observation, this activity was not seen in more than two-fifth Anganwadis (43.65 percent).



Following these, activities such as dances, poems and stories which reflected children's socio-cultural context were conducted in 54.49 percent Anganwadis. Out of these, in one-fourth Anganwadis (24.24 percent), the AWWs used both mother tongue and Odia. For instance, Santali and Soura were used along with Odia. This is just to highlight that other tribal language, such as Bonda, Bhumija, Ho, Kandha were also used along with Odia.

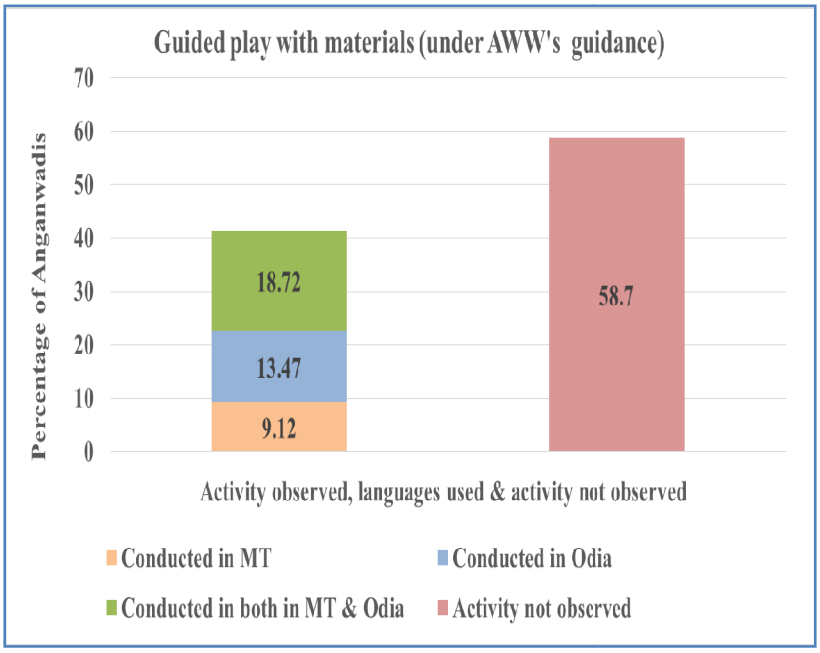


However, AWWs spoke these languages in proportion of Anganwadis. In nearly one-fifth Anganwadis (19.13 percent), AWWs conducted activities pertaining to socio-cultural context of children only in Odia. Next, in 11.12 percent Anganwadis, AWWs used only tribal languages as mother tongue, for instance, Santali. On the day of observation, this activity was not recorded in more than two-fifth Anganwadis (45.51 percent). This further reflected that AWWs need to be trained on how to plan and conduct activities which entail children's socio-cultural context. According to research, establishing and strengthening relationship with community members is of utmost importance as this would facilitate inclusion of children's socio-cultural aspects in their learning (Maher & Bellen, 2014).

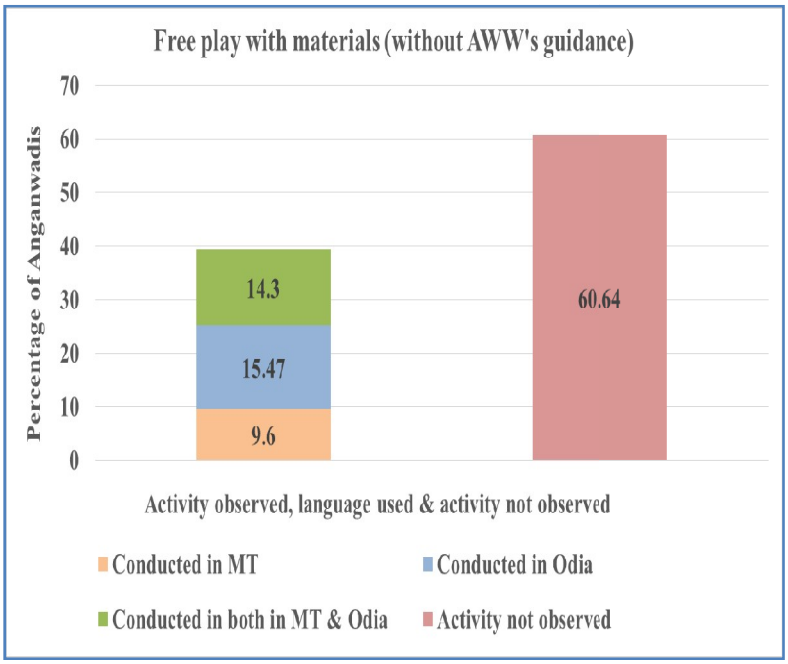


Next on the list was teaching of pre-reading. This activity was observed in 44.27 percent Anganwadis. Out of this proportion of Anganwadis, AWWs used mother tongue and Odia in one-fifth Anganwadis (19.96 percent). For example, Munda, Santali and Soura were used with Odia. Likewise, in 18.09 percent Anganwadis, AWWs only used Odia for engaging children in pre-reading activities. In less than one-tenth Anganwadis (6.22 percent), AWWs only used mother tongue. Meanwhile, pre-reading activities were not noticed in more than half of the Anganwadis (55.73 percent).

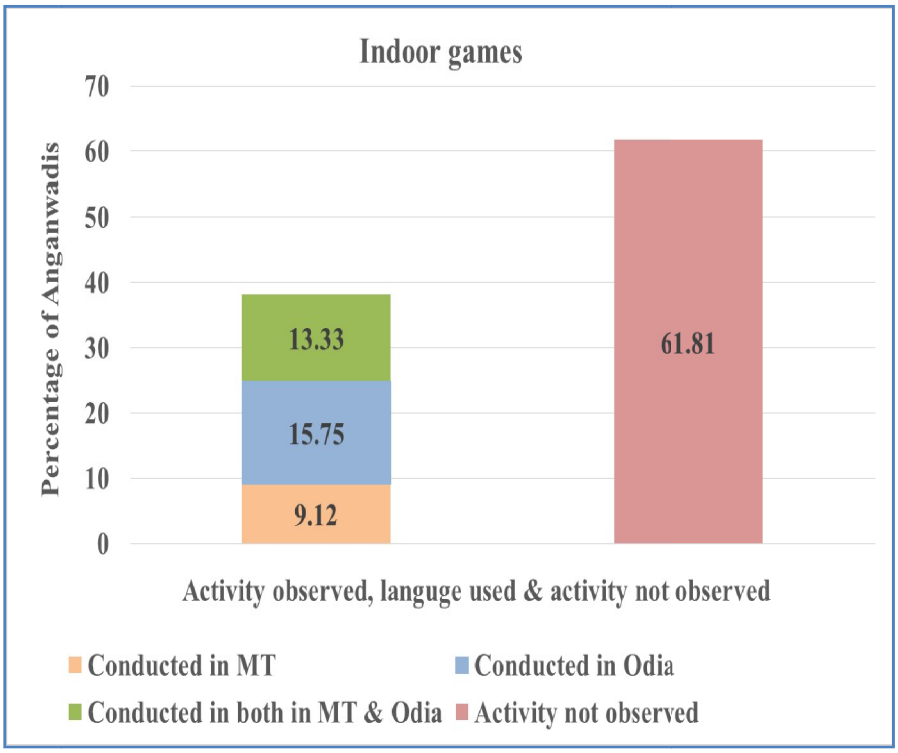
Next, guided play with materials (under AWW's guidance) was seen in two-fifth Anganwadis (41.30 percent). Out of these, in 18.72 percent Anganwadis, AWWs interacted with children both in mother tongue and Odia. For example, AWWs used Santali with Odia and Munda with Odia. Likewise, in 13.47 percent Anganwadis, AWWs only used Odia. In about one-tenth Anganwadis (9.12 percent), AWWs used tribal languages as mother tongue, for example, Koya and Santali. In nearly, three-fifth Anganwadis (58.70 percent), AWWs were not seen to engage children in this type of play activity.



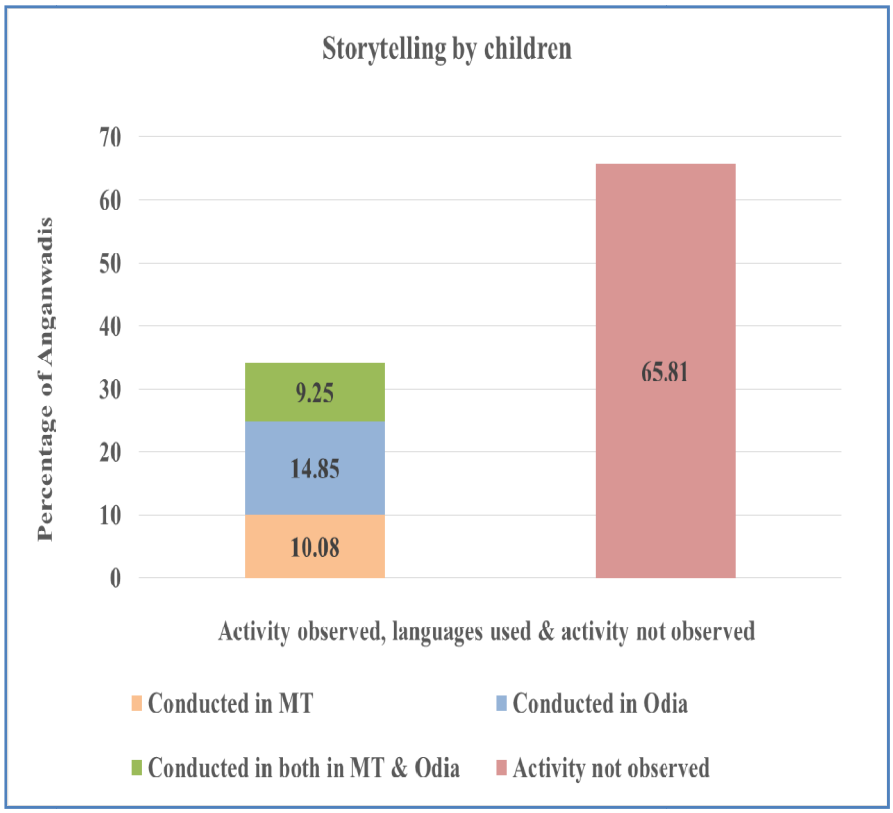
After this, children's free play (without AWW's guidance) was observed in two-fifth Anganwadis (39.36 percent). From these, in 15.47 percent Anganwadis, AWWs only used Odia, while providing instructions to children. However, in similar proportion of Anganwadis (14.30 percent), AWWs used both mother tongue as well as Odia to instruct children. In about one-tenth Anganwadis (9.60 percent), AWWs used only mother tongue. However, children were not observed to be engaged in this activity in three-fifth Anganwadis (60.64 percent).



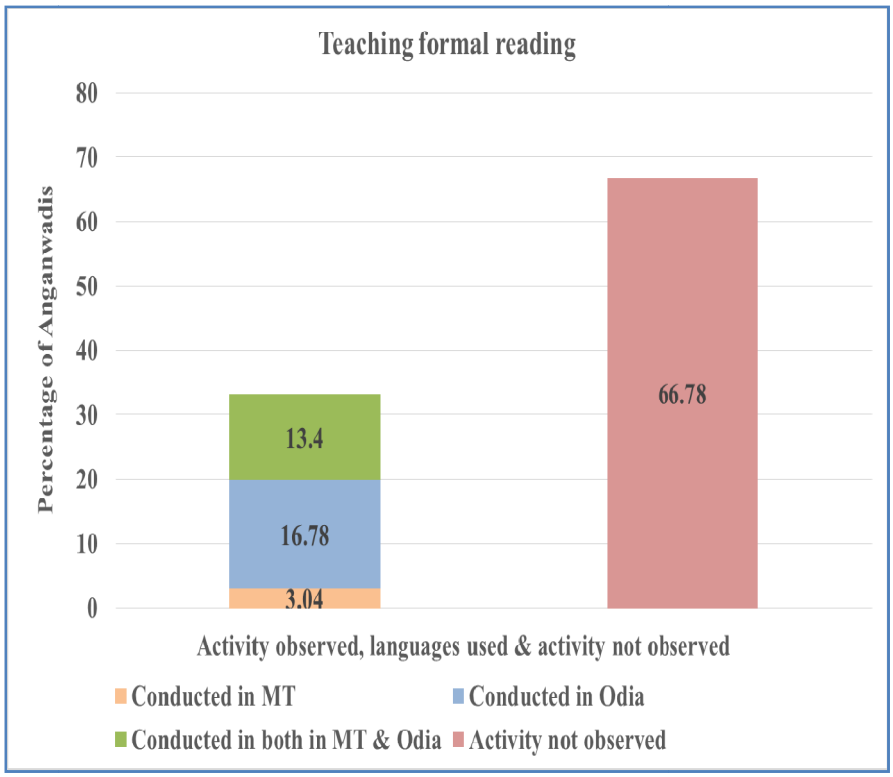
Then, organization of indoor games was recorded in about two-fifth Anganwadis (38.19 percent). From this proportion of Anganwadis, in 15.75 percent Anganwadis, only Odia was spoken by AWWs. In similar proportion of Anganwadis (13.33), AWWs interacted both in the mother tongue and Odia. To illustrate, AWWs used Koya, Kui, Santali as well as Odia. In 9.12 percent Anganwadis, only mother tongue was spoken by the AWWs. For instance, AWWs used Koya and Santali. Moreover, other tribal languages, viz, Bonda, Desia, Haa, Ho and Juanga were also used; however, these were spoken in negligible proportion of Anganwadis. Furthermore, indoor games were not seen in three-fifth Anganwadis (61.81 percent).



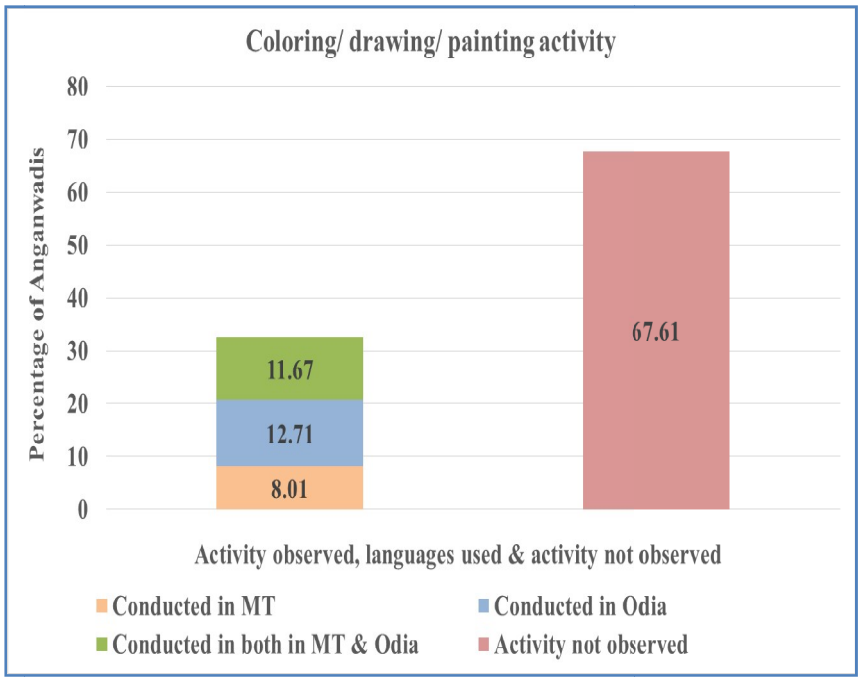
The activity of storytelling by children was noticed in 34.19 percent Anganwadis. From these Anganwadis, during storytelling telling by children, AWWs only spoke Odia in 14.85 percent Anganwadis. In 10.08 percent Anganwadis, AWWs only spoke mother tongue. Further, 9.25 percent Anganwadis, AWWs used mother tongue along with Odia. This activity was not conducted in more than three-fifth Anganwadis (65.81 percent).



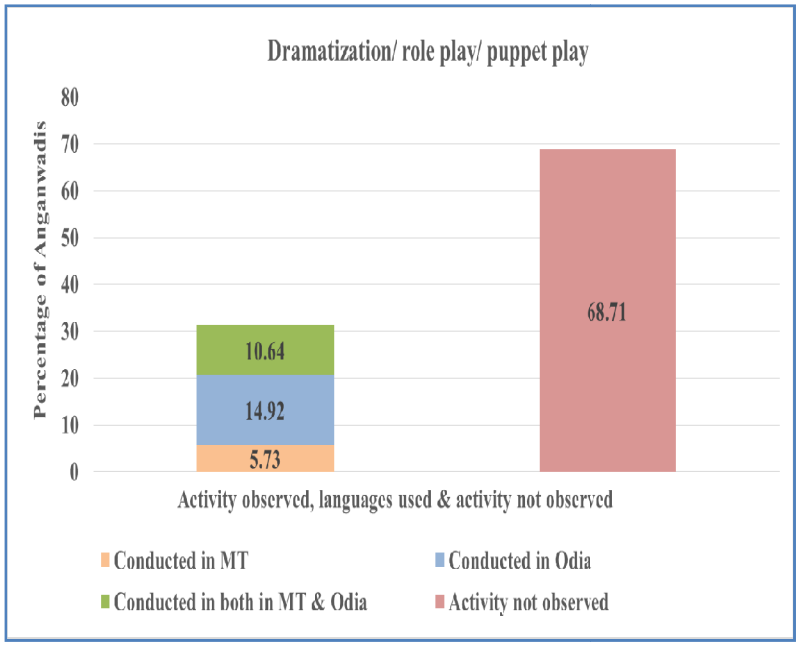
Then in one-third Anganwadis (33.33 percent), teaching of formal reading was undertaken. Of these Anganwadis, AWWs only used Odia in 16.78 percent Anganwadis. In more than one-tenth Anganwadis (13.40 percent), AWWs spoke in both mother tongue and Odia. Kui and Santali were used by AWWs in



most of the Anganwadis along with Odia. In 3.04 percent Anganwadis, AWWs only used mother tongue. Fortunately, formal reading activities were not evident in more than three-fifth Anganwadis (66.78 percent).



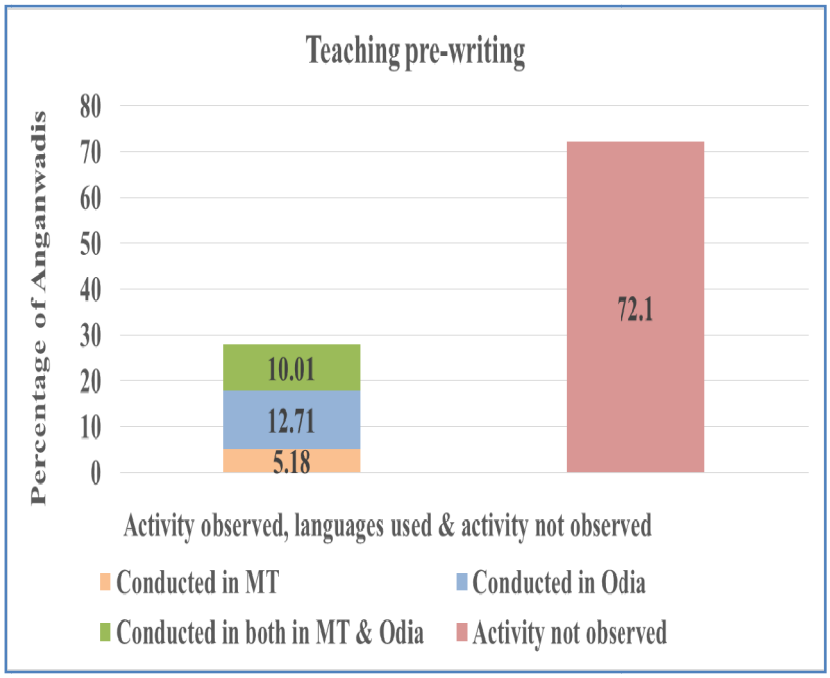
The coloring/drawing/ painting activity was observed in about one-third Anganwadis (32.39 percent). Out of these Anganwadis, AWWs used only Odia (12.71 percent Anganwadis) and mother tongue along with Odia (in 11.67 percent Anganwadis). In 8.01 percent Anganwadis, AWWs only spoke mother tongue while engaging children in coloring/drawing/ painting activity. However, these activities were not recorded in two-third Anganwadis (67.61 percent).



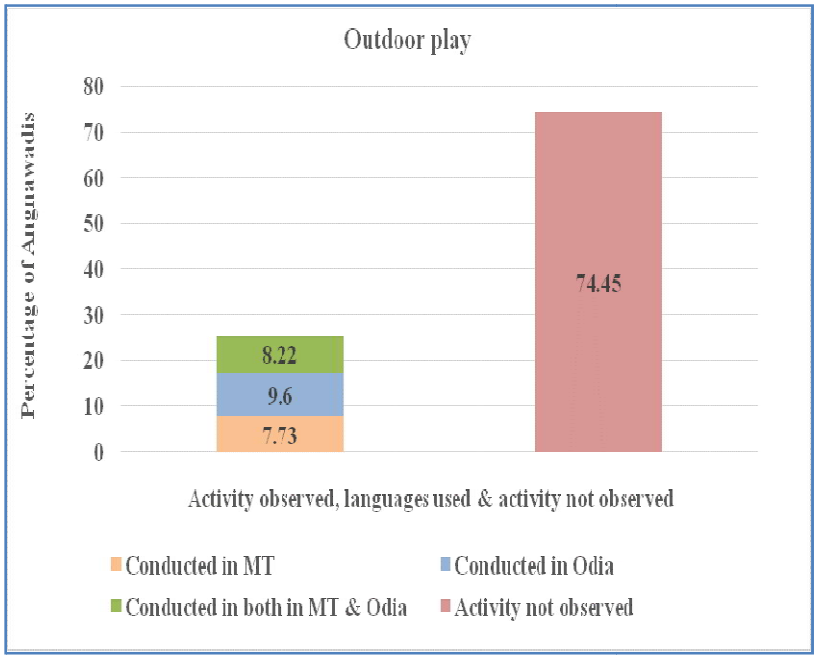
Following this, next on the list was dramatization/ role play and puppet play. This activity was observed in around one-third Anganwadis (31.28 percent). From this proportion of Anganwadis, only Odia was spoken by AWWs in 14.92 percent Anganwadis. Then in one-tenth Anganwadis (10.64 percent), AWWs conversed both in mother tongue as well as

in Odia. Kui and Santali were few examples of tribal languages, spoken as mother tongue by AWWs. Further, it was unfortunate that children were not engaged in such activities in more than two-third Anganwadis (68.72 percent).

After this, pre-writing activities were observed in a slightly over one-fourth Anganwadis (27.90 percent). Out of these Anganwadis, AWWs only used Odia in more than one-tenth Anganwadis (12.71 percent). In similar proportion of Anganwadis (10.01 percent), AWWs used mother tongue as well as Odia. Further, AWWs only used mother tongue in merely 5.18 percent Anganwadis. Nevertheless, a disturbing trend was that pre-writing activities were not noticed in close to three-fourth Anganwadis (72.10 percent).

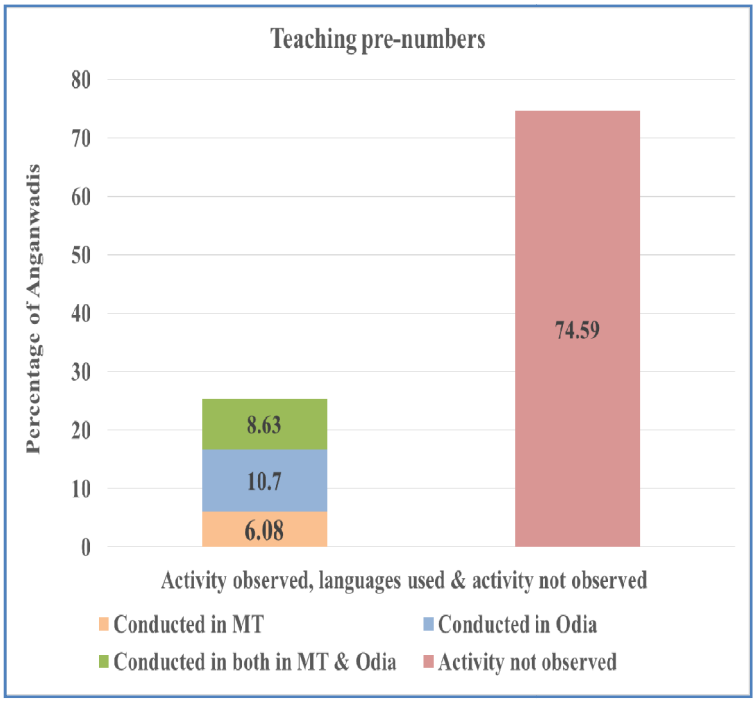


Next, on the day of observation, children were engaged in outdoor play in one-fourth Anganwadis (25.55 percent). Out of these, in 9.60 Anganwadis, AWWs spoke only Odia. Similarly, in less than one-tenth Anganwadis, AWWs interacted in both mother tongue and Odia in 8.22 percent Anganwadis and only

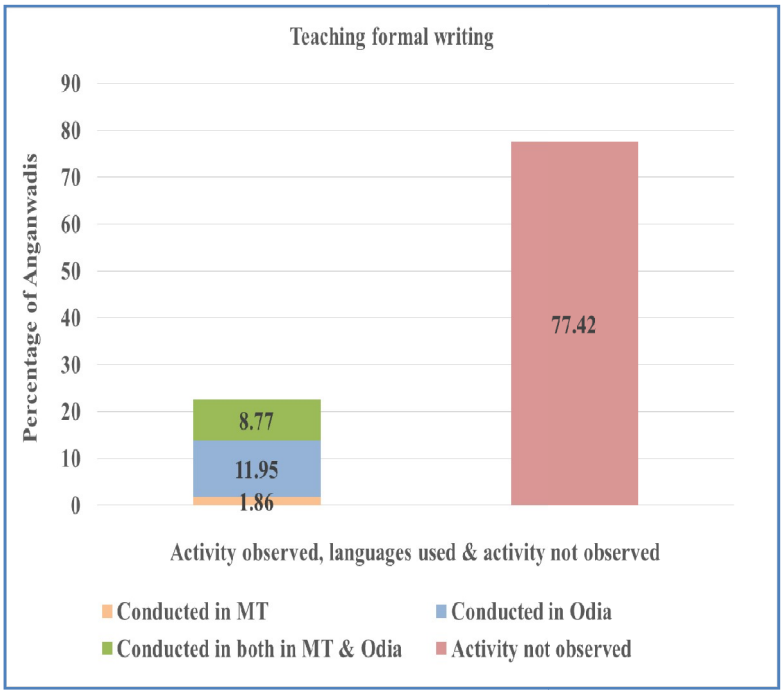


in mother tongue in 7.67 percent Anganwadis. Again it was very unfortunate that in three-fourth Anganwadis (74.45 percent), no outdoor activities were conducted for children.

In relation to teaching of pre-numbers, these activities were spotted in one-fourth Anganwadis (25.41 percent Anganwadis). Out of which, in one-tenth Anganwadis (10.70 percent), AWWs conversed only in Odia. Similarly, AWWs used both mother tongue and Odia in 8.63 percent Anganwadis and used only mother tongue in 6.08 percent Anganwadis. Again, similar to pre writing activities and outdoor play activity, pre-number activities were not undertaken in three-fourth Anganwadis (74.59 percent).

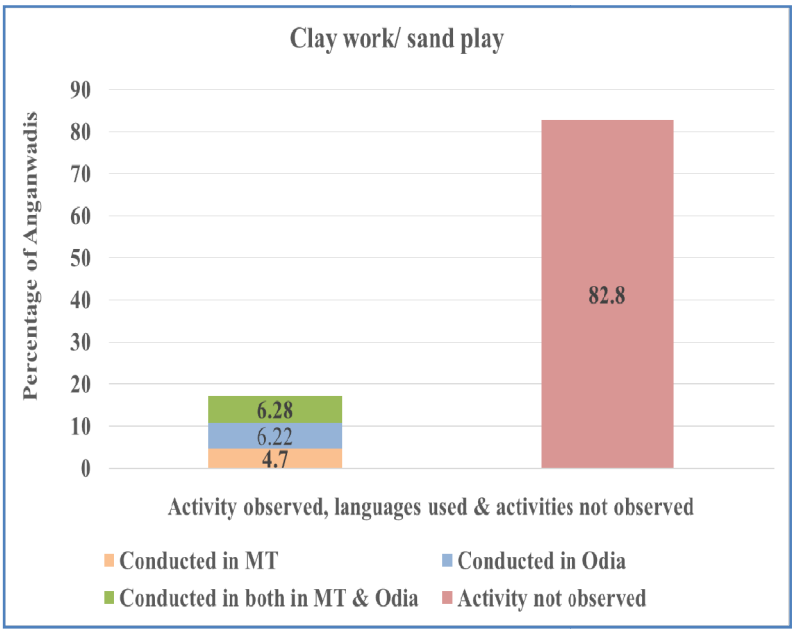


Formal writing activities were one of the least observed among sampled Anganwadis. Nonetheless, these activities were observed in a slightly less than one-fourth Anganwadis (22.58 percent). While, engaging children in formal writing, only Odia was spoken by AWWs in 11.95 percent Anganwadis. In less than one-tenth of Anganwadis (8.77 percent), AWWs used mother tongue as well as Odia. In 27 Anganwadis (1.86

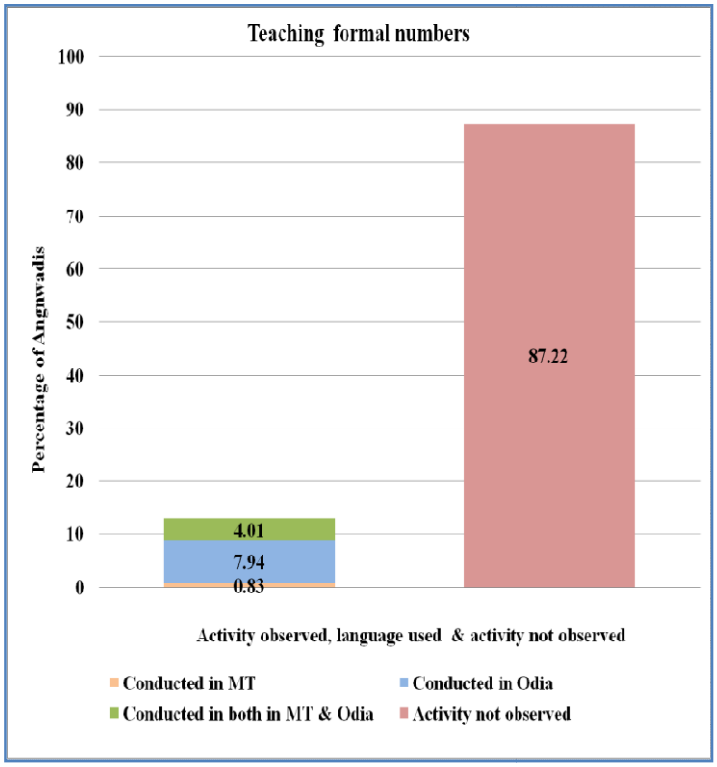


percent), AWWs only used mother tongue, for instance, Santali was spoken. This activity was not noticed in 77.42 percent Anganwadis.

Clay work/ Sand play was another one of the least observed activity and was noticed in 17.20 percent of Anganwadis. AWWs used both mother tongue and Odia in 6.28 percent Anganwadis, only Odia in 6.22 percent Anganwadis and only mother tongue in 4.70 percent Anganwadis. This activity was not observed in more than four-fifth Anganwadis (82.8 percent).

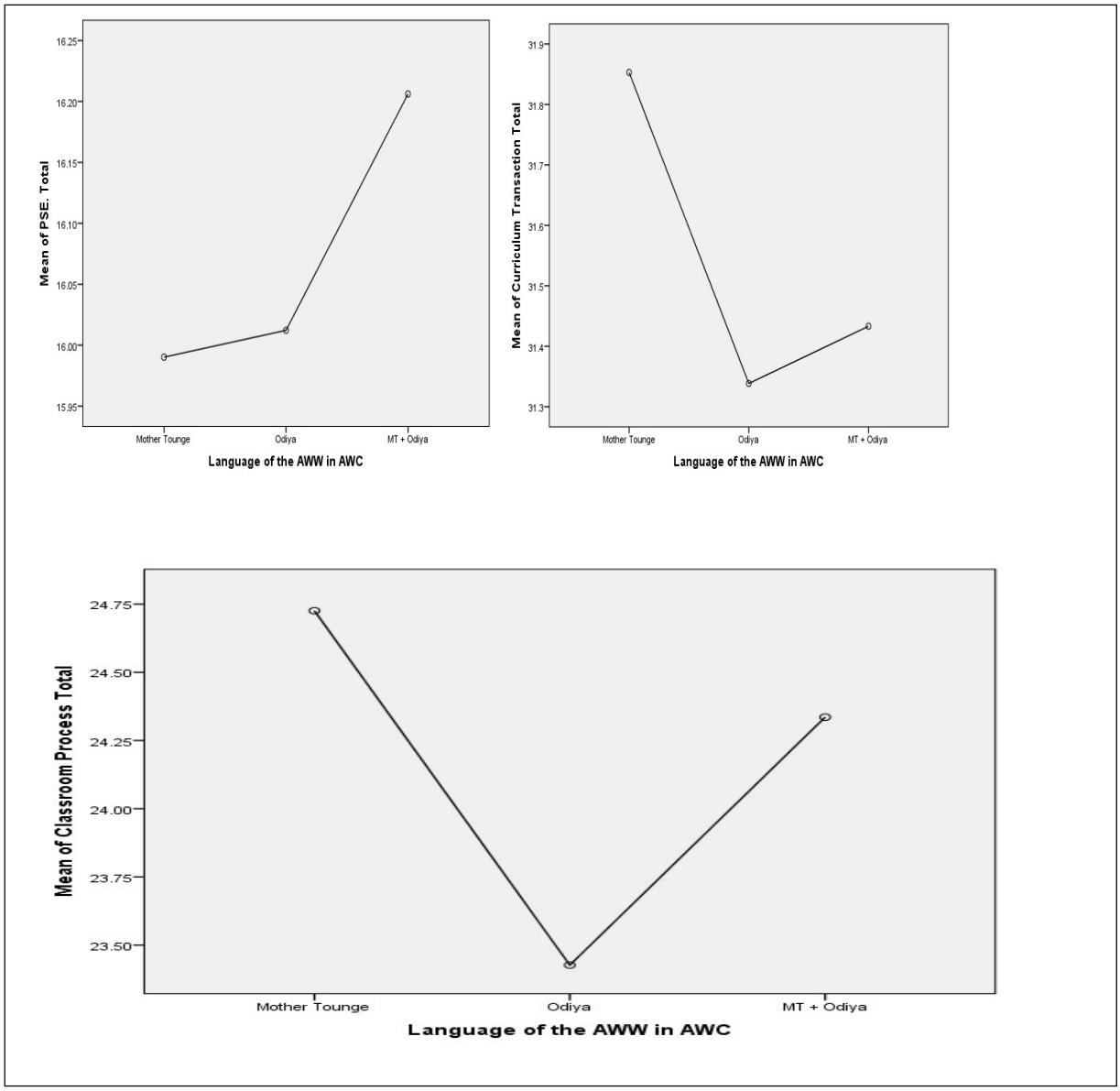


Last, formal number activities were least observed (12.78 percent). During teaching formal numbers, AWWs were observed to be speaking only Odia in 7.94 percent Anganwadis, both mother tongue and Odia in 4.01 percent Anganwadis and only mother tongue in 12 Anganwadis (0.83 percent). In more than fourth-fifth Anganwadis (87.22 percent), teaching of formal numbers was not noticed.



The section above informs the usage of MT, MT and Odia and only Odia in Anganwadis during transaction of curriculum. The evaluation further attempts understand the relationship between the quality dimensions of ECE and usage of language. The mean scores from the observation schedule for the various quality dimensions were drawn with respect to the languages used.

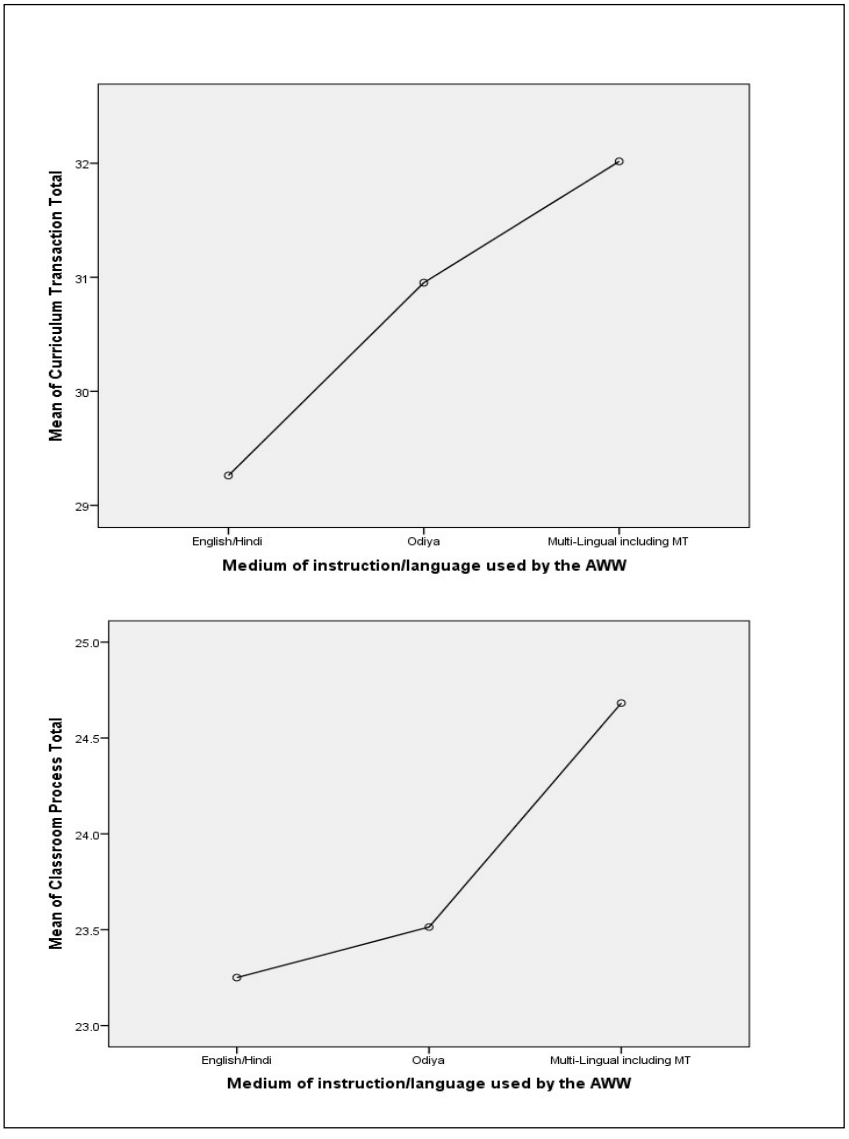
Figure 4.38: Mean plot figures of scores of quality dimensions (Pre-school environment, Curriculum Transaction & Classroom Processes) and usage of language by AWWs in Anganwadis namely Mother Tongue (MT), Odia & Both (MT + Odia) (N=1448)



The mean plots revealed (Figure 4.38) that child friendly environment was better where AWWs were using mother tongue and Odia language across all the districts whereas curriculum transaction and classroom process (teacher-child interaction) were better where AWWs were using mother tongue across all the 12 districts. On the whole the data established the effective role of mother tongue in making a better or conducive environment for children in Anganwadis. Use of mother tongue also facilitated AWWs' role in transacting the curriculum effectively and efficiently which positively impacted the classroom interactions between the AWWs and children. This may be attributed to effectiveness of training of AWWs on mother tongue based approach.

Attempts were also made to understand the relationship between ECE quality dimensions and medium of instruction.

Figure 4.39: Mean plot figures of scores of quality dimensions (Curriculum Transaction & Classroom Processes) and medium of instruction in Anganwadis namely Hindi/English, Odia & Multilingual including MT (N=1448)



Findings from mean plots (depicted in Figure 4.39) inform that Anganwadis, where the medium of instruction was multilingual including mother tongue, performed better in terms of curriculum transaction and classroom process as

compared to Anganwadis where medium of instruction was Odia or Hindi/English.

Effectiveness of Training for AWWs: Perspectives from LSs

There was a significant enhancement in the capacities of AWWs to deal with language issues after the implementation of MTELP+ programme. Majority of the Anganwadis covered under the MTELP+ programme were from tribal areas which had their own tribal languages. MTELP+ programme gave autonomy to AWWs to use Tribal Languages for communication and Curriculum transaction in Anganwadis which were earlier happening in Odia. Use of mother tongues in Anganwadis had increased the understanding and participation level of children as they felt more connected to the AWWs when AWWs spoke the language that was similar to the language spoken at children's home.

AWWs paid more emphasis on practical demonstration to engage with children in classroom rather than the traditional method of teaching with books. They used mother tongue to communicate and engage with children which had increased the attendance of children. Use of mother tongue had acted like a catalyst to energize both AWWs and children. They were comfortable in speaking their language and thus were able to coordinate and plan classroom activities in a way where all children were included.

4.1.4 The Lady Supervisors: Emerging Gains

LS's Understanding of ECCE

Lady Supervisors (LSs) were asked about their understanding of ECCE. Their responses showcased that they possessed extensive information of the same. Majority of LSs highlighted the importance of early years. One of the LSs stated that adequate care starting from prenatal phase, particularly embryonic stage, would have far-reaching positive impact on children's development. One other LS asserted that first 1000 days were of crucial importance, as during this phase rapid brain development took place. Other LS informed that she emphasized on adequate care of children in the ages of 0-3 years, as maximum brain development occurred during this phase. Subsequently, LS talked about the various components of ECCE, viz,

Preschool Education (PSE), Health and nutrition education, and immunization. Under the component of PSE, LSs pointed towards need of provision of complete PSE kits, importance of outdoor experiences for young children and use of play way approach and TLMs while transacting activities with children. With regard to children below 3 years, provision of early stimulation, growth monitoring and immunization was emphasized by LSs.

Knowledge of MTELP+

All the LS had received training on MTELP+. During interviews they shared their understanding of MTELP+ programme and its interventions. They described the MTELP+ programme as a critical aspect of quality early learning that primarily focused on teaching children in their Mother Tongue. Teaching children in their Mother Tongue increases the participation level of children and their understanding is enhanced. The training informed that Mother Tongue should be used as a first language when children enter the Anganwadis and it should be used to introduce other languages to the children. Use of Mother Tongue removes fear from children and they are able to

MTELP+ Trainings of Lady Supervisors: Components

- Brain Development
- Importance of early learning
- Meaning of development
- Development of schemas in children
- Importance of interacting with children in their mother tongue using play way method during transacting curriculum
- ECCE curriculum, classroom arrangement, social exclusion and inclusion, leadership, catering the need of disabled children
- Using locally available materials for demonstration purposes
- Importance of TLMs/ Low cost no cost contextual TLMs
- Classroom organization (Making classroom attractive)
- Theme based activity corners
- Organization of ECCE day
- Exposure Visits
- Mentoring
- Health and hygiene of children and mothers
- Managing children from different socio-economic backgrounds.
- Involving parents and community
- Teaching parents about various developmental domains. Further, educating parents about properly nurturing their children

express themselves freely without any inhibitions which promote joyful learning. MTELP+ programme emphasizes on importance of parents and community involvement in the activities of Anganwadis. It promotes positive parenting skills and connects mother to the children. MTELP+ programme also emphasizes on the importance of socio-cultural context for teaching children and the use of TLMs in order to promote joyful learning in the Anganwadis.

Mentoring/ Handholding of AWWs

Mentoring support to AWWs

Close to half of the AWWs (47.79 percent) indicated that they were provided guidance and support by the lady supervisors once a month. Close to one-fourth AWWs (23.76 percent) stated that they received mentoring support from the Lady Supervisors as and when required. Some AWWs (16.92 percent) told that they received guidance through mentoring once every 15 days. Mentoring, once in three months was informed by 8.29 percent AWWs. In total 47 AWWs (3.25 percent) mentioned that they did not receive mentoring (Figure 4.40).

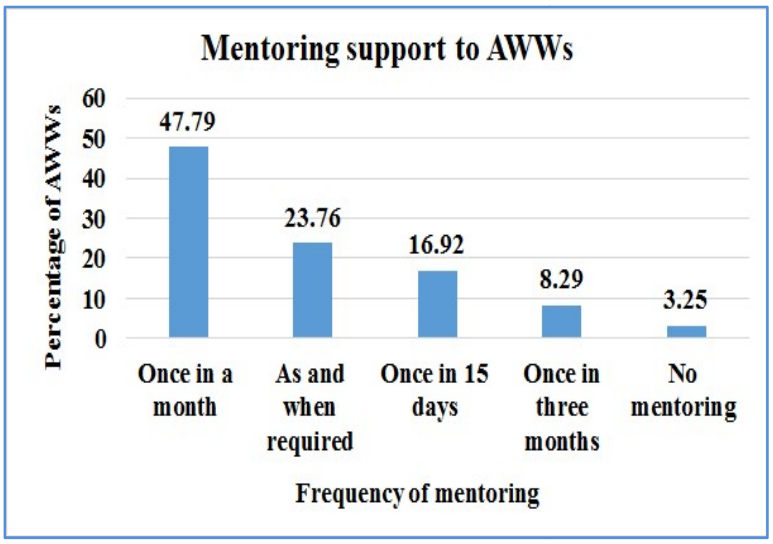


Figure 4.40: Mentoring support to AWWs (N=42)

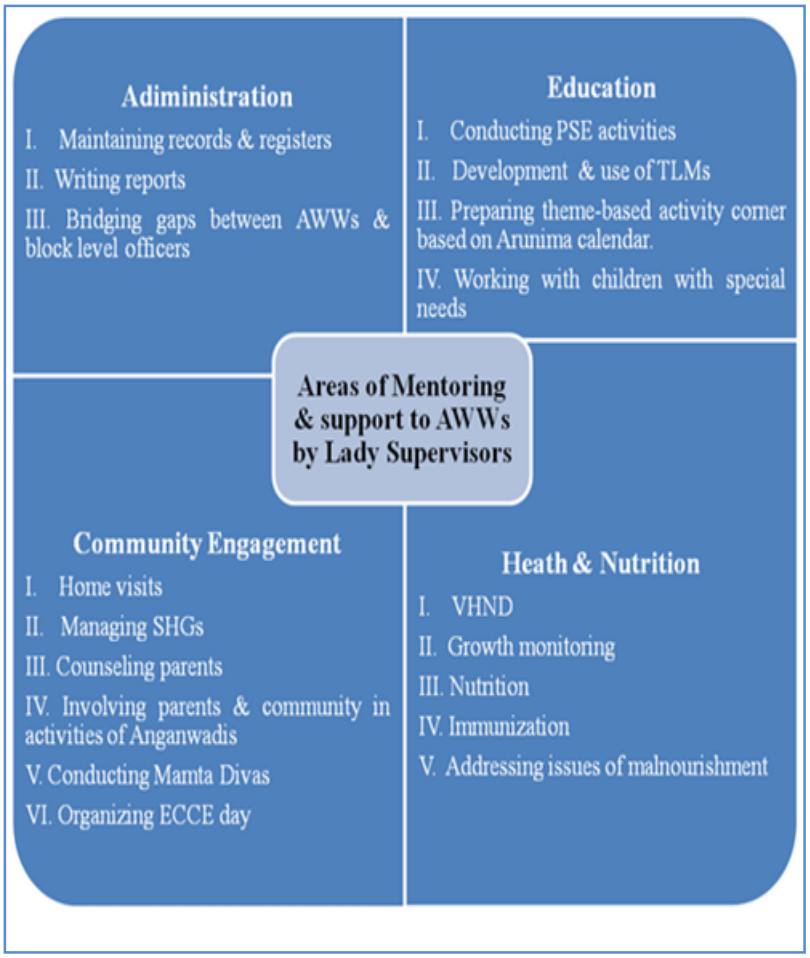
Frequency of LSs Visits to Anganwadis

The frequency of visits by LSs varied from district to district and block to block. It also varied at the individual level. Some of the LSs reported that they visited an Anganwadi at least once a month while others were able to visit an Anganwadi once in 3 months. LSs reported that they were overburdened with a lot of additional responsibilities which restricted their visits to the Anganwadis. Geographical barrier was another reason that affected their frequency of visits to Anganwadis.

> "I have to look after 112 centres and thus am not able to visit an Anganwadi regularly. I visit an Anganwadi once in 3 months. However, I am available for all AWWs. Whenever they require any sort of support from me they approach me."A Lady Supervisor, from Kasinagar, Gajapati

Strategies Used to Supervise and Monitor AWWs

In order to supervise and monitor the AWWs, LSs took various measures. LSs personally visited Anganwadis in order to monitor their functioning. During the visits, LSs informed the AWWs about the new schemes launched by the government, observed the activities conducted in the Anganwadis, checked/ verified records and registers, shared good practices observed in the Anganwadis and enquired about the difficulties faced by the AWWs in performing their role and responsibilities. LSs also visited children's homes to meet parents in order to get the feedback regarding activities conducted in the



Anganwadis. During the visits, LSs made use of an observation tool that served as a guide to plan what all should be observed in the Anganwadis. This tool termed as 'Advance Tool Plan', was a format developed by the PMU and was also used by the LSs for conducting monitoring visit to the Anganwadis.

Apart from the visits to the Anganwadis, LSs adopted various strategies to supervise and monitor the AWWs. They organized monthly sector wise meetings in which all the AWWs from the sector came together and shared knowledge with each other. Panchayat level meetings were conducted by LSs in order to review performance of the AWWs. Some of the LSs had categorized Anganwadis as 'Good', 'Average' and 'Poor' and handholding was done accordingly. More emphasis was given to the poor Anganwadis and to those which were situated in the remote areas. Some of the LSs had started using WhatsApp to monitor the AWWs. AWWs were directed to share the photos and videos of the activities conducted by them on the WhatsApp group. However, due to poor connectivity, this method was restricted only to small number of Anganwadis.

CDPOs' and LSs' Opinions on Challenges Encountered by AWWs

The CDPOs and LSs highlighted an array of challenges encountered by AWWs. The major themes derived from the responses of these two functionaries were, challenges in improving learning environment, implementation of mother tongue based early learning, and engaging parents and community members in Anganwadis, particularly, in ECE activities. Each theme is briefly explicated.

1. Challenges in improving learning environment

Some of the major challenges in this regard were low educational qualifications of AWWs. Almost all the LS shared that the capacities of AWWs were limited to carry out MTELP+ activities with children. A number of LSs also shared that AWWs' trainings were limited and further emphasized on provision of additional refresher trainings required to ensure fidelity in MTELP+ component. These functionaries expressed that AWWs were not sensitive to individual differences prevalent among children. Another major challenge shared by the AWWs was that they felt that they did not possess knowledge and skills to cater to the needs of disabled children. Most of the trainings imparted to AWWs mainly focused on identification of disabled children and supporting them with referral services. The recent revised training module for LS had a session included that encouraged the participants think and organize activities for disabled children. Inclusion of such training sessions and refresher trainings will strengthen skills and confidence among AWWs to organize activities for disabled and make the environment at Anganwadi inclusive.

> "On many occasions, if a training or meeting is planned I am unable to communicate this message to some of my AWWs and unfortunately they miss out on the activity."A Lady Supervisor from Gajapati.

Moreover, CDPOs and LSs revealed that due to low education levels among AWWs, they usually remained overburdened and lacked competence in filling of registers, conducting surveys and maintaining records. Sometimes, lack of regular communication between AWWs and LSs due to weak telephonic network caused problems in implementation of early learning activities.

CECDR recently conducted a study of status of ECE in Five states of India and the findings informed that the physical infrastructure of Anganwadis in Odisha is better when compared to states like Bihar, Delhi, Jharkhand and Rajasthan. The efforts of MWCD, GOO to provide quality ECE were visible (CECDR & Save the Children, 2019). Nonetheless, the CDPOs and LS shared the challenges of inadequacy of infrastructural facilities wherein buildings for Anganwadis were not available and they were running at AWWs' homes. In absence of physical infrastructure the scarcity of relevant contextual TLMs further posed as a challenge to quality learning.

2. Challenges in implementing mother tongue based early learning

One of the major problems was that Odia speaking AWWs were unable to deliver or conduct activities in various tribal languages. Also, at some places, multilingual children were present but AWWs were able to use only one of the tribal languages. This was problematic for children as well as for AWWs.

3. Challenges in parent and community engagement

Low education and awareness level of parents posed as hindrance. Mostly, parents were not involved in the Anganwadis due to time constraints. At the time of data collection, it was the peak season for growing cashews and turmeric and hence, parents would move out early in the morning and on many occasions would take their child with them. Low literacy level among the parents and community, practices of superstitions were not conducive to the learning environment.

> "Many parents go out to work early in morning and return late in evening."A Lady Supervisor, from Gajapati.
>
> "If my child goes to Anganwadi he will catch evil eye and will fall sick."A Lady Supervisor, from Rayagada quoting one of the parents

Challenges faced by CDPOs

- Lack of communication and coordination between LSs and AWWs due to network issues
- Language barriers, as CDPOs were not conversant in tribal languages and therefore faced difficulty in interacting with parents and children
- In Maoist affected areas, monitoring was problematic.
- Overburden of large number of Anganwadis
- Behavior of AWWs: Some AWWs were reluctant to follow instructions
- Geographical barriers, i.e., Anganwadis were spread over large areas hence travelling regularly to the location was difficult. Therefore, timely/ regular supervision was not feasible.

Challenges faced by LS

- LSs had supervision responsibility of many Anganwadis, hence, regular visits to each and every Anganwadi, was not feasible.
- Overburden of non-academic activities: filling registers, conducting surveys and maintaining records. Hence, resulted in availability of limited time for ECE.
- Due to non-provision of cooking gas, there was usage of wood logs, which affected children's health as well as transaction of ECE activities in Anganwadis.

4.2 Transaction of Quality ECE with MTELP+ Focus

The MTELP+ programme focused on scaling up of mother tongue based multilingual early childhood education in Anganwadis to provide quality learning environments, helping children become proficient in language usage and support successful transitions to primary school. The programme also focused on strengthening the capacity of Government policymakers and ICDS functionaries to deliver high quality mother tongue based early learning programmes.. Efforts were made to establish partnerships with parents and community to strengthen their understanding of holistic development of children. Importantly, daily routine and conduct of age and domain appropriate activities, nurturing and facilitative teacher-pupil relationships, strengthening support mechanisms for mentoring, monitoring and feedback, all culminate in determining and enhancing quality of Anganwadis.

The MTELP+ programme was assessed using AAS. Intensive observations of 3-4 hours for a day were conducted to complete three sections of AAS. The three sections focused on Child Friendly Environment, Curriculum Transaction and Classroom Interactions intended to capture the learning(s) provided to ICDS functionaries through MTELP+ programme. A total of 1448Anganwadis were observed. With regard to duration of Anganwadi programme, in more than half of Anganwadis (59.19 percent) the programme lasted for more than four hours. While in 31.91 percent of Anganwadis, the duration of programme was in the range of 3-4 hours.

4.2.1 Child Enrolment in MTELP+ Anganwadis

Table 4.5 shows the Enrolment (number of enrolled children), Attendance (average of past 30 days) and Head count (children present on the day of observation) in Anganwadis in various districts. The average enrolment of children was highest in Malkangiri district (Mean = 31) children per Anganwadi), followed by Kalahandi (Mean = 27) and Keonjhar (Mean = 27) districts. The average attendance of children was highest in Malkangiri (Mean = 25), followed by Keonjhar (Mean = 24) and Kalahandi (Mean = 20) districts. Further, number of children

> "AWWs use mother tongue to communicate and teach children and this practice has resulted in an increase in attendance of children." CDPOs from Kandhamal, Gajapati and Rayagada

attending Anganwadi on the day of observation was less because of the heat wave or the children would accompany their parents to the field. Additionally, this was a marriage season and many families along with children had gone visiting their relatives in other villages.

The head count of children on day of observation was highest in Malkangiri district (Mean = 21), with four districts (Kalahandi, Keonjhar, Dhenkanal and Ganjam) having similar number of children present (Mean = 16). Average enrolment, attendance and head count of children was recorded to be lowest in Sambalpur and Gajapati districts as detailed in Table 4.3.

Table 4.5: Enrolment, Attendance and Head count in Anganwadis in various districts (Average)

Average Enrolment, Attendance and Head count in Anganwadis in various districts (N=1448)									
Districts	**Enrolment**			**Attendance**			**Head count**		
	Boy	**Girl**	**Total**	**Boy**	**Girl**	**Total**	**Boy**	**Girl**	**Total**
Kandhamal	10	10	20	8	8	16	5	6	11
Kalahandi	14	13	27	11	10	20	8	8	16
Malkangiri	15	16	31	12	13	25	10	11	21
Rayagada	10	10	21	9	8	17	8	7	15
Gajapati	6	6	12	5	5	11	5	5	9
Koraput	11	11	22	9	9	18	8	8	15
Ganjam	10	11	21	8	10	18	8	8	16
Mayurbhanj	11	12	23	9	10	19	7	8	15
Sundargarh	10	9	19	9	8	17	7	7	13
Keonjhar	13	14	27	12	12	24	8	8	16
Sambalpur	4	6	10	3	5	9	2	4	6
Dhenkanal	9	12	21	8	10	18	7	8	16
Over All	10	11	21	9	9	18	7	7	14

Interestingly, the data on teacher-child ratio depicted the significance of favorable ratios. Correlations were computed between enrollment rate and quality provisions of ECCE programme to capture the relationship between the variables.

Table 4.6.: Correlation between enrollment rate and quality provision of the ECE programme (N=1448)

Variables	Child Friendly Environment	Curriculum Transaction	Teacher Child Interaction	Safety of the Children Total	AWC	Utilization of the TLM
Enrolled children (Avg. 21)	-.013	.031	.049	.086**	.033	-.011
Average Children (Avg. 18)	.030	.057*	.082**	.106**	.071**	.015
Head Count (Avg. 14)	.113**	.176**	.167**	.125**	.185**	.124**

Data from Table 4.6 revealed a strong relationship between the enrollment rate and quality provisions of Anganwadi in general. Head count (Average 14 children) per Anganwadi had positive and significant relationship with all the quality provisions of ECE programme such as child friendly environment (r = .113**, p< .001), curriculum transaction (r = .176**, p< .001), teacher child interactions (r = .167**, p< .001), safety of the children (r = .125**, p< .001) and utilization of the TLMs in classroom (r = .124**, p< .001). All the dimensions were statistically significant beyond the level of .001. However, the data confirms that the numbers of children were higher for average attendance or enrolled children as per attendance registers available at Anganwadis. The higher number of children under enrollment or average attendance negatively affected the quality provisons in terms of curriculum transaction, teacher child interaction or utilization of TLMs in the Anganwadis. This is confirmed from correlations presented in Table 4.4. The results did not show any positive relationship between both. Thus the results inform that favorable teacher-child ratio is a predicterof good quality ECE programme.

The Anganwadis were assessed on three themes, namely 'Child Friendly Environment', 'Curriculum transaction' and 'Teacher Child Interactions'. All the items were rated on a three point Likert Scale. Under the theme of 'Child Friendly Environment', there were seven items in total. The lowest score that could be obtained was seven, whereas, highest score was 21. With regard to 'Curriculum Transaction', there were 17 items. Hence, lowest possible score was 17, while the highest possible score was 51. Next, there were nine items, under the theme of

'Teacher Child Interactions'. Therefore, the lowest possible score was nine, whereas, the highest possible score was 27. The section below details the observations of 1448 Anganwadis.

4.2.2 Quality of Child Friendly Environment in Anganwadis

The component of '*Child Friendly Environment*', had 7 items. Table 4.7 provides information on quality of curriculum transaction in Anganwadis.

Table 4.7: Quality of preschool environment in Anganwadis

Child Friendly Environment (PSE) (N=1448)			
Items	**Poor**	**Average**	**Good**
Overall set up of AWC (ECE/ preschool set up)	10.84	47.1	42.06
Activity corners	20.72	25.55	53.73
Decoration of walls	11.6	32.94	55.46
Display of material at eye level	17.54	37.57	44.89
Display of children's materials	37.91	30.46	31.63
Availability of PSE kit	13.88	44.75	41.37

Table 4.5 informs about the quality of Anganwadis with regard to various dimensions of 'Child friendly environment'. In close to half of the Anganwadis (47.1 percent), the organization of materials and space was average, whereas, in more than two-fifth Anganwadis (42.06 percent) the overall set up of the Anganwadis was good. In these Anganwadis, space and materials were systematically organized. Almost all the materials which were used by the AWWs to transact curriculum were placed in their respective places. TLMs were arranged with ease in access to children. Glasses, plates etc. were kept in the kitchen. There was separate room for keeping materials related to health and supplementary nutrition in most of the Anganwadis. .

Overall set-up of Anganwadis

- Sambalpur district had most proportion of Anganwadis (85.71 percent) where space and materials were adequately set and organized.
- Sambalpur district was followed by Sundargarh, where four-fifth Anganwadis (79.69 percent) were well organized.
- Rayagada was next in position with more than half of the Anganwadis (53.33 percent) been systematically organized.
- One-third Anganwadis in Ganjam (33.33 percent Anganwadis) and less than one-fifth Anganwadis Kandhamal (17.02 percent Anganwadis) had poor performance on this aspect. These Anganwadis were substandard in terms of organization of space and placement of materials.

In more than half Anganwadis (53.73 percent), activity corners existed and were functional. Theme based activity corners were made with the help of locally available materials. During one of the visits, AWW asked the children to sit near the activity corner. She placed sticks and pebbles in front of children. As the activity progressed she taught the children counting with the help of the sticks and asked the children to make figures or alphabets by arranging the pebbles. Once the activity was done, all the children went and kept the materials on the shelf. It was also observed, that activity corners did exist in one-fourth Anganwadis (25.55 percent); however, these were not used by children on the day of observation (as depicted in Table 4.5)

Availability and usage of activity corners

- Most proportion of Anganwadis in which activity corners exited and were functional were in Sambalpur (85.71 percent) and Sundergarh (79.69 percent).
- Each Kalahandi and Rayagada district had nearly two-third Anganwadis (63.89 percent and 63.56 percent respectively) which performed well on this dimension.
- More than two-fifth Anganwadis (46.25 percent), which though had activity corners, but those were neither used by children nor by AWWs, on the day of observation, were in Malkangiri district. Similar situation was prevalent in 40.45 percent Anganwadis in Koraput.
- Nearly two-third of Anganwadis (65.00 percent) in Dhenkanal district did not have activity corners.

With regard to decoration of walls, in more than half of Anganwadis (55.46 percent), the walls were decorated with age appropriate, colorful and engaging pictures and posters. These materials were either procured from market or were painted on the walls of Anganwadis. Many charts were contextual as they had pictures depicting local birds and animals, contextual flowers and vegetables, body parts, seasons of the context etc., along with their names. While transacting the curriculum, AWWs referred and used the charts. Nonetheless, charts and posters were either absent in almost one-tenth Anganwadis (11.6 percent) or were age inappropriate for young children in 32.94 percent Anganwadis (see Table 4.5)

Wall decorations in Anganwadis

- All Anganwadis in Sambalpur district, had age appropriate and engaging wall decorations such as pictures and posters.
- Likewise, Sundargarh district had more than fourth-fifth Anganwadis (82.81 percent) with suitable wall decorations. Next in line was Gajapati district with 65.45 percent of such Anganwadis.
- Koraput and Dhenkanal districts were home to highest proportion of Anganwadis, where wall decorations were present but were inconsistent with children's age and understanding level. Each of these two districts had 60 percent of such Anganwadis.
- With 20.00 percent Anganwadis, Ganjam district was on top with those Anganwadis, where wall decorations were totally absent.

In more than two-fifth Anganwadis (44.89 percent) children could easily see displayed materials. However, in 37.57 percent Anganwadis, some charts and posters were not displayed at eye level of children.

Display of materials at eye level of children

- Districts of Kalahandi, Rayagada (55.56 percent each), Gajapati (52.27 percent), Sundargarh and Keonjhar (50.00 percent each) had Anganwadis, where display of materials was in accordance to eye level of children.
- In most Anganwadis (32.45 percent) in Kandhamal district, materials were not placed at eye level of children. This was followed by Ganjam district, where close to one-fourth of Anganwadis had material displays above the eye level of children.

In about one-third of Anganwadis (31.63 percent) the recent work of children were on display. In another 30.46 percent of Anganwadis, the materials produced by children were displayed in the rooms but looked as if they were old and had not been changed for about 2 months or more. In nearly two-fifth Anganwadis (37.91 percent) there was no display of children's materials. Materials made by the children such as drawing and paper cutouts were either pasted on the walls or kept in red color bags which were present for each child separately. Materials made out of clay and thermocol were displayed on the shelves. The materials were prepared as per the theme of the Arunima calendar (see Table 4.5).

Display of materials made by children

- Most Anganwadis having display of materials prepared by children were in Sambalpur (85.71 percent Anganwadis) followed by Sundargarh district (71.88 percent Anganwadis).
- Malkangiri district had highest proportion of those Anganwadis (66.25 percent), which did have display of materials prepared by children; however, those materials mainly remained unchanged for long time duration.
- Majority of Anganwadis (70.00 percent) without any display of materials, made by children were in Dhenkanal district, further, Kandhamal district followed with 51.06 percent of such Anganwadis.

Availability of PSE kits

- Again, in Sambalpur district all Anganwadis (100.00 percent) had PSE kits and materials within those kits were sufficient for all children. Next in line were Sundargarh and Rayagada district with 85.94 percent Anganwadis and 55.11 percent Anganwadis, respectively, which had complete set of PSE kits.
- Highest proportion of Anganwadis which did have availability of PSE kits but those kits were incomplete and inadequate for all children, were in Dhenkanal (80.00 percent) and Malkangiri (75.00 percent)
- Most proportion of Anganwadis without provision of PSE kits were in Kandhamal (25. 53 percent Anganwadis) and Rayagada (24.00 percent Anganwadis)

Further, in two-fifth of Anganwadis (41. 37 percent) PSE kits such as story books, activity books, crayons, counting blocks etc., were present and were sufficient for children. In 44.75 percent of Anganwadis, PSE kits and TLMs were available but were not sufficient for all

the children present in the Anganwadis.

4.2.3 Quality of Curriculum Transaction in Anganwadis

The component of 'Curriculum transaction' had 17 items. Table 4.8 provides information on quality of curriculum transaction in Anganwadis.

Table 4.8: Quality of curriculum transaction in Anganwadis

Curriculum transaction (N=1448)			
Items	**Poor**	**Average**	**Good**
Person transacting curriculum	1.52	3.18	95.3
Seating arrangement of children	6.7	13.33	79.97
Medium of instruction	6.35	34.94	58.7
Availability of time table/weekly schedule	26.17	23.2	50.62
Number of children participating in activities	12.15	37.29	50.55
Proper planning for PSE activities by AWWs	20.72	36.26	43.02
Transition between activities	10.64	41.85	47.51
Mix of group & individual activities conducted	10.84	43.44	45.72
Children select learning activities as per choice	10.91	39.71	49.38
Children meaningfully engaged in activities	26.8	37.5	35.7
Local & contextual material used by AWWs	21.96	44.89	33.15
TLMs used by AWWs in activity transaction	12.71	50.76	36.53
Play way/ activity based method used by AWWs	7.32	39.02	53.66
Conduction of psycho-social activities	23.03	45.3	32.67
Curricular activities encouraging good habits	13.12	43.92	42.96
Indoor & outdoor activities conducted by AWWs	27.97	52	20.03
Routine task by AWWs	15.33	40.54	44.13

In majority of Anganwadis (95.3 percent), AWWs were observed to be transacting activities for children. In few Anganwadis (3.18 percent), it was observed that AWWs were absent and the activities were conducted by AWHs/ parents/ community members /NGO workers. For instance, in Kandhamal district, the AWW was unwell and had requested an NGO worker to organize

activities for children on the day of observation. The NGO worker appeared competent to manage and engage the children in their mother tongue (see Table 4.6)

In four-fifth Anganwadis (79.97 percent), the sitting arrangement was appropriate for young children, i.e., inform of a semi-circle, circle or flexible arrangement. In few Anganwadis (6.7 percent), no organized sitting arrangement was observed and the children were seated in a haphazard manner.

Seating arrangement of the children

- Most appropriate and flexible sitting arrangement of children was evident in Anganwadis in Sambalpur (100.00 percent Anganwadis), Malkangiri (98.75 percent Anganwadis), Sundargarh (90.63 percent Anganwadi) and Dhenkanal (90.00 percent Anganwadis).
- Few Anganwadis in Ganjam district (13.33 percent) and in Rayagada district (9.78 percent) were observed to have children seated randomly.

With regard to language used in Anganwadis, it was found that in 58.7 percent of Anganwadis, the mother tongue of children (tribal languages) was spoken and majority of children were able to comprehend what was communicated by AWWs. In over one-third Anganwadis (34.94 percent), Odia, the state language was used as medium of instruction and not all children were able to follow the same.

Medium of instruction/language used by AWWs

- Most proportion of Anganwadis where children's mother tongues, were used as medium of instructions and all the children were able to follow AWWs, were in Malkangiri (93.75 percent), Koraput (85.39 percent), and Mayurbhanj (81.28 percent).
- Kalahandi district was home to one-fourth of Anganwadis (25.00 percent) in which AWWs used dominant languages, which made it difficult for children to understand and follow AWWs.

Time table/ weekly/ daily schedule was observed in half of the Anganwadis (50.62 percent) and was being followed. During the visits, it was observed that the AWWs started with the Morning Prayer, followed by general conversation and then conducted activities as per daily schedule. In about one-fourth Anganwadis (23.2 percent), time table/ weekly schedule were available. However, AWWs were not observed to be adhering to the plan. In over one-fourth of Anganwadis (26.17 percent), the weekly schedule was not observed.

Availability of time table/ weekly/ daily schedule

- Sambalpur district had highest proportion of Anganwadis (85.71 percent), where weekly time table/ daily schedule were present and followed by AWWs.
- In each, Sundargarh district and Malkangiri district, in more than three-fourth Anganwadis (78.71 percent and 76.25 percent, respectively), there was availability as well as adherence to weekly time table.
- Likewise, each in Rayagada and Koraput, more than half of the Anganwadis (55.11 percent and 55.06 percent Anganwadis, respectively), had provision of schedules and activities were observed to be conducted in accordance with the time table/ schedules.
- Dhenkanal and Ganjam were two districts with most Anganwadis, where time table/ weekly schedule were unavailable and AWWs were observed to be conducting activities randomly (55.00 percent Anganwadis and 40.00 percent Anganwadis, respectively)

With respect to child participation, in half of the Anganwadis (50.55 percent), more than 75 percent children were seen to be participating in activities. "*Use of mother tongue has acted like a catalyst to energize both AWWs and children. They are comfortable in using their mother tongue and thus they are able to plan classroom activities in a way where all children get included"* (A CDPO,

Children's participation in activities

- Most proportion of Anganwadis where more than 75 percent children were observed to be involved in varied activities were in Sambalpur district (85.71 percent) and Sundargarh district (79.69 percent)
- Unfortunately, Kandhamal district had a little over one-fourth of Anganwadis (28.19 percent), where less than 50 percent children were engaged in activities been undertaken.

from Kandhamal). In 37.29 percent 50-75 percent children were observed to be engaged in varied activities and in 12.15 percent Anganwadis, less than 50 percent children were observed to be engaged in different activities.

Adequate planning for transacting PSE activities was noticed in 43.02 percent Anganwadis. AWWs would organize the TLMs like books, flash cards, wooden sticks, pebbles etc., to be used during the activities beforehand. Observations in these Anganwadis revealed that AWWs had various TLMs easily accessible and smooth transition from one activity to another was observed in 47.51 percent Anganwadis. AWWs were often observed to be unprepared and did not undertake prior planning in one-fifth Anganwadis (20.72percent), which affected the smooth transition from one activity to another in 10.64 percent Anganwadis.

Planning for PSE activities

- Anganwadis, where AWWs were observed to have had properly planned for PSE activities, were found in Sambalpur (71.43 percent Anganwadis), Sundargarh (62.50 percent Anganwadis), Rayagada (53.33 percent Anganwadis) and Kalahandi district (50.00 percent Anganwadis).
- In Kandhamal (36.17 percent Anganwadis), Dhenkanal (35.00 percent Anganwadis) and Gajapati (27.27 percent Anganwadis) districts, AWWs did not engage in prior planning of PSE activities for children.

AWWs were found to be conducting a combination of individual as well as group activities in more than two-fifth Anganwadis (45.72 percent). In these Anganwadis, two or more than two activities were organized to engage children at an individual level. Group activities typically included songs, dance and poems while the individual activities included throwing balls, narrating stories and asking questions to children, talking about self in majority of Anganwadis. In 43.44 percent Anganwadis, a combination of group and individual activities was observed, however, in these Anganwadis, the frequency of activities at an individual level were less.

In context of early learning, in half of the Anganwadis (49.38 percent), it was noticed that children selected learning activities as per their choice. In one of the Anganwadis in Gajapati, children were enjoying a dancing activity. *In excitement, a girl child requested the AWW to repeat the activity. The AWW asked the other children whether they wanted to repeat the same*

activity. All the children agreed and that particular activity was repeated. This illustrated that children's interests and choices were taken into account. In about 39.71 percent of Anganwadis children were provided opportunity to select learning activities of their choice but the frequency for selection was limited.

Meaningful engagement of children in most of the activities was observed in 35.7 percent of Anganwadis. In these Anganwadis, the AWWs and children were attentive and engaged with each other. In similar proportion of Anganwadis (37.5 percent), children were seen to be meaningfully engaged (attentive and involved) in some activities.

Children's engagement in activities

- Majority of Anganwadis (63.75 percent) where children were observed to be constructively engaged in various activities were in Malkangiri district.
- Following Malkangiri, Sundargarh and Gajapati district had most Anganwadis, where there was meaningful engagement of Anganwadis in various activities (59.38 percent Anganwadis and 45.45 percent Anganwadis, respectively).
- Dhenkanal district had 70.00 percent Anganwadis, where children were not observed to be engaged in meaningful activities.

In one-third of Anganwadis (33.15 percent), AWWs did employ locally and context specific materials while transacting activities. "*AWW pay more emphasis on practical demonstration using TLM, to teach in the classroom rather than the traditional method of talking or teaching with books."*(A CDPO, from Gumma, Gajapati)

AWWs' use of locally developed and contextual material

- In Sundargarh and Sambalpur district (57 percent each), AWWs used locally developed and context specific materials while conducting various activities.
- Also, in districts such as Kalahandi, Gajapati and Ganjam, in good proportion of Anganwadis, contextual materials were used (52.78 percent, 50.00 percent and 40 percent, respectively).
- In contrast, in many Anganwadis in Dhenkanal and Mayurbhanj district (45.00 percent and 32.40 percent, respectively) use of locally developed and contextual materials was not recorded.

In 44.89 percent of Anganwadis there were a few

local and contextual materials available and were utilized in some of the activities that were conducted. Local contextual materials like locally grown crops, fruits and vegetables, tools for cultivation and hunting weapons made out of wood to ensure safety for children, were used by AWWs to demonstrate the local culture and linking them with classroom learning.

In 36.53 percent Anganwadis, AWWs were observed to be using TLMs for majority of activities. In half of Anganwadis (50.76 percent), the use of TLMs was noticed in few activities. No usage of TLMs was found in more than one tenth Anganwadis (12.71 percent).

Use of play way/ activity based approach in Anganwadis

- Most Anganwadis, where play way/ activity based approach was used to while engaging children, were in Sundargarh (78.13 percent Anganwadis), Malkangiri (72.50 percent Anganwadis), Sambalpur (71.43 percent Anganwadis) and Kalahandi (66.67 percent Anganwadi) and Rayagada (60.44 percent Anganwadis).
- Dhenkanal district had one-fifth of Anganwadis (20.00 percent), where play way/ activity based approach was not observed.

Play way/activity based approach was used in 53.66 percent Anganwadis, whereas, play/ activity based approach was observed only in a few activities being conducted in 39.02 percent of Anganwadis.

4.2.4 Quality of teacher child interactions (classroom processes) in Anganwadis

The component of 'Teacher Child Interactions' had 9 items and is presented below in Table 4.9.

Table 4.9: Quality of teacher child interactions (classroom processes) in Anganwadis

Teacher Child Interactions (Classroom processes)(N=1448)			
Items	**Poor**	**Average**	**Good**
Use of mother tongue encouraged	4.77	22.31	72.93
Both genders involved in activities	1.73	13.54	84.74
Opportunity to children to speak & ask questions	4.7	36.05	59.25
Use of positive reinforcement	6.42	43.85	49.72
Use of physical/ verbal punishment to maintain discipline	1.93	15.68	82.39

In majority of Anganwadis (72.93 percent), AWWs encouraged children to speak in their respective mother tongues. AWWs on many instances asked children to introduce themselves in their mother tongue. Children were able to tell the name of parents, village, block, district and state in their mother tongue. AWWs were helping the children to frame the whole sentence for the answers. In close to one-fourth Anganwadis (22.31 percent), AWWs seldom supported children's use of mother tongue (see Table 4.7)

Encouragement to children to speak respective mother tongues

- Most of Anganwadis in which children were encouraged to speak with mother tongues were in Mayurbhanj (86.59 percent Anganwadis), Malkangiri (83.75 percent Anganwadis), Dhenkanal (80.00 percent Anganwadis), Koraput (78.65 percent Anganwadis), and Ganjam (73.33 percent Anganwadis)
- Highest proportion of Anganwadis in which children were never supported to speak their respective mother tongue were in Keonjhar (8.22 percent Anganwadis), Rayagada (8.00 percent Anganwadi) and Gajapati (7.73 percent).

In more than four-fifth of Anganwadis (84.74 percent) both male and female children were engaged in activities. Further, children were encouraged to express themselves and ask questions during most of the activities, in about three-fifth Anganwadis (59.25 percent). In over one-third of Anganwadis (36.05 percent), children were encouraged to interact, speak and ask questions, however in limited situations (see Table 4.7).

Provision of opportunities to children to pose questions

- Malkangiri (83.75 percent Anganwadis), had high proportion of Anganwadis, where children were provided opportunities to express themselves and ask questions.
- Next, each Kalahandi and Gajapati districts had 75.00 percent Anganwadis, where children were encouraged to ask questions.
- Each Koraput and Keonjhar district had 8 percent Anganwadis, where these opportunities were limited.

In almost half of Anganwadis (49.72 percent), AWWs encouraged children, and provided positive reinforcement on many occasions during the day. For instance, *in one of the Anganwadi in Gajapati, children were asked to narrate a story by using pictures in a group of two. On completion of the story, AWW gave pat on the back and hugged them. She also made other children clap*. In 43.85 percent of Anganwadis the children were given positive reinforcement, though these favorable practices were observed occasionally (see Table 4.7).

Use of positive reinforcement

- Most Anganwadis in which AWWs used positive reinforcement to encourage children were in Sundargarh (71.88 percent Anganwadis), Gajapati (67.27 percent Anganwadis), Kalahandi (61.11 percent) and Ganjam (60.00 percent Anganwadis).
- Dhenkanal district was on top with 35.00 percent Anganwadis, where practices presenting positive reinforcement were not recorded. Next on the list was Keonjhar district with 15.75 percent such Anganwadis.

Table 4.7 depicts that in over four-fifth of Anganwadis (82.39 percent) the children were not punished either verbally or physically. As detailed above, the Child friendly (pre-school) environment, curriculum transaction and AWW-child interactions and safety measures for children were observed to assess the capacities of AWWs to transact quality early childhood education with a

Use of punishment to maintain discipline

- Anganwadis in districts of Keonjhar (99.32 percent Anganwadis, Dhenkanal (95.00 percent Anganwadis), Koraput (94.38 percent Anganwadis), Malkangiri (93.75 percent Anganwadis) and Gajapati (90.91 percent Anganwadis) performed well on this dimension. The children were not punished verbally or physically in these Anganwadis.
- A negligible proportion of Anganwadis performed poor on this dimension. The worst performing districts were Rayagada (4.00 percent Anganwadis), Mayurbhanj (3.91 percent Anganwadis) and Kandhamal (2.13 percent Anganwadis). Use of punishment was a regular feature to maintain discipline in these Anganwadis.

focus on mother tongue based multilingual early childhood education.

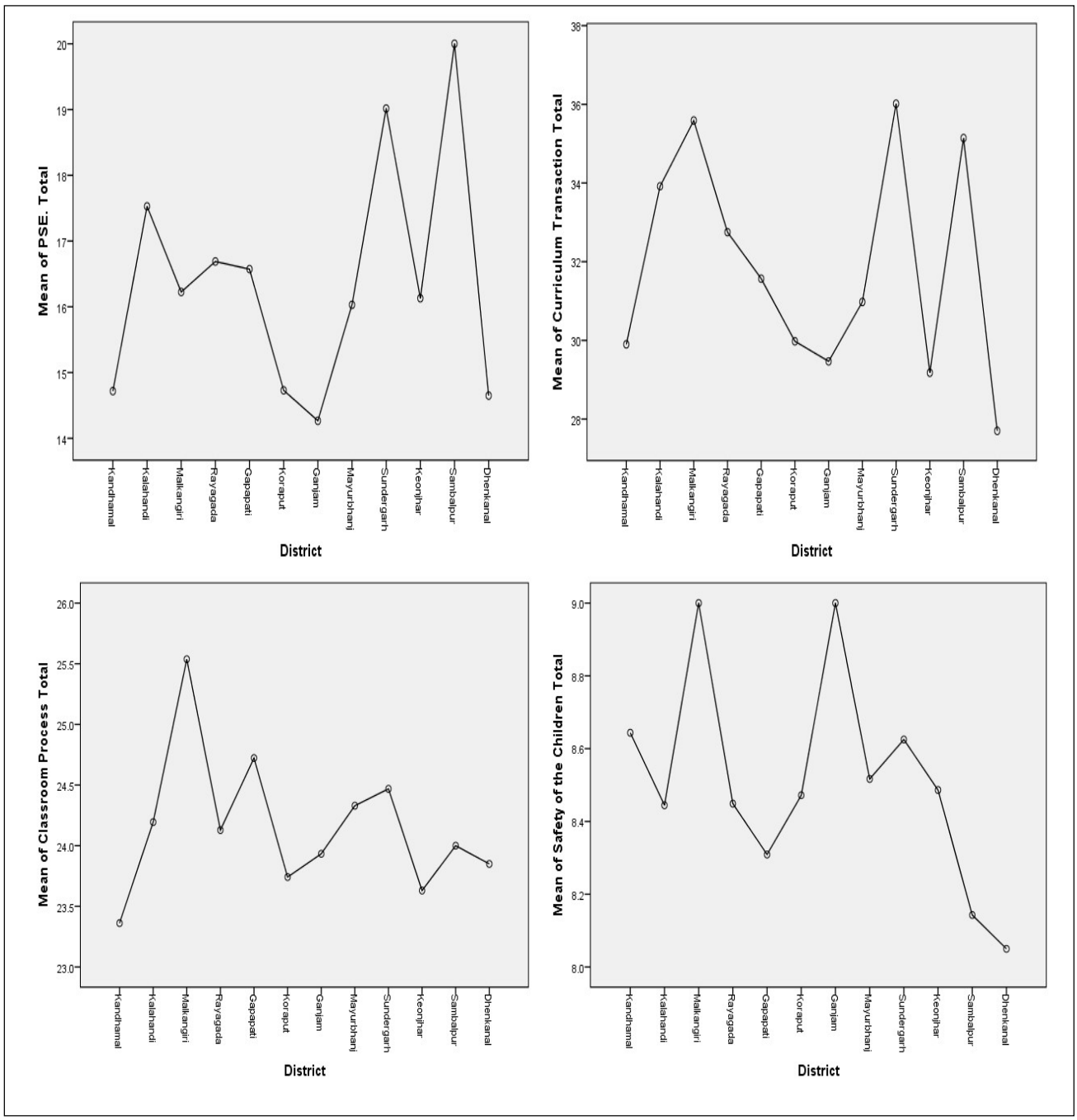
To gain a comprehensive understanding of performance of Anganwadis, total scores of the three components (Preschool Environment, Curriculum Transaction and Classroom processes) of observation tool (AAS) were taken. These scores were split into three categories of good, average and poor performing Anganwadis.

Table 4.10: Frequency and percentage of the Anganwadis based on their performance on the tool

Indicators	Range of scores	Frequency	Percentage
Poor	38 - 66	54	3.73%
Average	67 - 95	744	51.38%
Good	96 – 114	650	44.89%

Table 4.10 indicated that 44.89 percent of the Anganwadis across the 12 districts were performing 'Good' whereas 51.38 percent of the Anganwadis were performing 'Average' on the quality dimensions of ECE i.e. pre-school environment, curriculum transaction, teacher child interaction (classroom processes) and safety measures for the children in Anganwadis.

Figure 4.41: Mean plot figures of quality dimensions scores across districts in Odisha (N=1448)



The above mean plots depict (Figure 4.41) a lot of variations in child friendly environment scores among all 12 districts. Anganwadis in Sambalpur district showed better 'Pre-school environment' as compared to other districts. Scores of 'Curriculum transaction' also had

variances where Sundergarh district had shown better curriculum transaction as compared to counterpart districts. Whereas the scores of 'Classroom processes' and 'Safety of the children' were high among Anganwadis in Malkangiri districts as compared to other districts. These differences among districts on Anganwadis assessment scores were also found statistically significant (as ANOVA summary given below showcases).

Table 4.11: ANOVA Summary (N=1448)

Variables	Source of Variance	Sum of Squares	df	Mean Square	F	Sig.
Pre-school Environment	Between Groups	1470.70	11	133.70	9.74	.001
	Within Groups	19704.23	1436	13.72		
Curriculum Transaction	Between Groups	5220.48	11	474.59	12.87	.001
	Within Groups	52954.18	1436	36.88		
Classroom Processes	Between Groups	416.61	11	37.87	4.54	.001
	Within Groups	11969.90	1436	8.34		
Safety of the Children	Between Groups	42.29	11	3.84	2.75	.002
	Within Groups	2009.51	1436	1.39		
Overall AWC Scores	Between Groups	14302.14	11	1300.19	9.99	.001
	Within Groups	186842.58	1436	130.11		

Table 4.11 indicates the magnitude of quality provisions of ECE programme among Anganwadis of 12 districts of Odisha. From the results it appeared that the difference between the districts in terms of quality provisions of overall Anganwadi assessment was found statistically significant as the F-value were found 9.99, $p = < 0.001$. The dimensions of quality provisions, viz., 'Pre-school environment, 'Curriculum transaction', 'Classroom processes' and 'Safety of the children' the scores of the listed particular dimensions were showing similar trends.

Table4.12: Mean and standard deviation (SD) of Anganwadi assessment and one-way ANOVA for the difference between the three groups namely rural, urban and tribal (N=1448)

Variables	Groups	N	Mean	Std. Deviation	Minimum	Maximum
Pre-school Environment	Urban	7	16.29	4.348	9	21
	Rural	562	16.23	4.006	7	21
	Tribal	879	16.07	3.705	7	21
Curriculum Transaction	Urban	7	30.14	5.551	23	39
	Rural	562	31.59	6.119	14	42
	Tribal	879	31.40	6.488	14	42
Classroom Process	Urban	7	24.71	1.890	22	27
	Rural	562	23.92	3.172	9	27
	Tribal	879	24.34	2.754	9	27
Safety of the Children	Urban	7	8.43	1.134	6	9
	Rural	562	8.51	1.193	5	12
	Tribal	879	8.51	1.191	5	13
Overall AWC Scores	Urban	7	79.57	10.814	63	94
	Rural	562	80.27	11.790	36	101
	Tribal	879	80.33	11.810	35	101

Table 4.12 indicates the scores of mean and standard deviation of different quality provisions of ECE programme among three different groups namely rural, urban and tribal. The overall Anganwadi assessment scores revealed that Anganwadis running in tribal setting were slightly better than the rural and urban.

Table4.13: ANOVA Summary (N=1448)

Variables	Source of variance	Sum of Squares	df	Mean Square	F	Sig.
Pre-school environment	Between Groups	9.160	2	4.580	.313	.732
	Within Groups	21165.765	1445	14.648		
Curriculum Transaction	Between Groups	25.264	2	12.632	.314	.731
	Within Groups	58149.399	1445	40.242		
Classroom Process	Between Groups	62.811	2	31.405	3.682	.025
	Within Groups	12323.691	1445	8.529		
Safety of the Children	Between Groups	.053	2	.026	.019	.982
	Within Groups	2051.748	1445	1.420		
Overall AWC Scores	Between Groups	5.058	2	2.529	.018	.982
	Within Groups	201139.660	1445	139.197		

Table 4.13 indicates the magnitude of quality provisions of ECE programme among Anganwadis of three different groups namely rural, urban & tribal. From the results it appeared that the difference between the three groups in terms of classroom processes was found statistically significant as the F-value were found 3.68, p = < 0.025. Anganwadis in the urban areas scored significantly higher with regard to 'Classroom processes' when compared to tribal and rural areas. No statistical significant differences between the Anganwadis located in urban, rural and tribal areas were observed with regard to 'Curriculum transaction', 'Preschool environment' and 'Safety of children'. Thus overall scores of Anganwadis among three groups were not found statistically significant.

It can be concluded that Anganwadis in urban, rural and tribal settlements were having same kind of pre-school environment and curriculum was also transacted in the same manner as AWWs were following the handbook of preschool activities '*Nau Arunima'* used as a resource booklet by AWWs. Whereas, the instruction with regards to safety of the children and safe and sound surrounding for the children were same across the rural, urban and tribal.

Further, a specific focus is laid on relationship between training and quality ECCE provisions. Table 4.14 depicts the coefficient of correlation between the demographic varaibles of AWWs and the quality indicators of ECE in Anganwadis.

Table 4.14: Coefficient of correlation between the AWWs' demographic variables and quality provisions of ECE in Anganwadis

Variables	*1*	*2*	*3*	*4*	*5*	*6*	*7*	*8*	*9*	*10*	*11*
Age of Anganwadi worker -1	1	-.214**	.736**	.160**	.045	.099**	.084**	.021	.110**	.125**	.081**
Qualification of AWW - 2		1	-.243**	-.004	.022	.109**	.063*	.050	.028	.106**	.050
Total experience - 3			1	.154**	.031	.078**	.111**	.052*	.129**	.126**	.087**
Training - 4				1	.140**	.144**	.090**	.140**	.070**	.146**	.124**
Medium of instruction -5					1	.054*	.119**	.196**	.051	.208**	.067*
PSE -6						1	.651**	.399**	.329**	.548**	.531**

Curriculum Transaction - 7		1	.604**	.397**	.574**	.622**
Classroom Process - 8			1	.331**	.368**	.370**
Safety of the Children- 9				1	.287**	.345**
Availability of the TLM- 10					1	.760**
Utilization of the TLM - 11						1

From the Table 4.14 it is clear that training of AWWs on MTELP is associated with medium of instruction in the Anganwadis (r = .140**, p < .001), pre-school environment (r = .144**, p < .001), curriculum transaction (r = .090**, p < .001) and classroom processes (Teacher child interaction) (r = .140**, p < .001) and availability & utilization of teaching learning material in Anganwadis (r = .146** & .124**, p < .001). The training of the AWWs on MTELP helpedthem to transact the curriculum effectively and efficiently. The training also helped the AWWs to enhance teacher child interaction in the Anganwadis using appropriate medium of instruction in the Anganwadis which was mother tongue and Odia (Multilingual). Training also strengthened AWWs to develop contextual TLMs and use them effectively.

Table 4.15: Mean and SD of Quality of Anganwadi assessment scores and t-value for the difference between the two groups based on the training received by AWW (N=1448)

Variables	*Training Received*	*N*	*Mean*	*Std. Deviation*	*Std. Error Difference*	*t-value*	*p-value*
Child Friendly Environment	No	189	14.72	3.983	.295	5.517	.001
	Yes	1259	16.35	3.757			
Curriculum Transaction	No	189	29.99	6.717	.493	3.442	.001
	Yes	1259	31.69	6.255			
Teacher Child Interactions	No	189	23.13	3.728	.226	5.373	.001
	Yes	1259	24.34	2.753			
Safety of the Children	No	189	8.30	1.275	.093	2.673	.008
	Yes	1259	8.54	1.175			
AWC Asses. Score	No	189	76.14	12.786	.911	5.254	.001
	Yes	1259	80.93	11.509			

The above table (Table 4.15) revealed that the differences between the two group of AWWs. These were AWWs who had received training and the second were AWWs who were untrained. In total 86.97 percent of AWWs were trained from sample. The overall score of Anganwadi assessment on quality provisions was found to be high for trained AWWs as the mean scores was 80.93 as compared to Anganwadis where untrained AWWs, as the mean score was 76.14. The difference between both the groups was found statistiaclly significant as the 't' value was found 5.25 which is significant beyond the level of .001. Dimension wise scores were found statistically significant and showed the same trend whether it is 'Child friendly environment', 'Curriculum transaction', 'Teacher child interaction' or 'Safety of the children'. On the whole it can be said that trained AWWs were able to run Anganwadis effectively as compared to AWWs who did not receive training.

4.3 Capacities of AWWs to Engage Parents

In order to understand the Parents' perception and attitude towards early learning & development, existing ECCE programme in village, community participation and their stand on use of Mother Tongue in Anganwadis, two parents from each sampled Anganwadi were interviewed.

Background of the Respondents

A total of 2871 parents were interviewed from 1448 Anganwadis across the 12 Districts out of which 31.4 percent parents were in the age group of 18-25 years, 36.4 percent were in the age group of 26-30years and 32.2 percent parents were in the age group of 31-60years. 70 percent of the respondents were mothers and 30 percent were fathers.

Highest level of education in the family was enquired. Around 50 percent of family members were illiterate, 18 percent of the family members had studied till 5thgrade and around 21 percent of the family members had studied till 9th grade. Higher education was low among family members. Only 9 percent had studied till 10th grade and 5 percent had passed intermediate.

Majority of the respondents belonged to the Schedule tribe (80.5 percent parents) followed by Schedule caste (14.2 percent parents) and OBC (4.2 percent parents). Parents in General category accounted for only 1.1 percent.

Table 4.16: Mother Tongue of Respondents and Other Languages Spoken at Home (N=2871)

Districts	Mother tongue of the respondents				Other Languages Spoken at Home		
	Tribal	Odia	Hindi	Others	Tribal	Odia	Others
Kandhamal	64.4	35.6	0.0	0.0	83.7	71.2	0.3
Kalahandi	29.2	70.8	0.0	0.0	55.6	91.7	0.0
Malkangiri	98.8	.6	0.0	.6	95.6	23.8	1.3
Rayagada	75.1	24.4	0.0	.5	72.9	64.9	0.7
Gajapati	90.0	8.6	.9	.5	83.5	56.8	2.3
Koraput	93.8	6.2	0.0	0.0	53.9	60.1	3.9
Ganjam	46.7	53.3	0.0	0.0	50.0	100.0	0.0
Mayurbhanj	83.2	15.6	.1	1.0	85.8	42.2	2.1
Sundargarh	78.9	20.3	.8	0.0	26.6	93.8	8.6
Keonjhar	63.0	36.3	0.0	.7	56.8	73.6	0.3
Sambalpur	35.7	64.3	0.0	0.0	21.4	100.0	0.0
Dhenkanal	82.5	17.5	0.0	0.0	80.0	90.0	0.0
Total (in percent)	77.9	21.4	.2	.5	74.6	60.0	1.7

The above table (Table 4.16) represents the distribution of parents on the basis of their mother tongue. Tribal language was the mother tongue of 77.9 percent of the parents, followed by Odia which was spoken by 21.4 percent parents. Hindi was spoken by only 0.2 percent parents. The highest proportion of parents whose mother tongue was a tribal language belonged to Malkangiri (98 percent parents) followed by Koraput (93.8 percent parents) and Gajapati (90 percent parents). Odia was dominant in Kalahandi (70.8 percent parents spoke Odia), Ganjam (53.3 percent parents spoke) and Sambalpur (64.3 percent parents spoke Odia). Additionally, the above table (Table 4.15) depicts the other languages spoken at home. Tribal languages were spoken in 74.6 percent of the households, while, 60 percent of the households spoke Odia. Other languages such as Hindi and English were spoken by 1.7 percent of parents.

Anganwadi Centre: Functioning and Enrollment

Children of all respondents were enrolled in the Anganwadis and of these 87.4 percent of children liked going to the Anganwadis (as per perception of parents). Close to three-fourth of parents (72.02 percent) reported that the Anganwadis remained operational for 3-4 hours daily. A few proportion of parents (7.4 percent) reported that Anganwadis were operational for more than 4 hours during the day. Few parents (15 percent) reported that Anganwadis opened up for 1-2 hours and a negligible proportion (5.4 percent) of the parents reported that Anganwadis were operational for less than an hour daily.

> "Parents have become more aware about the need of education and thus they motivate their children to go and attend AWC."A CDPO, from Gunpur, Rayagada

Knowledge of Activities Organized for Children in Anganwadis

Parents were mostly aware about range of activities done by the children in Anganwadis. Of the total 2871 parents, 47.5 percent of the parents mentioned 3-4 options, 29.2 percent of the parents mentioned 5-6 options, 13.1 percent of the parents mentioned 1-2 options and only 10.2 percent of the parents mentioned 7-8 options[6].

Majority of the parents shared that their children ate food in Anganwadis (87.1 percent). Close to three-fourth of

> "Parents and community were aware of the activities happening in Anganwadis. Some parents came and sat in Anganwadis while activities were being conducted. They motivated their children to participate. Parents were also more aware about the health-related issues and they helped in spreading awareness among other parents." A Lady Supervisor, from Kasinagar, Gajapati.
>
> "The parents now remain informed about the activities done by the AWWs in the Anganwadis and the significance of it on the growth and development of their child." A CDPO, from Kolnara, Rayagada.
>
> "Children learn to get along with others, apart from learning songs, stories, dance and basic speaking skills". **A mother from Gondia in Dhenkenal**

[6] **options: 1-Eats food, 2-Draws & Colors, 3-Listen to stories, 4-Learn to read & write, 5-Sings songs, poem, 6-Writes/ works on worksheets, 7- Plays games, 8- Plays with toys or puzzles.*

parents shared that their children learnt to read and write (74.2 percent parents) and play games (73.2 percent parents) at Anganwadis.

Reason(s) for Sending Child to Anganwadis

Parents sent their children to Anganwadis for various reasons. Of the total 2871 parents interviewed, 35.5 percent parents mentioned 1-2 reasons for sending their child to Anganwadi, nearly half of parents (52.2 percent) listed 3-4 reasons for sending their children to the Anganwadis, 10.9 percent of the parents could mention 5-6 reasons and only 1.3 percent of the parents mentioned 7-8 reasons [7] for sending their child to the Anganwadi.

> "Children learn through play way methods and get nutritious food in the Anganwadis. Children learn communication skills and basic etiquettes in the Anganwadis where they mix up with different children. Children are able to communicate with the parents freely. Holistic development of child takes place in Anganwadis". **Inspection committee in Laxmipur, Koraput**

The most common reasons for sending children to Anganwadis were that children would receive food to eat and they would be prepared for the primary school (each of these two reasons was mentioned by 78 percent parents).

> "Anganwadis provide education (Early Childhood Education) along with the focus on personal hygiene and cleanliness. Counselling is given to pregnant women regarding the importance of iron tablets, nutritious food and regular health check-ups. Malnourished children are given special medical attention. AWW also gives information to the adolescent girls on health care and appropriate practices". **A Female, Janch committee, from Daringbadi in Kandhamal**

Services Provided by Anganwadis

As per parents, an array of services were provided by Anganwadis, for instance PSE to children in the age range of 3-6 years,

[7] **Options: 1- S/he will get food to eat, 2- S/he will be prepared for primary school, 3- His/Her brother/sister goes there, 4- S/he will learn to sit and obey, 5- AWC is close to the house, 6- AWW will look after the children, 7- Don't know, 8- Any others*

immunization and health check up facilities for children as well as expectant and lactating mothers, referral services, and health education to girls and women in the age range of 15-45 years. Comparison was made between the responses received from parents during the baseline study and the post-intervention evaluation. There was significant increase in the percent of parents who had mentioned 3 options, 4 options and all the options. During the baseline study only 20 percent parents mentioned 3 options which increased to 26 percent after the MTELP+ programme interventions. Similarly, there was increase of around 10 percent parents who mentioned 4 options and 2 percent increase in the proportion of parents who had mentioned all the 5 options[8] after the MTELP+ intervention.

Language Used by AWW to Engage with Children

Figure 4.41 represents the languages used by AWWs to engage with children in Anganwadis. More than three-fourth of parents (78.6 percent) informed that the AWWs used Mother Tongue/ Tribal language to teach children in Anganwadis. Nearly four-fifth parents (83.2 percent) informed that the AWWs used Odia to teach in the Anganwadis. Mother tongue and Odia were common languages used for transacting curriculum in Anganwadis.

> "A Child understands well and is more receptive when taught in mother tongue."**SHG member, Gosani, Gajapati**

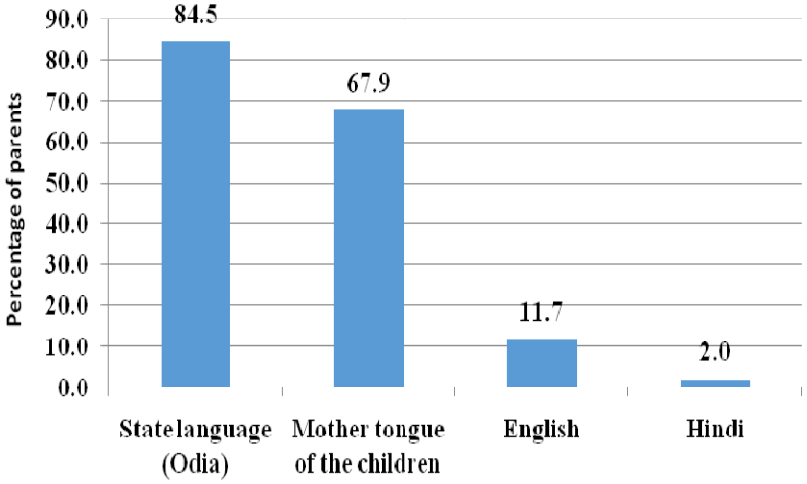


Figure 4.41: Parental preferences for languages to be used by AWWs to engage with children (N=2871)

[8] **Options: 1- Preschool Education, 2- Health check-ups, 3- Immunization, 4- Supplementary nutrition, 5- Referral Services, 6- Nutrition and health information, 7- Any other*

Parents' Preference for Language to be used at Anganwadis

Nearly two-third of parents (67.9 percent) wanted AWWs to use mother tongue/ Tribal language when interacting with their children, while many parents (84.5 percent) expressed an inclination towards Odia. One-tenth parents (11.7 percent) were of the view that English should be used. Merely, two percent parents favored usage of Hindi.

Views of parents & community members during FGDs: Importance of teaching children in mother tongue

"AWWs should teach children in mother-tongue along with other language. It would help child to learn multiple language". – **An Inspection committee member from Gosani in Gajapati**

"Children only know mother-tongue when they come to the Anganwadi. They would be more comfortable and less fearful if taught in mother-tongue".**A Female from Laxmipur, Koraput**

Perception about School Readiness

Majority of parents (96.9 percent) expressed that their children would be ready for primary school after attending Anganwadi programme.

Satisfaction Level of Parents

On enquiring about the level of satisfaction with respect to functioning of Anganwadis, 84.1 percent of parents reported that they were satisfied with day today

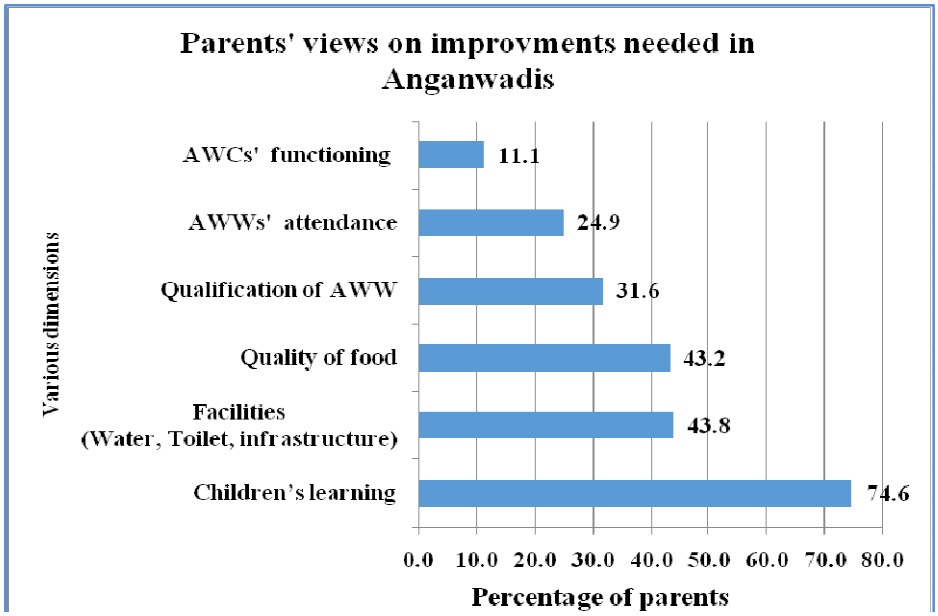


Figure 4.42: Parents' perception about things that needed improvement in Anganwadis (N=2871)

working of Anganwadis, 14.7 percent of parents were somewhat satisfied and a negligible proportion of parents (1.1 percent) were not satisfied at all.

Parents' Perception on Things to be improved in Anganwadis

> "Anganwadis should run for at least 4-5 hours daily. Community members should cooperate and inspect the activities of Anganwadi on regular basis. They should help the AWWs in TLM preparation and must participate in the programmes conducted in the Anganwadis to make it successful". A **Female from Thuamul Rampur, Kalahandi**

Figure 4.42 depicts parents' perceptions about things which needed to be improved in Anganwadis. Close to three-fourth of parents (74.6 percent) believed that learning environment should be improved. Nearly, 43.8 percent parents highlighted the need to improve basic infrastructure facilities like water and toilet facilities, and 43.2 percent parents wanted quality of food to be improved. Close to one-third of parents (31.6 percent) wanted the AWWs to be better qualified and one-fourth of parents (24.9 percent) wanted AWWs to be regular. Few parents (1.1 percent) expressed that Anganwadis should function on a daily basis.

Frequency of the visit to Anganwadis

Figure 4.43 shows the frequency of visits of the parents to Anganwadis. Majority of parents were regular in their visits to Anganwadis (32.2 percent parents visited Anganwadi daily, 17.3 percent parents visited Anganwadis once in a week and another 36.1 percent parents visited Anganwadis twice or thrice in a week). The remaining few parents (11.9 percent) visited Anganwadis only once a month, 0.6 percent parents visited Anganwadis once in

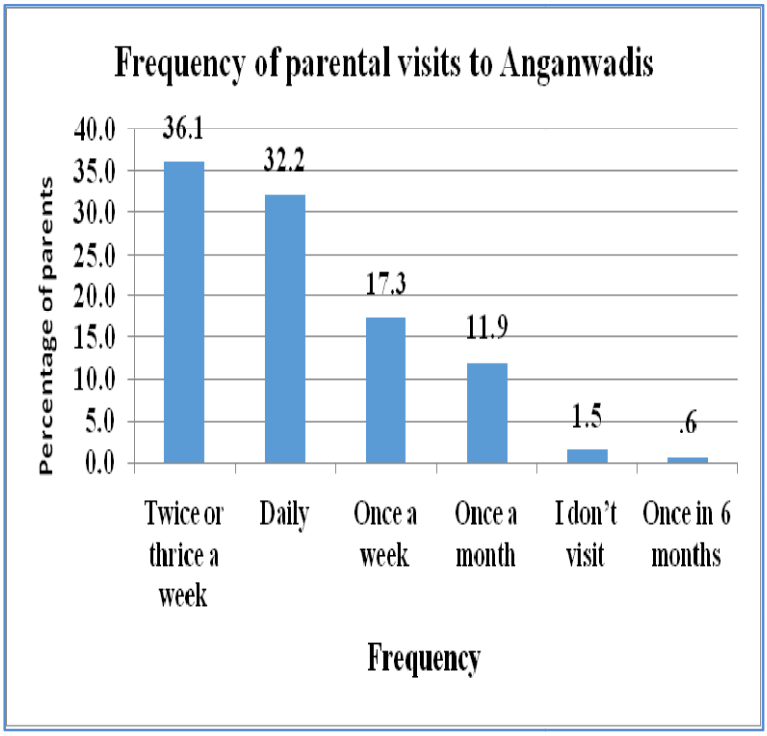


Figure 4.43: Frequency of parental visits to Anganwadis (N=2871)

6 months and 1.5 percent parents did not visit Anganwadis.

Opportunities of Meeting AWW

Parents had several opportunities to meet AWWs. They met the AWWs on various occasions such as PTMs, home visits, workshops & meetings, celebration of ECCE days, Village Health Nutrition Day (VHND), while dropping off and picking up children etc. As reported by parents, close to three-fifth of parents (59.2 percent) met AWWs during the PTMs, more than one-third of parents (37.1 percent parents met the AWWs during ECCE day celebrations and 36.3 percent met the AWWs during home visits, 27.8 percent parents met the AWWs during VHNDs, 20.9 percent parents met the AWWs while dropping off or picking up their children at Anganwadis and some proportion of parents (16.2 percent) met the AWWs during workshops and meetings. While 14.1 percent parents reported that they met the AWWs daily. There were a negligible proportion of parents (0.9

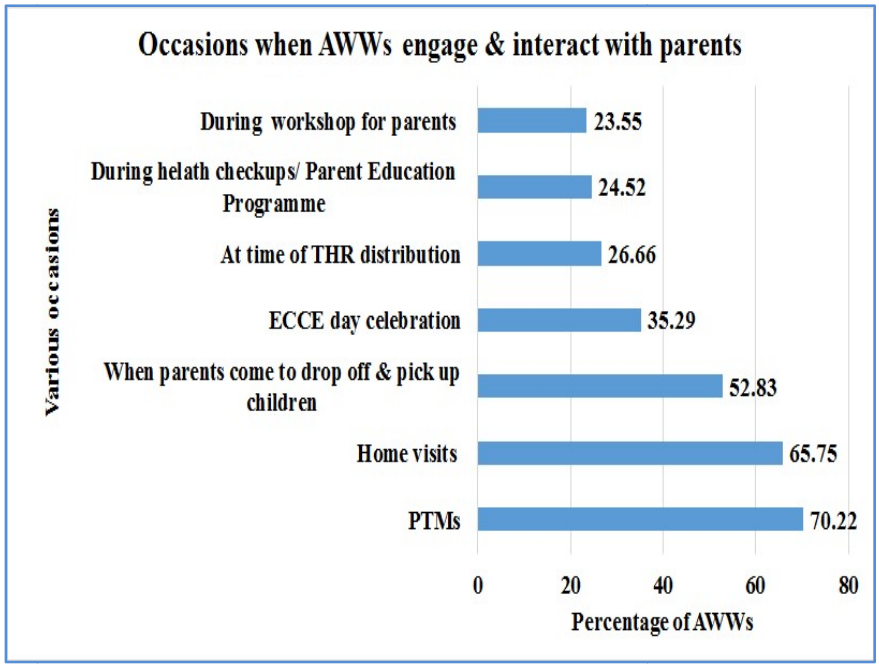


Figure 4.44: AWWs' engagement with children (N=1448)

"Use of MT bridged the communication gap between the parents and ICDS stakeholders as the people from tribal languages were not well versed in Odia. The community felt that their language and culture was being respected/ depicted and thus participated in events such ECCE day, Parent teacher meeting and workshops." A Lady Supervisors, from Rayagada, Gajapati

"Parents are meaningfully involved in the activities of Anganwadis. They attend regular meetings, ECCE day celebration and VHNDs. Parents come and drop their children to the Anganwadis and sometime sit there to witness the activities going on in the AWC." A CDPO from Gosani, Gajapati

percent) who reported no meeting/ engagement with AWWs.

AWWs' engagement with parents

The AWWs shared various occasions for engagement with parents and community (see Figure4.30). Majority of AWWs (70.72 percent) reported of engaging with parents during PTMs. Nearly, two third of AWWs (65.75 percent) scheduled visits to children's homes to interact with parents. More than half of AWWs (52.83 percent) interacted with parents when they came for dropping off and picking up their children. More than one- third of AWWs (35.29 percent) shared that they interacted with parents during ECCE Day. More than one-fourth of AWWs (26.66 percent) mentioned interacting with parents during Take Home Ration (THR) distribution. A little less than one-fourth AWWs (24.52 percent AWWs) stated that they interacted with parents during health checkups or parents education programmes and during workshops (23.55 percent AWWs).

Issues discussed with AWWs

Parents discussed variety of issues with AWWs during the meetings. Close to one-third of parents in each category shared that they discussed the challenges/ things they wanted to improve at Anganwadis with AWWs (39.8 percent parents discussed about the quality of food served in Anganwadis, 33 percent parents discussed about TLMs and 37.5 percent parents discussed the physical infrastructure such as toilet and water facilities). Close to one-third parents (30.8 percent) shared that AWWs discussed the irregularity of their child during the meetings. A few proportion of parents (14.6 percent) discussed the issue of physical fight or bullying among the children. One-tenth parents (12.4 percent) reported that they did not discuss any issues with the AWWs.

Awareness about Child's Progress

Parents were informed about the children's progress majorly through PTMs. More than half of parents (55.9 percent) got to know about their child progress through this. More than two- fifth parents(45.3 percent) got to know about their child's progress through the home visit by AWWs, 32.9 percent parents were informed through informal interactions with AWWs, 9.9 percent of parents came to know about their child's progress through notes sent by AWWs. Close to half of

parents (46.3 percent) got to know about the child's progress by observing the activities. Only 2.7 percent parents reported that they did not get any information about the child's progress.

Sharing of Children's Progress with Parents

Similar data were received from AWWs interviews. Close to three-fifth of AWWs informed that they discussed children's progress with parents during PTMs (59.94 percent) and during home visits (58.29 percent). 56.08 percent AWWs disclosed that they interacted with parents when they came to drop off and pick up their young children. Only one-fifth AWWs (18.65 percent) stated that they merely handed over children's assessment cards to parents (see Figure 4.45).

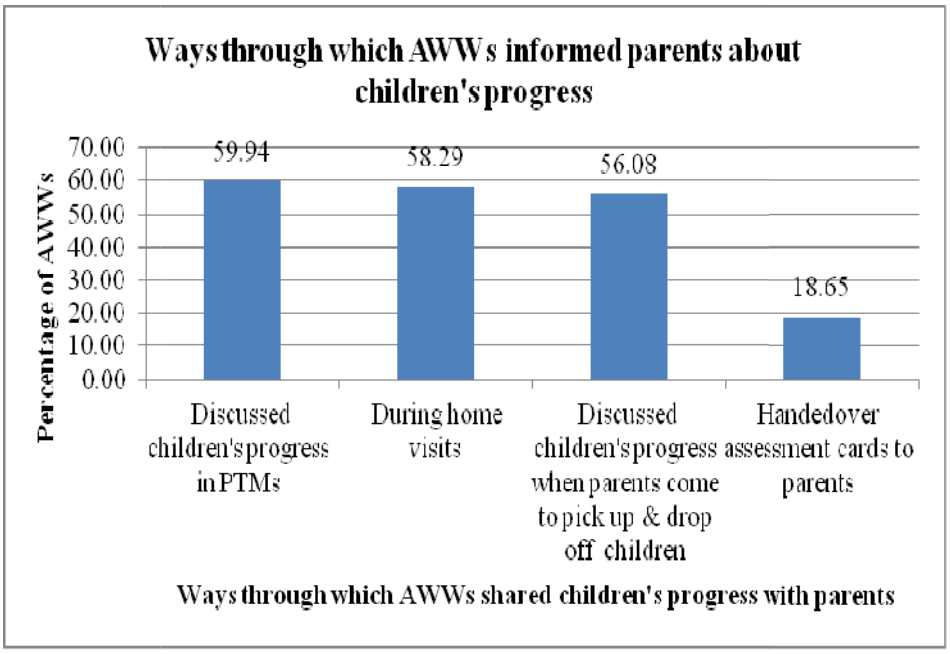


Figure 4.45: Ways through which AWWs informed parents about children's progress (N=1448)

Engagement in ECE activities in Anganwadis

Parents got involved in activities of Anganwadis in various ways. Nearly 38 percent parents informed that they supported AWWs in preparing TLMs, 35.2 percent parents informed that they conducted activities with children, 55.3 percent parents participated in ECCE day, 25.7 percent informed that they attended workshops and meetings organized in Anganwadis.

Nearly one-fifth of parents (20.4 percent) informed that they did not get involved in any activities of Anganwadis. Few proportion of parents (4.5 percent) informed that the AWWs did not welcome their involvement in Anganwadis.

AWWs Perceptions of Support Received from Parents

More than two-fifth AWWs (42.47 percent) shared that parents extended a helping hand in developing TLMs. Nearly one-third AWWs (32.25 percent) informed that parents would ensure that their children attended Anganwadis. More than a quarter of AWWs (29.63 percent) complained that parents did not render any form of help to them. More than one-fourth AWWs stated that parents helped in preparation and distribution of mid-day meals (28.94 percent AWWs), and community members served as resource persons and provided space for conducting various activities (26.45 percent of AWWs). Close to one-fourth AWWs (24.17 percent) shared that parents contributed towards monitoring activities in Anganwadis (see Figure 4.46).

> "MTELP+ Programme had strengthened the capacity of the AWWs to engage parents and community in the activities of Anganwadis. Parents supported the AWWs in activities like preparing TLMs from locally available materials and preparation of food." Lady Supervisor, Gumma, Gajapati
>
> "Community members act as a resource person for wide range of activities such as developing TLM, making posters, translating text from Odia to the mother tongue and so on." CDPO, Ramnaguda, Rayagada

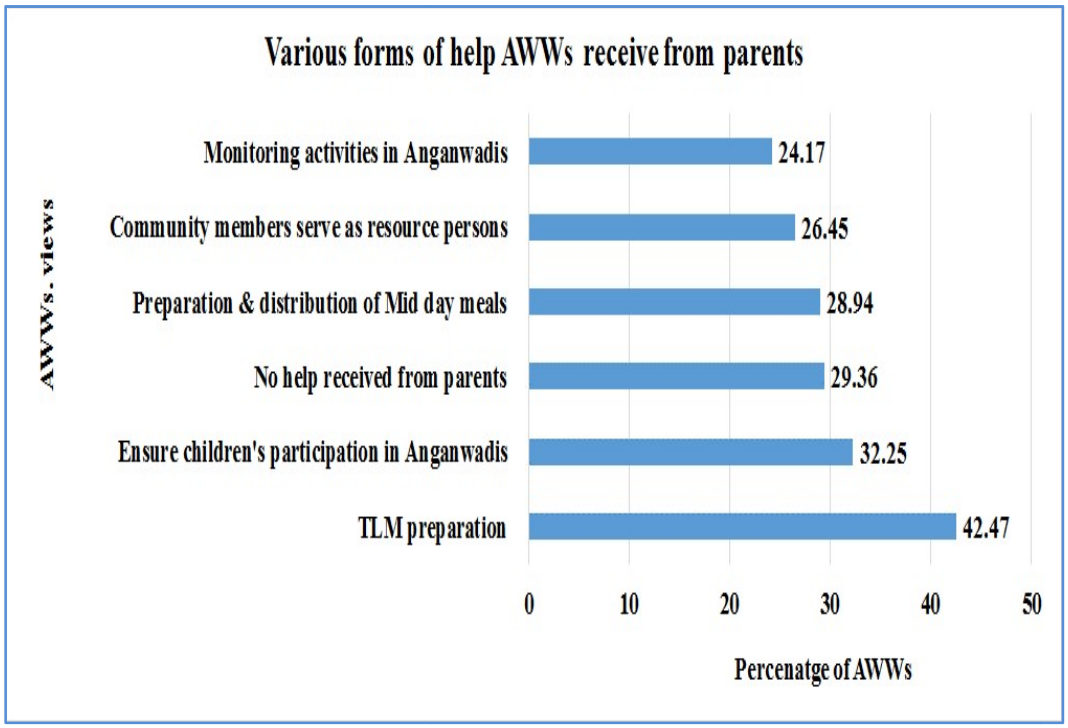


Figure 4.46: Various forms of help AWWs receive from parents (N=1448)

Engagement with children at home

During the interviews parents also reported about their involvement with children at home. Over half of parents (52.7 percent) shared that they narrated stories to their children, close to two-thirds of parents (61.8 percent) informed that children enjoyed listening to the songs, poems, stories, two-fifth of parents enjoyed singing folk songs together (39.3 percent parents), close to two-third of parents (63.9 percent parents) reported feeding/bathing grooming the children, playing with their children (42.7 percent parents), going for outings (48.8 percent parents) and asking about the day at Anganwadi (31.3 percent parents). 39.5 percent parents shared that they taught children alphabets and numbers. A negligible proportion of parents (2.7 percent parents) informed that they did not engage with their children in any of the activities.

> "Use of MT has made parents more aware about the activities of AWC and thus the interaction between parents and child has strengthened. Children share the activities done by them in AWC with their parents."ACDPO from Gumma, Gajapati

Challenges Faced by AWWs in Engaging Parents

Majority of AWWs shared that they did not face challenges in engaging with parents. Figure 4.47 displays different kinds of difficulties

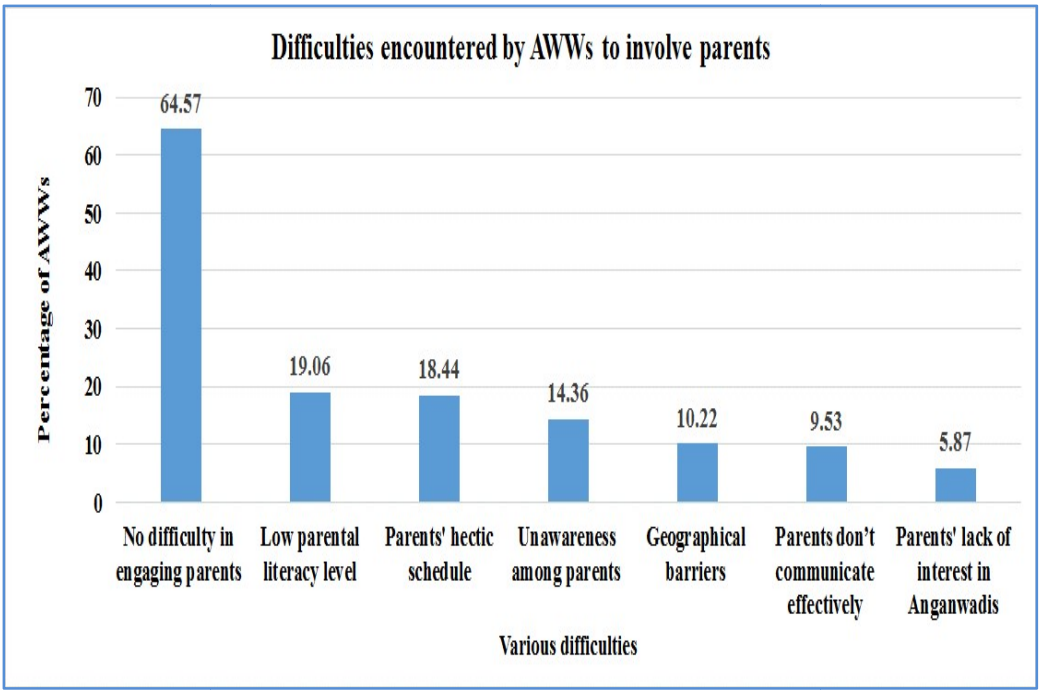


Figure 4.47: Difficulty encountered by AWWs to involve parents in ECE (N=1448)

which AWWs encountered in their endeavor to involve parents in PSE.

Over two-third AWWs (64.57 percent) informed that they were able to engage with parents. Nearly, one-fifth AWWs (19.06 percent) shared that due to low literacy levels, parents did not realize importance of getting involved in children's early learning. 18.44 percent AWWs confided that parents were usually busy and hence unavailable during day time. Lack of awareness among parents was another reason for parental non-involvement, as informed by 14.36 percent AWWs. Further, far away location of Anganwadis from children's home discouraged parents from getting involved in day-to-day activities in Anganwadis, as expressed by 10.22 percent AWWs. Moreover, 9.53 percent AWWs and 5.87 percent AWWs stated that parents did not communicate effectively, due to attitudinal problems and were least interested in Anganwadis' activities, respectively.

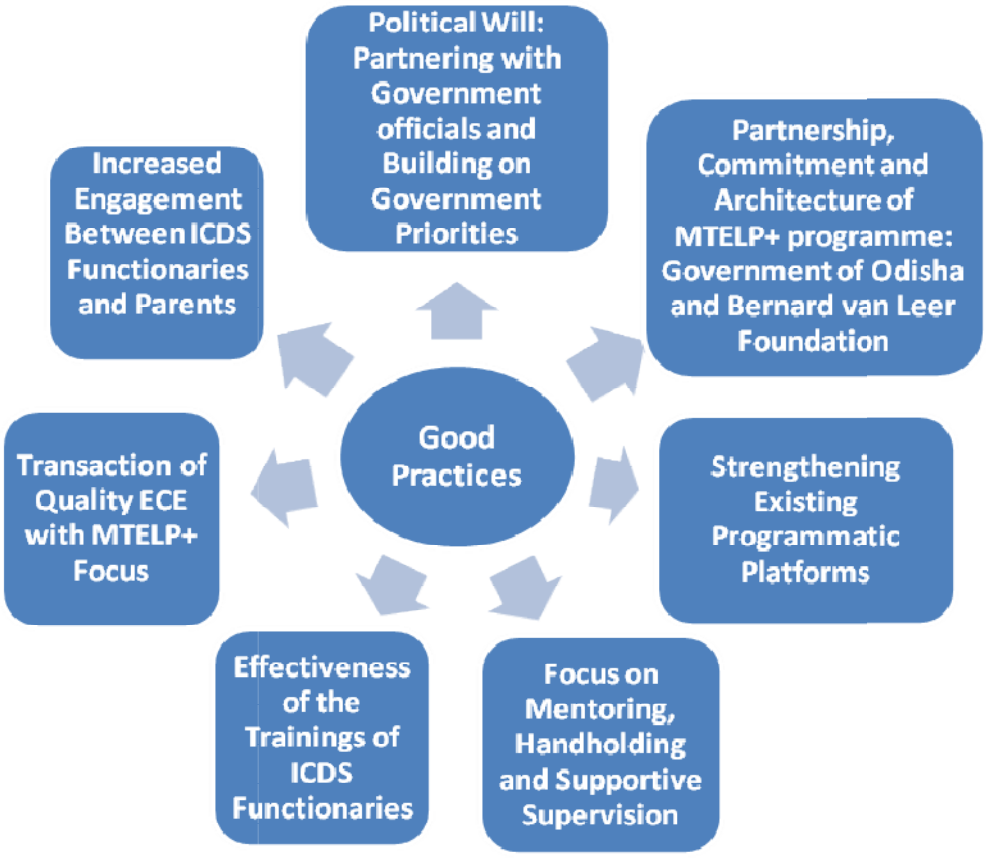
Challenges encountered by Lady Supervisors (LSs) in parent and community involvement

Major challenges identified by the LSs in terms of engaging parents and community after the implementation of MTELP+ programmes were:

- Most of the parents were daily wage worker who left for work in the morning and came back later in the evening.. They did not get time to come and visit Anganwadis.
- Parents believed that it was the duty of the government to look after all the Anganwadis and thus they were reluctant in coming forward to extend their support to the Anganwadis.
- Parents believed that the Anganwadis were just a place where children came to play. They perceived that the education that happened in the private school was better and thus sent their children to those schools.

5. Good Practices Observed in Anganwadis

A number of good practices were observed during data collection. These practices not only brought in quality changes at the Anganwadi level but also ensured successful implementation of MTELP+ programme.



5.1 Aligning and Strengthening the Existing Programmatic Platforms

MTELP+ programme was envisaged with an objective to build capacities of existing ICDS functionaries. The aim was to strengthen the existing government machinery to ensure that the interventions are meaningful, cost-effective and sustainable. In addition to using the government staff, the project built its interventions into the existing platforms. These platforms like sector meeting were regularized to impact larger numbers. Capacities of LSs were built for strengthening their understanding and significance of early years, brain development, a quality early learning environment with a focus on mother tongue based multi-lingual learning,

monitoring and handholding and follow-ups. Capacity building of AWWs included building their understanding of early learning, planning of meaningful and joyful learning environment using a play way and activity based pedagogy with an intentional focus on mother tongue and multi-lingual education.

Development of appropriate and contextual TLMs and building partnerships with parents and community was integral to the training programme. The parents+ programme was in progress when the evaluation was carried out and thus it was not feasible to provide a comprehensive evaluation at this point.

5.2 Focus on Handholding and Supportive Supervision

The MTELP+ programme showcased the important role of supportive supervision. Visits to Anganwadis and regular sector meetings, were used to build capacities of AWWs. These opportunities of handholding and support not only improved skills of AWWs to deliver but also improved relationship between LSs and AWWs.

5.3 Partnering with Government officials and Building on Government Priorities

The Project worked with block, district and state governments on priority issues as identified by them. The Project team used respectful and collaborative approaches which built trust and ensured local ownership and commitment to the interventions.

5.4 Shift from Common Rhymes and Songs to Higher Order Skill Activities

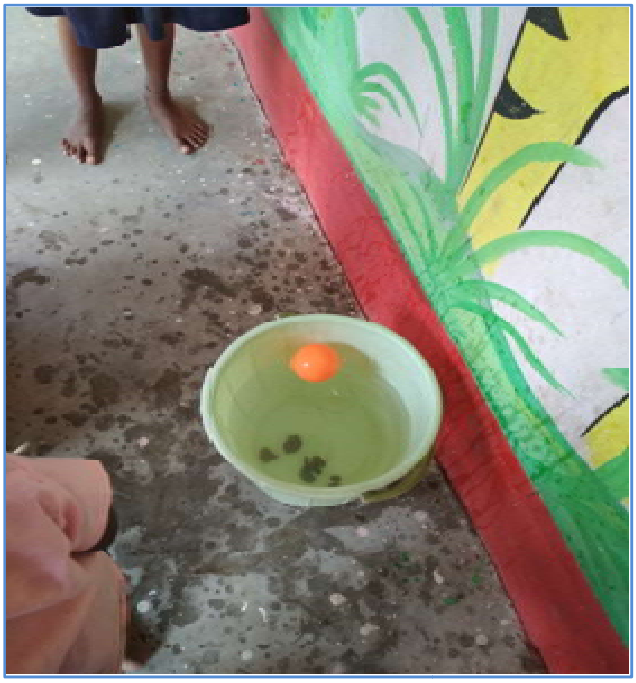
A shift in the activities conducted at Anganwadis was observed. These practices were contextually relevant and ignited children's curiosity and thought processes, thus reflecting that the interventions were impactful and augmented AWWs' skills pertaining to planning, conducting and involving children in various activities. The

Picture 5.1: AWW conducting seed identification activity with children

transaction of activities utilizing play way approach and encouraging children to be active learners set a stage for vibrant Anganwadis envisaged in the national ECCE policy document,

To illustrate, an activity was specific to the culture of Odisha, wherein, the AWW had arranged for different plant seeds. The children had to identify the seeds by name. Children were able to do so in both Odia and 'Soura' language. This activity was of interest to mostly all children, as it was contextually appropriate one. Likewise, in another Anganwadi, songs in 'Kui' language were used to promote awareness regarding protection from mosquitoes among children. In this way children's mother tongue was used to impart health and safety measures to young children and parents. In Tumbiguda, Rayagada, an AWW brought a model of a hand pump to demonstrate how it worked. This activity helped children to gain a rough idea about how things operated and served as a stimulus for them to explore further. This interaction was in 'Kuvi' language. Children were able to understand these activities as the themes and messages of these activities were related to their day to day context.

In Rayagada, in one of the Anganwadis, an activity of exploratory nature was observed. AWW asked the children to be seated in a semi-circle. Meanwhile, AWW collected materials such as a bucket filled with water, few balls and marbles and organized an activity for children. She asked children to pick up balls and marbles one at a time and drop them in a bucket. All children got an opportunity to participate and were excited to drop the marbles and balls in the bucket. After dropping the balls and marbles they observed what happened to balls and marbles. Subsequently, the AWW explained why marbles sank while plastic balls were still floating on water. **Such an activity was a step forward towards stimulating children's thought process and awakening their curiosity.** This activity was observed in one more



Picture 5.2: Ball & marble activity to stimulate children's thought process

Anganwadi, where, plastic balls were replaced by thermocol ones. Further, this activity was observed in three districts, where CECDR staff visited viz, Kandhamal, Gajapati and Rayagada. At some other Anganwadis, leaves, cotton and stones were used. Overall, in these districts it was noted that more than 75 percent children participated in this particular activity. Also, children were readily expressing which objects would float and otherwise. This reflected that this particular activity was a regular feature of Anganwadis, situated in above mentioned districts.

Furthermore, in districts such as Gajapati and Rayagada, children were engaged in role plays. It was seen that children enacted the story Two Goats on a Bridge. In another role play, children depicted reaping of crops, while singing tribal songs. This was because usually those songs were sung during reaping season. These activities promoted social skills, such as taking turns, adhereing to rules of the game and cooperation among children. Planning and transaction of diverse, appropriate and meaningful activities reflect strengthening of AWWs' skills and knowledge. Innovative activities which lead to holistic development of children were well planned and organized. The observations informed that focus had shifted from usual songs and rhymes. Though songs, rhymes and storytelling continued to be widely used, however, AWWs acknowledged that merely conducting these activities won't be sufficient for enhancing various competencies of children.

Importantly, noteworthy practices involved, use of low cost and a variety of indigenous materials. This further assisted children in gaining awareness about their day to day surroundings. Additionally, in few Anganwadis, for instance, in Rayagada district, children used sticks to make mathematical figures, viz, triangles and rectangles on the ground. Next, an AWW drew various shapes on the ground, such as leaves, mangos, and subsequently, children put marbles on the boundaries of those shapes. Introduction of early numeracy and fine motor skills was evident through these activities.

Picture 5.3: Children using sticks to make different shapes

In yet another Anganwadi, interesting activities were organized using usual materials, viz, buckets and balls. Interesting materials such as bowling pins were also put to use. In one of the appealing activities, a bucket was placed at a distance from the children. The AWW asked children to throw balls in the bucket. In another similar activity, AWWs arranged rolling pins in a row. One by one child had to hit the pins with the balls. **Such activities were stimulating and provided children to practice and strengthen their eye hand coordination skills. While building on gross motor skills, these activities ensured that children were actively engaged and foundation for precision was in progress.** During this activity, AWW and children were using 'Soura' language. In Kharadasing in Gajapati, children were made to sit in a circle, and every child was provided beads and a thread to make their respective necklace. Interestingly, children who refused to be engaged in beading activity were involved in other activities like playing with puzzles and blocks. **This reflected AWW's sensitivity and recognition of children's interests.** Also, this activity provided children with practice motor kills, particularly, fine motor skills.

Picture 5.4: Low cost TLMs in Usurikapadu, Rayagada

Picture 5.5: Low cost TLMs in Anukundaguda, Gajapati

Nature related practices were evident too. For instance, in Malkangiri, AWWs along with young children undertook nature visits, wherein, children were exposed to different plants and animals and AWWs lend an ear to various expressions of children and addressed their queries and questions. Additionally, AWWs put forth various questions to children to stimulate their thinking.

5.5 Shifts in Child Friendly Environment and Curriculum Transaction

Availability of Time Table

In the baseline report it was observed that the Time table was followed in only 12.46 percent of Anganwadis whereas in the evaluation it was found that the Time table was followed in half of the Anganwadis (50.62 percent).

Local Contextual Material

Examples from tribal context were used only in 9.9 percent of the Anganwadis during the baseline study. There was a significant increase after the intervention of BvLF in terms of using examples from socio-cultural context. It was observed that the AWWs were using locally and context specific materials while transacting activities in 33.15 percent of the Anganwadis.

Usage of TLMs while transacting curriculum

During the baseline study, frequent use of TLMs was undertaken by only 12.47 percent AWWs. After the intervention of BvLF it was found that 36.53 percent Anganwadis were using TLMs during majority of activities.

Use of TLMs was noticed in few activities in almost half of the Anganwadis (50.76 percent) against the baseline study where TLMs were used in few activities in 23.32 percent of the Anganwadis.

Display of children's work

During the Evaluation study it was found that in about one-third of Anganwadis (31.63 percent) the recent work of children was on display which was in only 8.49 percent Anganwadis during the baseline study.

In 30.46 percent Anganwadis, the materials made by children were on display during the evaluation study against 21.13 percent Anganwadis in the baseline study. However the materials displayed appeared to be old and had not been changed for about 2 months.

Arrangement of TLMs and Activity corners

Functional activity corners where TLMs were within the reach and could be used by the children whenever they wanted, were present only in 10.11 percent Anganwadis during the baseline which had now increased to 53.73 percent Anganwadis during evaluation study.

Display of material at the eye level of the children

Display of visually attractive materials which are of interest to the children displayed at the eye level of children has increased from 19.01 percent in the baseline study to 44.89 percent post intervention.

6. Implementation of MTELP+ Programme: About PMU, Progress and Deviations

At the outset it will be important to understand the formulation of PMU and its important role in ensuring successful implementation of MTELP+ programme.

Programme Management Unit (PMU): Roles and responsibilities, and contribution

The Programme Management Unit (PMU) was set up under the purview of Women and Child Development Department, Government of Odisha. PMU was instrumental to implementation of project and was set up with three major objectives. First, the intent was to extend the model of mother tongue based multilingual early childhood education to 7,202 Anganwadis. This was envisaged so that across the state children could be provided with favorable learning environment and their transition to primary education could be ensured. Second, objective was to ameliorate the skills of government officials, managers and frontline workers so they could optimally plan and implement early childhood education activities. The third objective was to ensure that Anganwadis were used as an avenue for parental and community engagement so that Anganwadi workers (AWWs), parents and community members could work in tandem for holistic development of children.

The PMU team

The PMU constituted of a Programme Manager, a Training Officer, and 13 District Coordinators. All the members were post graduates in various streams of Social Sciences, for instance, Anthropology, Law, Political Science, Psychology, Social Work, Sociology, and Rural Development. Besides, some of the members had pursued certificate and Diploma courses. The team members had experience as a trainer in the range of 5-21 years. While, the average experience of the PMU team was 12.53 years.

Knowledge and skills of PMU team

The PMU team members were well versed with the area of Early Childhood Education (ECE). They had developed and circulated a number of technical briefs in the area of Early Childhood Education and Care (ECCE) and brain development. Moreover, the members had received

trainings on a range of aspects, viz, ECCE, Early Child Development (ECD), community mobilization, early reading, Integrated Management of Newborn and Childhood Illnesses (IMNCI) as well as gender sensitization. These trainings were provided by renowned organizations, such as Centre for Early Childhood Education and Development (CECED), United Nations Children's Fund (UNICEF), Centre for Learning Resources (CLR), Pune and BvLF ECD experts.

Besides, the PMU team members had also imparted trainings to government officials (District Social Welfare Officers [DSWOs], Child Development Project Officers [CDPOs]), Block Coordinators and ICDS functionaries, viz, Anganwadi workers (AWWs) and Lady Supervisors (LSs).

MTELP+ project had adequate field presence with trained staff in the districts. Moreover, District Coordinators had established an effective working relationship in the districts and anchored the ECCE portfolio across ICDS projects.

Further, Programme Manager, too had established adequate working relationship with the Department of Women & Child Development.

Progress and Deviations

One of the objectives of the evaluation was to evaluate the progress of key programme activities of the MTELP+ programme implementation framework to document any deviations and assess efficiency or drawbacks due to deviations.

This task was contingent on secondary data review of the project progress reports and documentation received from PMU during the evaluation period. The following documents were reviewed:

- Project progress reports for year 1 (September 2016 to January-February, 2017)
- Project progress reports for year 2 (July-September, 2017 to January-March, 2018)
- Project progress reports for year 3 (July-September, 2018 to January-March, 2019)
- Biannual Progress Report (Mother Tongue Based Multi-lingual Early Childhood Education & Parents + Programme)

A thorough desk review of the MTELP+ documents was conducted. It provided insights about the programme activities, progress and achievements. An analysis matrix was developed in order to systematically process the information contained in all documents related to MTELP+ and its implementation. The log frame is presented below (see Table 16). This provided a frame of reference for evaluation and was used to measure the progress of MTELP+ programme against its intended outcomes. The relevant information from the available reports was systematically compiled and collated as per the activities, duration and outcome indicators. This facilitated a high degree of objectivity and transparency in evaluating the level of achievement against the outcome indicators and the existing gaps and shortfalls. This log frame was shared with PMU to ensure completeness and accuracy of information. Besides, some questions were put forth to PMU. The secondary desk review and primary data collection ensured reliability of processes for evaluation.

Table 6.1: Activity Log Frame MTELP+ programme

PMU set up & capacity building of Programme Manager, PMU		
Activities	**Duration**	**Outcome indicators**
Setting up PMU	• July-August, 2016	• 10 Districts coordinators (DCs) appointed • DCs started operating since 18th July, 2016, except in Koraput
Induction programme for DCs	• July, 2016 (3 days)	
Orientation & exposure visit	• September, 2016 (2days)	• All PMU staff. • Conducted at PREM resource centre Mandiapally, Berhampur
Review of DCs	• September, 2016	• In BvLF, Bhubaneswar
PMU office: functional	• October, 2016	• In Mission Shakti premises
Planning cum review meeting	• July, 2017	• Planning cum review meeting conducted & activity planning for two years finalized • Programme Director, Country representative, Programme Manager, BvLF, PMU, & WCD, dept., Government of Odisha
International conferences (Programme Manager (PM), PMU)	• May-June, 2018	• PM, PMU participated in two International conferences in Russia (5 days) & Nepal (4 days) in May & June, respectively

Workshop participation (PM, PMU)	• October-December, 2018	• PM, PMU participated in National level ECCD workshop in New Delhi
Development of monitoring tools & formats		
Activities	**Duration**	**Outcome indicators**
Daily Activity and Planning format		• Developed & rolled out for DCs
Monitoring formats for AWC visit		• For programme monitoring & review
Financial format, viz, travel expense format, log book etc., developed		• DCs were oriented on the same
Developed Monthly Progress Report formats in five matrix		• Yet to be rolled out
Baseline assessment process		
Activities	**Duration**	**Outcome indicators**
Identification & orientation of Field Investigators (FIs)	• November, 2016	• 720 Field Investigators
Commencement of baseline assessment process	• December, 2016	
District launching		
Activities	**Duration**	**Outcome indicators**
District launching of MTELP project	• September-October, 2016	• District launching in 12 districts • District officials of WCD, District Magistrate, CDPOs, & active NGOs participated
Development of training modules for AWWs		
Activities	**Duration**	**Outcome indicators**
Draft module prepared		• 6 day draft module for Master Trainers (MT) • 6 day draft module for LSs • 7 day draft module for AWWs • All these documents shared by CECED with PMU for Odia translation
Translation of documents		Following documents translated in Odia • National ECCE policy, • National curriculum framework for ECCE
Capacity Building of Government officials & Trainers		
Activities	**Duration**	**Outcome indicators**
State level TLM workshop in Berhampur	• November, 2016	• Draft TLM list prepared shared with WCD & CECED. Facilitated by PMU

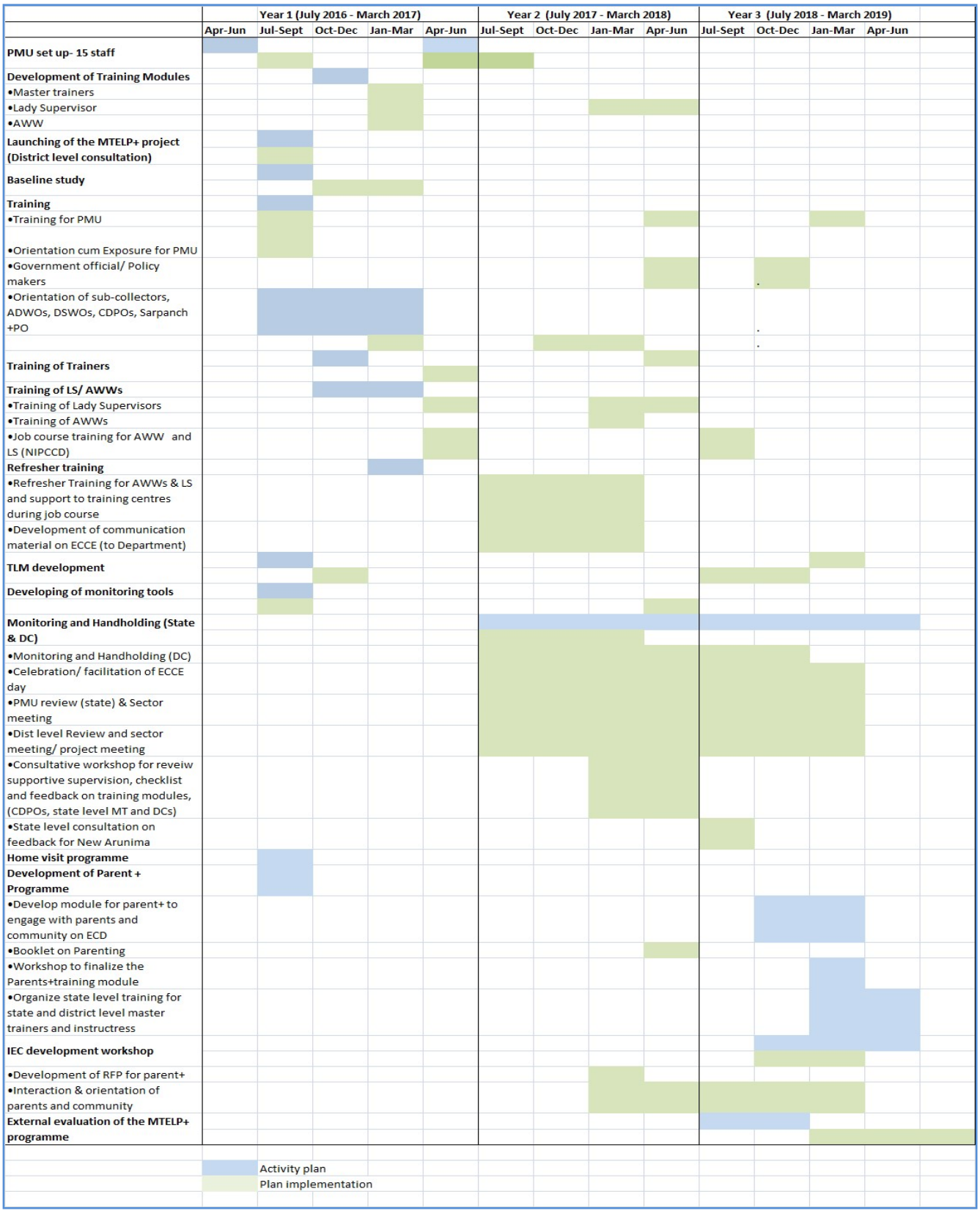
Orientation of AWTC's Principal & Instructress	• November, 2016 (2 day)	• Orientation on ECCE & mother tongue
Orientation & state level ECCE training of DSWOs, POs, CDPOs & Instructress	• January, 2017-January, 2018	• **924 participants** attended these orientation & trainings • These included DSWOs, POs, CDPOs, Instructress • Content: ECCE • A two day orientation in February 2017 was facilitated by Dr. Rekha Sen Sharma & Ms. Chhandarani Mohanty • An orientation on March 2017, Dr. Adarsh Sharma was ECCE expert
Orientation of SLMT & state level officials of WCD & PMU team members	• May, 2018	• Orientations on brain development, & parenting • Session facilitated by Ms. Rachel, ECD expert, BvLF Netherlands • A booklet on parenting (28 pages) circulated
Exposure cum learning trip for higher officials of WCD	• December, 2018	• Observe ECCD best practices of WCD Chhattisgarh
Orientation of newly joined DCs	• October-December, 2018	• Newly joined DCs oriented on MTELP +project deliverables both at PMU & field level
Capacity building of various stakeholders		
Activities	**Duration**	**Outcome indicators**
• **Training of Master Trainers**	• Trained at PREM, Berhampur & Rourkela during 19th-21st November, 2016 & at DISHA, Bisra, & Raurkela during 22nd-24th November, 2016	• Total **95 Master Trainers** trained by CECED
• **Training of Trainers (TOT)**	• April, 2017 (6 days)	• **76 trainees** trained by CECED at CUTM, Jatni
• **Training of LSs**	• April 2017 (6 day training)	• Total **209 LSs trained** on ECCE at CUTM. LSs trained by selected Master trainers in 4 batches
• **Orientation of LSs (3 urban ICDS & 1 rural project of**	• Feb 2018	• An orientation on ECCE, brain development, parenting & TLMs, organized by PMU

Bhubaneswar		
• **State level training of trainers for LSs on ECCE**	• March 2018 (5 days)	• Total **26 master trainers trained.** • Dr. Rekha Sharma Sen, Mrs. Amita Tondon& a communication expert Mr. KedarnathRanjit& resource persons from CLR (Centre for Learning Resources) facilitated the sessions
• **Training of LSs**	• April-June, 2018	• **25 batches of LSs** training completed in all 12 MTELP+ districts
• **Training of newly joined LSs**	• July-September, 2018	• At HETC, BBSR • Facilitated by Programme Manager
• **Training of AWWs**	• April-June, 2017	• **6388 AWWs trained** in 125 groups in 6 batches at 2 different venues. Training was monitored by PMU & BvLF staff.
Job course training of AWWs	• July-Sept, 2018	• At HETC, BBSR (in 4 batches) • Programme Manager facilitated a session on MT based preschool transaction during skill training • Facilitated by Programme Manager
Job course training of AWWs	• October-December. 2018	• Facilitated by training officer • Training at HETC, BBSR
Handholding & monitoring support provided by DCs		
Activities	**Duration**	**Outcome indicators**
Provision of monitoring & handholding support to AWWs by DCs	July 2017 to March, 2019	• In **509 AWCs**, DCs & LSs made joint visits **Interaction with community members & parents** • Community members:**13242** • Parents: **5542** Mothers of children between 3-6 years of age: **763** • Community members & parents oriented on importance of early years, brain development & positive parental practices
ECCE Day observations		
Activities	**Duration**	**Outcome indicators**
ECCE Day observations	July 2017 to March, 2019	• **160* ECCE Days**: DCs supported AWWs in organizing ECCE Days
	July-September, 2018	• One page Odia ECCE day organization guideline introduced
	October 2018 & March, 2019	• DCs filled monitoring sheets • DCs motivated AWWs, reviewed ECCE day performance during sector & project review meetings
State level monitoring		
Activities	**Duration**	**Outcome indicators**

• **State level PMU review meeting conducted regularly**	• September-December, 2017	• State level PMU review meeting in which Addl. Director-Cum-Under Secretary to Government from WCD dept. anticipated & reviewed programme (for 1 day in Sep, 2017) • AD cum Under Secretary Ms. Chhanda Mohanty, every month • State level monitoring Kalahandi district by AD cum Under Secretary of WCD & PM-PMU jointly visited (t)
• **Monthly PMU review meeting**	• January 2018-Marcyh 2019	• At PMU-MTELP+ office, Bhubaneswar • PMU developed in Odia thematic notes/ talking points in ECCE including policy & framework, early literacy, numeracy & personal hygiene & importance of play & nature walk. These topics shared with LSs & CDPOs for further discussion during sector & project level meeting • Forum used for capacity building of DCs • PMU developed thematic points & talking points on role play, & nature walk, early stimulation & parent involvement in ECCE in Odia. These points discussed during sector meetings by DCs & LSs
Monitoring visits		
Activities	**Duration**	**Outcome indicators**
• **Programme Monitoring visits**	• January-March, 2018	• These visits made by Programme Manager & Training Officer of PMU-MTELP + • Visits made to 3 districts, viz, Kandhamal, Rayagada, Gajapati
• **Joint monitoring visits**	• March, 2018	• These visits were made by Programme Manager, BvLF & Programme Manager, PMU-MTELP • Visits made to Koraput district
TLM development		
Activities	**Duration**	**Outcome indicators**
• **TLM development process initiated & facilitated in MTELP projects**	• July-Sept, 2018	• Completed in 10 ICDS projects. AWWs of model AWCs developed context specific TLMs
• **TLM development workshop**	• October-December, 2018	• These were organized in 64 ICDS projects (75 batches) • AWWs of MTELP+ model AWCs developed child centric context specific low cost materials. • AWWs of model AWCs & LSs participated
• **TLM development**	• January-March, 2019	• PMU facilitated **75 workshops** • Workshops oriented AWWs, & LSs to prepare

workshop		lost cost TLM • **2628 participants**(AWWs, LS &CDPOs) trained in 10 districts, through these workshops
Training of community members		
Activities	**Duration**	**Outcome indicators**
• **Zonal IEC development workshop**	• November, 2018	• 3 days workshop was organized in Baripada • 30 tribal community leaders, including parents, artisans, & AWWs from Santal, Munda, Juang & Oram community from Mayurbhanj, Keonjhar, &Sundergarh
• **3 zonal IEC development workshop**	• January -March, 2019	• 84 participants participated from parents, leaders from Tribal community, MLE teachers, SHG leaders & service providers • Objective of workshop: understand challenges & effectiveness of existing communication strategy/ IEC/ IPC from community &v stakeholders from 3 districts (Baripada, Koraput, &Ballipuda)
District, project & sector meetings		
Activities	**Duration**	**Outcome indicators**
• **Sector & review meetings**	• July 2017-March, 2019	• DCs attended these meetings • DR – **53** • PR – **220** • SR- **244** • ECCE as an agenda discussed & facilitated • DCs facilitated ECCE training organized at project level & supported CDPOs for better ECCE implementation • Sector meetings: used for capacity building of AWWs & DCs supported LSs in quality review of ECCE & other mandated activity • Thematic notes/ talking points for discussion was developed in Odia & circulated to LSs, every month

Figure6.1: Implementation of MTELP+ Programme: Progress and Deviations



Orientation and Training of Key Stakeholders

Training and capacity building, mentoring and monitoring and handholding were major responsibilities of the PMU. The PMU had organized a six days residential training of 7,202 AWWs in the year 2017. All the DSWOs, POs, CDPOs of 30 districts along with Instructress of ICDS training institutions were trained. Further, 1,200 LSs were trained across 12 districts. These trainings were on aspects such as brain development, mother tongue based multilingual education and ECCE. Besides, TLM development workshops were organized at sector level to provide handholding support for the development of need based contextual materials. District coordinators facilitated ECCE training at ICDS projects. One of the major roles of PMU MTELP+ was capacity building of state level Women and Child Development Officials and instructress of training institutions.

The diverse activities listed above and outcomes achieved are reflective of Government's will to take the activities forward and ensure their seamless implementation in 12 districts. In absence of direct interactions with Government policymakers, information from media is incorporated in the current evaluation. While inaugurating the parent's module, sensitization towards quality early learning at Anganwadis and parental role in promoting quality early learning was visible in voices of leadership. Honorable Minister, Women and Child Development & Mission Shakti WCD & MS) Department, Smt Tukuni Sahu reiterated the Government of Odisha's commitment to Early Childhood Care and Education, reassuring the need to convert every Anganwadi into a vibrant centre by focusing on the nurturing framework of care, nutrition, protection, play and early learning. The event steered by Smt. Anu Garg, Principal Secretary to Government, WCD & MS Department, highlighted on the efforts of WCD & MS to take the ECD programme to next level, by building capacities of AWWs and

> "Parents need to be more involved in caring about the children, we will aim to make the Anganwadis more vibrant, and make learning more joyful for young children". – Smt Tukuni Sahu ,Honourable Minister, Department of Women and Child Development (@preettyprada, 2019)

> "Both parents should be involved in caregiving so it's not only in the AWC but also in the homes children need to be taken care and stimulated." - Smt. Anu Garg, Principal Secretary, at Women and Child development (@preettyprada, 2019)

sensitizing parents on importance of nutrition and early stimulation to ensure that every child in state thrives (Daily Pioneer 2019; Orissa Diary 2019). The same were highlighted through tweets by Ms Preeti Prada India Programme Manager, BvLF.

Good practices observed during developing of training modules

Training across the stakeholders both at the macro and micro level (Government functionaries, PMU, CDPOs, LSs, and AWWs) was commendable. The baseline conducted mapped the training needs assessment of the stakeholders. The information from baseline provided information for development of training modules. The LS module was revised based on continuous feedback to ensure that the module was meaningful and appropriate.

Further, the MTELP+ programme was about to complete its duration to support scaling up of MTELP+ in Odisha. BvLF and PMU wanted to make sure that the MTELP+ programme sustains in the future training programs of Odisha Government. A review of the developed training modules was requested to address these aspects. These modules include the following:

- Orientation module for CDPOs and Govt functionaries
- Training module for AWWs
- Training module for Lady Supervisors
- Training module for Master Trainers

The review for the training modules was shared with three experts and CECDR received responses from two of them.

Initial Training Modules	**Revised Training Module for Master Trainers in ECCE**
Strengths	
The experts were of the opinion that the content was appropriate for a typical ECCE training programme, Participatory approach and involvement of adult-learners in the process of ongoing transaction were the some of the appreciable	With regard to organization, the experts opined that contents were structured and presented in a systematic manner. Besides, there were provision of 'Hand-outs' after each domain specific session. The hard work put in by the team (which developed the module)

aspects of the modules. However, one of the experts put forth that the Masters Trainers ought to be empowered to use the above two techniques. Moreover, practice of techniques, such as group activities and shared learning needed to be strengthened. The manual/guide book of master trainers was well prepared and had very useful reference materials. Another expert stated the module was well planned. For instance, training module for master trainers began with introductory games; subsequently, provided basic understanding of ECCE as well as policy and programmatic context. Next, it focused on familiarizing Master Trainers with specifics of ECCE in terms of principles, planning and practice. Last, the module provided sessions on training methods. Hence, in this way, this particular module was well structured.	was clearly visible. Another expert was of the view that at a glance, day wise sessions were well planned. The strength of the Module was that it covered all the important content of an ECCE programme, namely various domains of development and steps required as part of trainings. In the Module, step by step support materials, in form of Hand-outs were provided and each activity was explained in detail. Critical dimensions, viz, Early Stimulation, Preschool Education, and Supportive Supervision had been comprehensively addressed in the Module. The module included information on TOT skills and methodologies of participatory training. Training the trainees on training methodologies would facilitate them to transfer knowledge, skills and information effectively. As a part of the MTELP+ programme majority of the relevant materials were translated to Odia and circulated among the staff and functionaries.
Gaps	
Lack of emphasis on mother tongue based planning and multilingualism In module for Maters Trainers, provision of 'hands-on' session was missing. Though field visits did find a mention in the module. Next, the narrative of inclusion was	There was absence of 'hands on' opportunity with children, for Master Trainers (MTs). Merely visits were scheduled to Anganwadis where MTs were required to document their observations. As there was not substantial information about the educational

limited to disabilities. In order to expand this, social challenges which hinder inclusive practices, need to be discussed in the module. Further, incorporation of discussion on practices which would assist in use of '*multilingualism*', as a resource in the Centres, would prove to be helpful. The modules mainly focused on theoretical information, without providing hands on practices to the participants, on how to put to use all the information in the day to-day activities at Anganwadis. Specific activities to promote early learning were not discussed and hence need to be incorporated in the modules. During training sessions, opportunities should be provided to the participants to practice, reflect upon and apply the concepts which they had learnt. Participants' communication skills need to be fostered. The focus on mother tongue was quite diluted across modules. Specific recommendations on how use of various mother tongues during day to-day transactions with children, was found to be missing. Topics such as parent education and parent involvement had inadequate coverage. Therefore, before scaling up, these topics	qualification and experiences about MTs, thus, in this scenario it becomes a lot more important to provide hands on experience to them. Through hands on training, the MTs will be able to 'experience' and 'understand' what and how they have to train others. Importantly, in every 'hands on' training, the focus should be on imparting demonstration skills (How to demonstrate?) and guidance skills (How to guide?). Though Module's content and scope was comprehensive in nature, however, the focus on mother tongue was quite diluted across modules. Specific recommendations on how use of various mother tongues during day to-day transactions with children, was found to be missing days training at a stretch was questionable. The trainings need to be provided in a recurrent fashion so that first, basics are clear to the trainees and then they proceed towards attaining in-depth understanding about philosophies, content and methods of ECCE. Any training planned by sponsorship should not be a one-time event and ought to be organized recurrently. Images from Odisha were incorporated in the Module which was a step forward in contextualization of the content. Additionally, a section on 'Diversity' was present, with particular emphasised on children with special needs. Nonetheless, more importantly, issues,

need to be strengthened.	viz, Home vs. School language and transition were unfortunately sketchy and inadequate. Further, there were no details about Odisha's tribal communities and socio-linguistic challenges these communities encounter as their children enter preschools. There was no mention about how these challenges ought to be addressed in Anganwadis. Dimension of 'time management' was addressed in a limited fashion. The skill of time management will enable the LSs and AWWs to devote quality timing to ECE, besides delivering other five services of ICDS. Therefore, time management skills have to be incorporated in all the trainings.

Continued and Refresher Trainings

The element of continuing orientation and refresher training was visualized and implemented at the circle level systemically. Staff members who joined in between were oriented and trained on the MTELP+ both at PMU and field level. The PMU would regularly keep a note of the observations, gaps and address these during monthly meetings and review meetings taken by supervisors. Calendar and a roaster prepared for short workshops of peer learning was effective in organizing regular and meaningful refresher trainings.

TLM Workshops

The MTELP+ programme had proposed distribution of TLM among the Anganwadis. Given that the yearly state allocation as a part of ICDS scheme of Rs 2500/- was already in place and was being received by each Anganwadi towards procurement of TLM, the Government suggested an alternate approach for the same. In concurrence with Government, PMU modified and planned TLM Workshops for ICDS functionaries to facilitate development of indigenous and contextual TLMs and address the non-negotiable objective. TLM booklets with details of variety of TLMs

and how to develop these TLMs were published and launched recently. Pictorial handbooks were also published and launched. These were developed in Odia. Efforts were made to include contextual materials available locally.

Sector and Project Meetings

Sector and project meetings were organized with CDPOs and LSs. These meetings provided a platform to ensure regular follow-ups and interactions to reach out to large population. It was neither feasible nor practical for the 12 DCs to individually cover each and every Anganwadi. Hence the platform of sector meetings was utilized to reach majority of the LSs and AWWs. As informed by progress reports, in the initial sector meetings there was no discussion on ECCE. Gradually, through these meetings an increase in ECCE discussions was observed, feedback was taken, observations were made and further capacity building for AWWs was conducted as per the needs. Thematic notes and talking points for discussion during sector meetings were developed and circulated to LSs. Feedback on 'Nau Arunima' was taken and shared with DWCD. These platforms were effectively used to strengthen ECCE implementing strategies. A gradual shift in content and thematic areas, was evident which included policy and framework, early literacy and numeracy and personal hygiene, importance of play and nature's walk being discussed at these platforms.

Monitoring, Mentoring and Handholding

Joint visits of DCs with LSs and CDPOs on monthly basis facilitated continuous capacity building and handholding with an increased efficiency for ECCE monitoring. This was a significant component of training conducted at the district and state level and needs to be leveraged. The PMU team shared their observations and findings on appropriate forums, viz, district review meetings, project meetings, and sector meetings. PMU provided handholding support to CDPOs and LSs on how to transact activities using '*Nau Arunima*' and on ECCE.

Development and usage of monitoring tools was an effective step to ensure accountability. Monitoring also involved regular observation of early childhood education transactions at Anganwadis, home visits, and interaction with communities.

Facilitation of celebration of ECCE days was initiated from year 2 (July – September 2017). A gradual progress in celebration and participation of the stakeholders was observed over a period. Initially the parents and community started participating with the gradual inclusion of PRIs and school teachers over a period of time. A handbook on the guidelines for organizing an ECCE day was developed and launched in Odia.

Through progress reports, increase in parents' involvement and engagement in various forms was evident. For instance, parents participated in ECCE day celebrations, regularly dropped their children to Anganwadis, and extended helping hand to AWWs in preparation of TLMs.

Parents + Programme

While MTELP+ programme seems to have achieved most of its envisaged activities, the Parents+ programme was in progress simultaneously with the evaluation. The progress reports highlight the orientation provided to State level officials, SLMT and PMU team members on brain development and Parents+ by Ms Rachel, ECD Expert, BvLF, Netherlands. Trainings for LSs were also organized simultaneously to strengthen their skills on MTELP+ programme. These skills were further transferred to AWWs through monitoring and handholding.

The progress reports further inform about the interactions and orientation of parents and community from January 2018 to March 2019. These were initial efforts to engage with the parents and community to sensitize them on importance of early years, brain development and the significance of early stimulation, the mother tongue approach and role of parents as valuable contributors.

These efforts were further strengthened through the development and launch of Parents+ module in August 2019. The AWWs were to be trained on the module and strengthen the component of sensitizing the parents. As the activities for Parents+ programme were in progress, the evaluation process was not able to capture the recent developments as a part of this activity.

Strategic plans are envisaged to make the Parents+ programme robust. The proposed activity plan for January – December 2020 lays an array of diverse activities to strengthen ECCE technical support for Parents + with a focus on 0-3 year children. The following activities are proposed as per the proposed plan:

- Capacity building of Department of Women and Child Development
- Distribution of IEC materials launched on Ankur Day in August 2019
- Translation of the Parents+ module and its distribution
- One day orientation on revised Job course curriculum
- Master trainers training for 4 days on Odia Parents+ module
- Best practices process documentation for dissemination
- MTELP+ evaluation state level dissemination

7. Conclusions and Recommendations

The Department of Women and Child Development (DWCD) in partnership with BvLF had initiated MTELP+ programme in 10 tribal languages in 12 districts serving over 2,50,000 children. The previous section detailed and analysed the diverse interventions of the MTELP+ programme implemented during the period July 2016 to August 2019. The MTELP+ programme with its concerted efforts made worthy achievements in scaling up the model of mother tongue based multilingual early childhood education and strengthening the skills and capacities of government policy makers, mangers and frontline workers. Although a modest progress was made subsequent to the interventions of MTELP+ programme, significant improvements in early learning and holistic development in early years will require continuous support and efforts from ICDS functionaries. Moving forward, the Government may need to ensure that these positive shifts continue to become better and sustainable. Creating an environment that is respectful of indigenous languages and culture will go a long way in ensuring a quality learning environment and preserving the languages, context and culture of tribal communities. Moving forward a few observations and recommendations are highlighted in the section below.

7.1 Partnership, Commitment and Architecture of MTELP+ programme: Government of Odisha and Bernard van Leer Foundation

The envisaged partnership between the Government of Odisha and BvLF to scale up the model of mother tongue based multilingual early childhood education was a well planned strategic decision. MTELP+ programme was envisaged with an objective to strengthen the existing government machinery both at macro and micro level to ensure that the interventions are meaningful, cost-effective and sustainable. The Project worked with block, district and state governments on priority issues as identified by them. The Project team used respectful and collaborative approaches which built trust and ensured local ownership and commitment to the interventions. The partnership was successful in reaching out to far reached locations, train a large number of SLMTs, State government officials and most important LS and AWWs who may have received a focused ECCE training for the first time.

Strengthening capacities of government policymakers and existing ICDS functionaries created a facilitative environment to deliver quality mother tongue based early learning programmes.

Political will, complemented with concerted efforts of PMU, in concurrence and commitment from ICDS functionaries are seen as the significant factors that led to valuable accomplishments of MTELP+ programme.

Recommendation # 1: Innovative Strategies to Strengthen, Scale and Sustain the MTELP+ interventions

- Introduction of language policies to ensure that the early learning is carried out in mother tongue and before moving to second language the children have gained competence over their mother tongue. The second language needs to be introduced gradually with trained ICDS functionaries to ensure seamless process of transition.
- A dedicated trained ECCE workforce is required for monitoring and strengthening the ongoing existing platforms and programmes of ECCE. Given the existing strengths of the PMU personnel or personnel with similar skills, it will be prudent to utilize their capacities to strengthen and sustain the MTELP+ programme. The capacities of LS need to be strengthened to continue and sustain the continuous monitoring and hand-holding of the AWWs.
- The good practices and learning from MTELP+ programme are ample, but it needs to be reiterated that this is just the beginning to ensure quality ECCE in the state with a special focus on far reached areas, that often are neglected because of difficulty in access. The learning(s) and activities pertaining to ECCE (early learning, brain development, Mother Tongue based multilingual education, partnership with parents and community) need to escalated at various levels and with other districts to ensure quality early education across the state of Odisha.
- Promoting platforms for reward, recognition and promotion for ICDS functionaries can go in a big way in motivating and sustaining quality in programme, The ECCE day, sector meetings can be a few platforms where the AWWs and Supervisors can be recognized for their valuable, committed and innovative contributions. Good experienced and seasoned AWWs can be promoted to Supervisors or their expertise can be utilized in training. These platforms can also be utilized to applaud the efforts of parents and community members who are engaged with Anganwadis and support by volunteering at the Anganwadis or preparing contextual TLM for children.

- Continue to invest in mother tongue based early learning by allocating specific budgets for the indigenous populations who have witnessed exclusion for several years.

7.2 Project Planning

The DWCD had a baseline assessment conducted to assess the needs of the diverse ICDS stakeholders (AWWs, LSs and CDPOs) and understand their key challenges at the ground level. This helped in identifying the ECCE components on which training was required. The planning and conduction of a baseline to determine the training needs of ICDS functionaries was a well-thought step.

Training Needs Analysis (TNA) helped in determining and prioritizing the needs of the ICDS functionaries (trainees) and proved to be cost effective. It confirmed the commitment of Government of Odisha and BvLF to improve quality of early childhood education and respected the needs of trainees. TNA helped in aligning the training with the principles of Andragogy (Adult Learning Theory by Malcom Knowles) (Knowles, Holton & Swanson, 2012) which informs the pedagogy of how adults learn. The theory talks about the internal drive of adults that is built upon the past experiences and is guided by practical, problem-centered approaches to learning. The baseline assessment also facilitated a holistic understanding of existing practices, gaps and issues in Anganwadis with a focus on mother tongue based transaction. The data from baseline was utilized in development of meaningful training modules and training programme aligned with needs identified from baseline. As a part of this activity, orientation and training modules were developed for key Government and ICDS stakeholders. Capacities of LSs were built for strengthening their understanding and significance of early years, brain development, and a quality early learning environment with a focus on mother tongue based multi-lingual learning, monitoring and handholding and follow-ups. Capacity building of AWWs included augmenting their understanding of early learning, planning of meaningful and joyful learning environment using a play way and activity based pedagogy with an intentional focus on mother tongue and multi-lingual education. Many positive changes and shifts were noted as a part of the evaluation study but it is to be noted that it was just a beginning.

7.3 Strengthening Existing Programmatic Platforms

In addition to building capacities at macro and micro level, the project built its interventions into existing platforms. These platforms like sector meeting were regularized to impact larger numbers. Development of appropriate and contextual TLMs and building partnerships with parents and community was integral to the training programme. A gradual shift in discussions from no discussion on ECCE to an active engagement on ECCE in every meeting was observed. The gaps observed during monitoring visits were discussed during these platforms and they further supported in strengthening ECCE.

7.4 Effectiveness of the Trainings of ICDS Functionaries

Majority of the AWWs (66.1 percent) were in the age range of 21- 40 years. Given that the Government has mandated the selection of AWWs from local community to ensure the AWWs are able to speak the tribal language, the recruited AWWs were not highly qualified. This finding was similar to baseline study. Nearly three-fourth of the AWWs had barely managed secondary school or even less. Of these three-fourth 41.37 percent AWWs had completed class 10^{th} and nearly one third (31.56 percent) had schooling in range of class 6-9. More than half of AWWs (56.22 percent) had an experience of 5-15 years and 24.93 percent had an experience of more than 20 years. Despite the duration of their tenures they had received limited trainings as shared by LSs. Majority of AWWs (86.95 percent) confirmed that they had received MTELP+ training, however 72.72 percent of AWWs informed that they received no training subsequent to the MTELP+ training. This information aligned with the MTELP+ programme interventions, as the subsequent trainings were for the supervisors and master trainers. Given the existing scenario, it was helpful to have training at the beginning of the MTELP+ intervention and hand-holding support for close to half of AWWs (47.79 percent) at least once a month.

Data from interviews with AWWs, informed that most of the AWWs (81.77 percent) favored usage of children's mother tongues when the child first comes to an Anganwadi. Close to three-fourth favored the usage of multilingual environment (children's mother tongue and the State language) while transacting the curriculum in Anganwadis. Enhanced participation of children and less fear among the children were the reasons cited for advantage of using mother tongue in Anganwadis.

A slight increase in the awareness levels of AWWs regarding ICDS services and National ECCE policy was noted. Engaging children through play-way approach and activity based learning, supported with guidance from AWWs themselves, were reported as an effective way to help children learn by more than half of AWWs (55.48 percent). Linking learning to contextual activities through storytelling, poems and songs, development of TLMs like flash cards, picture cards was reported by three-fourth of AWWs. A variety of activities like picture reading/ shared reading/book handling, organizing scribbling, drawing /writing activities, were reported by AWWs to promote language and literacy skills among children. The dynamic shifts observed from rich engaging interactive activities to high order thinking and exploratory activities showcases the increased capacities of ICDS functionaries specifically AWWs and LSs. Nonetheless this was just a beginning, the shifts and gains need to be sustained and built further.

The interviews with Anganwadi workers revealed that the trainings were successful in promoting MT based early learning, usage of MT in Anganwadis and understanding ECCE with a few activities. However, when the data was analyzed further the gain and activities conducted across the Anganwadis was uniform in their own way. For instance, if the science experiment of floating was being demonstrated, it was a similar experiment showcased across the Anganwadis and continued from the day the trainings were organized. Only a few proportion of AWWs talked about scribbling, writing and phonemic awareness as activities to be conducted for promoting early literacy skills among children. Further, only a few proportion of AWWs shared about the MTELP+ programme building their capacities for partnerships with parents, community and assessment of children. In discussions with parents on AWWs sharing progress of children with them only close to one-fifth of parents mentioned the usage of assessment cards. The others shared that the progress of children was discussed during meetings or home visits but did not talk about assessment cards.

Close to half of the AWWs (47.79 percent) indicated that they were provided guidance and support by the lady supervisors once a month. The frequency of visits by LSs varied from district to district and block to block. It also varied at the individual level. Some of the LSs reported that they visited an Anganwadi at least once a month while others were able to visit an Anganwadi once in 3 months. LSs reported that they were overburdened with a lot of additional

responsibilities which restricted their visits to the Anganwadis. Geographical barrier was another reason that affected their frequency of visits to Anganwadis.

In order to supervise and monitor the AWWs, LSs took various measures. LSs personally visited Anganwadis in order to monitor their functioning. During the visits, LSs informed the AWWs about the new schemes launched by the government, observed the activities conducted in the Anganwadis, checked/ verified records and registers, shared good practices observed in the Anganwadis and enquired about the difficulties faced by the AWWs in performing their role and responsibilities. LSs also visited children's homes to meet parents in order to get the feedback regarding activities conducted in the Anganwadis. During the visits, LSs made use of an observation tool that served as a guide to plan what all should be observed in the Anganwadis. This tool termed as 'Advance Tool Plan', was a format developed by the PMU and was also used by the LSs for conducting monitoring visit to the Anganwadis.

7.5 Transaction of Quality ECE with MTELP+ Focus

Various parameters of a quality ECE Anganwadi were measured, namely, ''Child friendly environment', 'Curriculum transaction', 'Teacher child interactions' and 'Safety of children'. The results from observations informed that majority of Anganwadis were performing good or average on the four quality dimensions. The districts Sambalpur, for 'Child friendly environment', Sundergarh for 'Curriculum transaction' and Malkangiri for 'Teacher child interactions' and 'Safety'were computed to be performing significantly well.

Observations at Anganwadis provided meaningful insights to the shifts seen in transaction of curriculum. Transaction of activities utilizing play way approach and encouraging children to be active learners set a stage for vibrant centres for children in Odisha. While rhymes and songs continued to be a popular activity in most of the Anganwadis, it was heartening to see an increase in activities like storytelling, free or guided conversations, contextual activities and pre-reading activities. Storytelling using books was a welcome activity; however, a need to provide inviting and well-illustrated story books will be appreciated. The field investigators shared their observations on limited availability of appropriate and child-friendly story books. Further, the organization of activities like story telling by children, coloring and drawing, role play/ dramatization, indoor games, clay/ sand play was observed in less proportion of Anganwadis.

AWWs usage of language, children's usage of language and AWWs usage of language when responding to children all inform the presence of multilingual environment available to children. The usage of both Odia and mother tongue was observed in most of Anganwadis. Further attempts were made to understand the relationship between the quality dimensions of ECE and usage of language. The mean plots revealed that 'Child friendly environment' was better where AWWs were using mother tongue and Odia language across all the districts whereas 'Curriculum transaction' and 'Classroom process' (teacher-child interaction) were better where AWWs were using mother tongue across all the 12 districts. On the whole, the data established the effective role of mother tongue in making a better and conducive environment for the children in Anganwadis. Use of mother tongue also facilitated AWWs' role in transacting the curriculum effectively and efficiently which positively impacted the classroom interactions between the AWWs and children. This may be attributed to effectiveness of training of AWWs on mother tongue based approach.

Attempts were also made to understand the relationship between ECE quality dimensions and medium of instruction. Findings from mean plots inform that Anganwadis where the medium of instruction was multilingual including mother tongue, performed better in terms of 'Curriculum transaction' and 'Teacher child interactions' (classroom processes) as compared to Anganwadis where medium of instruction was Odia or Hindi/English.

Interestingly the enrollment and head count data on teacher child ratio depicted the significance of favorable ratios. Correlations were computed between enrollment rate and quality provisions of ECE programme to capture the relationship between the variables and findings inform that favorable teacher child ratio is a predicter of good quality ECE programme.

Observations of Anganwadis informed availability of organized child friendly spaces. The presence and utilization of Activity Centres/corners in more than half Anganwadis was a delight to the eyes. However, the next shift to be observed could be developing the activity corners theme wise. The TLMs were systematically arranged and accessible to children. However, the observations inform that good quality and quantity of PSE kit (TLM) was available in less than half (41.37 percent) of Anganwadis observed. The wall decorations were contextual, appropriate, colorful and placed at eye level of children in more than half of Anganwadis. Materials prepared

by children were in display in less than half of Anganwadis. The display of children's work was missing/ average in two-third of Anganwadis.

Observations inform that on day of observation in majority of Anganwadis it was the AWW who was transacting the curriculum. However, it is explicit that there are many occasions where the helpers organize or provide custodial care for children in absence of AWW. Again in majority of Anganwadis the children were seated in circles/ semicircles. The presence of a time-table, number of children participating in activities, planning of activities, transition from one activity to other, children selecting activities of their choice was visible in close to half of Anganwadis.

Observations of activities conducted at Anganwadis revealed the dynamic shifts from common activities like rhymes and songs that are considered to be rich, engaging, interactive activities to high order thinking and exploratory activities. These activities showcase the increased capacities of ICDS functionaries specifically AWWs and LSs to provide children with a range of exposure. The presence of a multilingual environment with usage of mother tongue of children had increased the participation levels of children. An effort to create an environment, conducive for discussion and participation of children was encouraged. In close to half of Anganwadis, the AWWs would encourage children to ask questions and provide positive reinforcement to children. The observations revealed that the children were engaged in early learning activities for good duration. The multilingual approach with a focus on mother tongue had strengthened AWWs skills to engage children effectively in early learning activities. Activities like early literacy to support children become school ready were visible in one-third of Anganwadis. Activities like transaction of early numeracy and writing were seen in less proportion.

The availability and usage of TLM does show the inadequacy in the TLM available at the Anganwadis and in many instances if is available it is not used by the AWWs.

The evaluation laid specific focus on relationship between training and quality ECCE provisions. Findings revealed that trained AWWs were able to run Anganwadis effectively as compared to AWWs who did not receive training. All components of quality ECE programme namely, 'Child friendly environment', 'Curriculum transaction', 'Teacher child interactions', medium of instruction, availability & utilization of TLMs were significantly associated with training of AWWs.

Recommendation # 2: Strengthening of Existing Government Training Modules for ICDS Functionaries

- Existing training modules and curriculum need to be reviewed for inclusion of important topics. The modules developed and utilized for the MTELP+ programme are tested and validated. The specific components can be utilized to strengthen the existing training modules for ICDS functionaries.
- Existing training modules on job course and refresher trainings need to be strengthened on aspects like ECCE, mother tongue based multilingual education, early learning and brain development. The component on Parental engagement needs to be strengthened in the Modules developed in MTELP+ programme and once tested should be incorporated in the Government training modules.

Recommendation # 3: Continuous and Regular Refresher Training

Given the AWWs are selected from community which ensures that they know the mother tongue and can transact the curriculum in mother tongue implies that majority of AWWs will have low education qualifications (nearly three-fourth of the AWWs had barely managed secondary school or even less). Hence, to ensure a quality ECE programme, systematic, regular trainings, refresher trainings and follow up sessions will be essential. Similar recommendations were received from experts.

In addition to the first training, trainings need to be provided in a recurrent fashion so that first, basics are clear to the trainees and then they proceed towards attaining in-depth understanding about philosophies, content and methods of ECCE. Any training planned by government, government partners or sponsorship should not be a one-time event and ought to be organized recurrently (Expert feedback and recommendations).

Some of the future trainings can include capacity building on:

- Orient the trained ICDS functionaries to further pass on skills and knowledge to their counterparts (service providers) in other tribal dominated blocks.
- Strengthen skills of Supervisors and CDPOs on training, mentoring and supportive supervision.

- Strengthen skills for domain specific activities (organization and planning of new and innovative activities on indoor play, clay and sand activities, colouring/ craft work and higher order learning like sequencing, seriation. Building capacities and skills on early numeracy and early writing can be re-visited as it is one area which is relatively new and complex for the AWWs to assimilate.
- Build on skills for Organization and Planning (Anganwadi environment, display of charts, display of children's materials, prior planning of activities and TLM to be used for planned activity).
- Encourage AWWs to make a shift from teacher directed activities to children initiated activities where children are active agents and receive opportunities to construct knowledge as per their interests, promoting interactions between AWWs and children (encouraging children to choose among activities, ask questions, positive reinforcement).
- Augment skills for assessment of children to improve and reflect on teaching learning and transaction processes.

Recommendation # 4: Feedback from Experts on Training Modules

- An exposure visit to a typical Anganwadi should be scheduled just after the icebreaking session, on the first day or on third day. Also, reflection and discussion session should follow the exposure visit to Anganwadis. These illustrative examples from field will lead to discussions and can make excellent 'discussion points' for introducing apt and conducive ECE classroom practices and eliminating inapt existing practices. This would allow participants to understand the objectives and relevance of the trainings and would further allow them to develop realistic expectations (Expert feedback and recommendations).
- A transformational approach is recommended. This includes a series of trainings each with a limited objective as part of the series, to bring more effectiveness and depth into the training. The duration of training needs to be extended. This would ensure that Master Trainers gain sound understanding and hands-on skills on ECCE, to be effective trainers. This needs to be institutionalized at the level of the DWCD of the state as a mandatory requirement. Both CDPOs and Supervisors may be made to discharge their role of

supportive supervision. A District officer may be assigned the responsibility to oversee its implementation (Expert feedback and recommendations).

- The focus on mother tongue was quite diluted across modules. Specific recommendations on how use of various mother tongues during day to-day transactions with children, was found to be missing (Expert feedback and recommendations). The ICDS functionaries need to be trained on interactive teaching methods that facilitate emergent literacy skills, thus the child friendly acquisition process of early reading and writing skills utilizing the mother tongue based early learning approach.
- After each section of the module, incorporating short assignments would assist in gauging whether the trainees were able to absorb various concepts (Expert feedback and recommendations).
- Dimension of 'time management' was addressed in a limited fashion. The skill of time management will enable the LSs and AWWs to devote quality timing to ECE, besides delivering other five services of ICDS. Therefore, time management skills have to be incorporated in all the trainings (Expert feedback and recommendations).

Recommendation # 5: Exploring Strategies to Address Anganwadis with Multiple Mother Tongue

- Exploring strategies to address the challenges of Anganwadis having children with more than one mother tongue is warranted. The MTELP+ intervention focused on monolingual Anganwadis, however there are many Anganwadis where children with multiple mother tongue exist. One of the strategies, where the AWWs can speak one tribal language and a helper speaks another tribal language can be employed. Another option could be to engage volunteers from community (parents, adolescent girls or boys) who are willing to take turns to participate and support the Anganwadis. This will ensure the language diversity in Anganwadis, create a true multilingual environment and ascertain that all the children enrolled in the Anganwadis get to hear and are able to communicate in their mother tongue.
- Introduction to a second language and the process of introduction of second language needs to be incorporated and added to training component.

Recommendation # 6: Training to Reach the Last Mile of Anganwadis: The Helpers

- In addition to training of AWWs, trainings need to be planned and organized for Anganwadi Helpers. While the Baseline did consider the option for exploring the needs of helpers, they were not included in the MTELP+ training. Many alternate models have included training of helpers to support the ECE services of Anganwadis and have shown promising results. On many occasions it is observed that the AWWs are assigned administrative duties, they have to attend sector, district meetings. The helpers can be trained with skills to equip them conduct basic activities (story-telling, indoor games, guided conversations) with children rather than having no activity during the absence of AWWs.

Recommendation # 7: Supporting the Development of Developmentally Appropriate and Contextual TLM

- The availability and utilization of TLMs brings joy, curiosity and a medium to explore for children. The Anganwadis need to be provided with adequate materials to ensure that the children are able to engage in activity based learning. While procuring the TLM from the market one should be mindful and identify and select contextual TLM. A checklist or guidance can be provided for appropriate selection of TLM. In addition more and more trainings to develop innovative materials should be organized. While developing materials engaging with parents and community will be beneficial and it should be an integral component for the future trainings.
- Developing TLMs in mother tongue and ensuring a print rich environment fostering Early Literacy and Numeracy is important. Along with this designing, printing story books for children that are age and contextually appropriate, will provide a boost to children's learning.
    - Training and workshops can be organized for the AWWs, parents and community to come together and create contextual story books for children. These initiatives will be reflective of the context and will be a step towards sustaining the culture. A mix of picture books and story books with one line text and an increase in order of complexity can be developed. This will not intimidate the parents who may be illiterate and can effectively conduct story sessions using pictures.

- Creating libraries or mobile libraries in Anganwadis will facilitate access to self created, colourful and inviting story books for children. It will be further helpful if parents get opportunities to issue the books from library, take them home and organize story telling sessions with their children.

7.6 Focus on Mentoring, Handholding and Supportive Supervision

The MTELP+ programme showcased the important role of supportive supervision and this was a commendable effort. The review of literature informs that while a number of policy documents have emphasized the benefits of regular mentoring and supported supervision, opportunities for promoting mentoring and supervision in field are largely limited or go missing. Barely a couple of funded projects have implemented interventions for mentoring and supervision and the positive impact is visible. As a part of MTELP+ programme visits to Anganwadis and regular sector meetings, were used to build capacities of AWWs. As reported in progress reports, specific areas of improvement to name a few were - regular celebration of ECCE days, creative games being transacted for children like playing with mud/ sand, using sticks and beads for counting, nature walk and free play. Some of these activities were captured during data collection. Joint visits of DCs with LSs and CDPOs on monthly basis facilitated continuous capacity building and handholding with an increased efficiency for ECCE monitoring. The MTELP+ programme was successful in converging efforts of the various stakeholders to provide mentoring and supportive supervision, in form of periodic review meetings, to AWWs, Supervisors and CDPOs. These opportunities of handholding and support not only improved capabilities of AWWs to deliver but also improved relationship between LSs and AWWs. As noted above 'a gradual shift in content and thematic areas, was evident which included policy and framework, early literacy and numeracy and personal hygiene, importance of play and nature's walk being discussed in these platforms'. The LSs shared during interviews that they did take diverse measures in supervising and monitoring the Anganwadis, however they also shared their challenges of burdened with additional load of monitoring Anganwadis and administrative burden. While the data from AWW interviews inform that more than half of AWWs were receiving mentoring support in some form or the other during sector meetings, the role of DCs engaged by PMU was critical. They provided the linkages to facilitate opportunities for mentoring and handholding.

Recommendation # 8: Mentoring and Supportive Supervision need to be given Priority

- Mentoring and supportive supervision are significant aspects that need to be continued and strengthened as a good practice from MTELP+ programme.

7.7 Engagement Between ICDS Functionaries and Parents

Interviews with ICDS functionaries and parents informed that overall parental engagement had increased. Majority of parents participated/ interacted with AWWs. The parents were aware of activities being conducted at Anganwadis. Their frequency of visiting Anganwadis had increased and they met AWWs during meetings, workshops, THR distribution, or while dropping off and picking up children to and from Anganwadis. However, participation of parents on ECCE day needs to be encouraged. Also, the increase in spread of private schools had brought shifts in mindsets of parents. While on one hand they believed that Anganwadis were a place where children came to play. The shift in their thoughts informed that they preferred private schools over Anganwadis as these were the platforms where children learned counting and alphabets.

While the workshops with parents and communities were organized for past one year, there is a need to strenghten the platforms and reaching larger numbers. The launch of the parent modules with focus on children in age group of 0-3 years is a commendable effort to reach out to parents with fidelity. However it needs to be made sure that these modules get translated into awareness generation programmes/ workshops for parents and community. The importance of parental involvement, the ways and strategies to involve parents and build their awareness is discussed in the Section 1, review of literature.

Recommendation # 9: Awareness Generation for Parents and their Continuous Engagement

The commitment from MWCD, GOO to ensure quality ECCE in Anganwadis is laudable as they acknowledge the importance to sensitize parents and community to ensure the children receive adequate nutrition and early stimulation. These efforts will provide positive stimulating experiences to the children, and hence promote optimal brain development. The government also affirms the encouragement of parents and community to partner in ECCE activities and preparing TLM.

While the MTELP+ programme made significant progress in majority of its activities, the efforts to make Parents+ programme robust continue. Given the low literacy levels of parents, it will be valuable and important to continue building relationships with parents and community. The recently launched Parents+ module for strengthening the component of parent engagement for ICDS functionaries, specifically the AWWs with a focus on children in age group of 0-3 years are commendable efforts by the MWCD, GOO and BvLF to ensure fidelity of parental involvement. The parents+ modules developed for AWWs along with the proposed trainings will strengthen the parents+ component and thus sensitize parents towards mother tongue based early learning. Generating awareness and involving them as worthy contributors to the Anganwadis will require further committed and sustained efforts. These ongoing efforts necessitate a comprehensive evaluation at the end of MTELP+ implementation. The good practices that emerge from these interventions will provide valuable evidence for the ECCE fraternity.

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