

**Empowering Future Generations: Early Childhood Education for Sustainable Development in India - Challenges, Opportunities, and Way Forward**

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**Abstract**

Education for sustainable development is ideal for the next-generation educational system. The whole world is currently experiencing serious environmental devastation. To prevent this, human beings should develop and adopt some necessary practices that can help to maintain sustainability. This study aims to highlight early childhood education's significance for sustainable development in India. An exploratory methodology was employed in the study to review previous research on this field that has been done both in India and abroad. The New Education Policy (2020) of India strongly emphasises Early Childhood Education (ECE) and Sustainable Development. The Indian government has implemented many educational initiatives to foster ECE and Sustainable Development. The article also covers how Early Childhood Education (ECE) can help Indian children maintain sustainability. The paper also shows that, despite the growing importance of early childhood education, several issues have persistently impacted this sector in India. In light of this, the study has made some crucial recommendations for resolving these issues and successfully implementing ECE for sustainable development in India.

**Keywords:** *Early Childhood, Education, Foundational Stage, Pre-primary Education, Sustainable Development*

**Introduction:** Education is one of the most significant means through which it is possible to build a sustainable society in India because education helps to increase awareness, energy and sustainable practices among people. Through effective education, various forms of bias, conflict and discrimination are eliminated from society. Regardless of caste, religion, and other factors education plays a tremendous role in preserving equality throughout all segments of society.

The concept of “Sustainable Development” was first internationally conceded in 1972 by the UN Conference on the Human Environment held in Stockholm (Mensah, 2019). Sustainable Development Goals, which replaced the Millennium Development Goals (MDGs), were endorsed by the United Nations in 2015 (Akinsemolu & Ogunkoya, 2021). "Sustainable Development" describes the wise use of natural, human, financial, and social resources to fulfil present-day needs without compromising the requirements of succeeding generations. Sustainable development has been a top priority in the modern Indian discourse due to the country's rapid population increase, environmental deterioration, and rising demand. To attain socio-economic growth and ecological preservation in the Indian setting, sustainable development is essential.

Early childhood is one of the crucial stages of development. It is a stage of brain development where the child is formally and informally supported to realise his or her maximum potential and develop holistically. A child's foundational learning starts in early childhood. ECE plays a crucial role in preparing children in such a way that they can effectively face all the present and future challenges in building a sustainable society. ECE for Sustainable Development refers to the education that helps early children live healthily and happily in the present and prepares them for a sustainable future by teaching them about the interdependence of everything on Earth. Therefore, it is important to give great importance to ECE to encourage sustainable development in India.

### **Education for Sustainable Development (ESD):**

The term "Education for Sustainable Development" refers to the kind of education that enables people to learn about the environment, society, economy, etc and use their knowledge to preserve sustainability on Earth. UNESCO defined “ESD is holistic and transformational education that addresses learning content and outcomes, pedagogy and learning environment.” (UNESCO, 2017).

The Sustainable Development Goals (SDGs) specifically recognise ESD because it is essential for accomplishing the 17 SDGs. ECE aims to address a child's physical, mental, and socioeconomic requirements comprehensively to lay a strong foundation for long-term learning and overall well-being (Akinsemolu & Ogunkoya, 2021).

Education for Sustainable Development plays a very important role in shaping values, behaviour and lifestyle that are conducive to achieving sustainable developmental goals. ESD is crucial in ameliorating sustainable development of the environment, society and economy.

**The Linkage between Sustainable Development and Education:** A sustainable future depends on the quality and kind of education that supports sustainable development. Education and sustainability are intimately related. By increasing awareness, developing analytical thinking and troubleshooting abilities, and promoting morality and responsibility, education supports building a more sustainable world. There are several connections between education and sustainability, including:

- **Education raises sustainability literacy and awareness:** Education encourages the advancement of one's knowledge and abilities about sustainability and environmental consciousness. It contributes to raising awareness of the adverse consequences of excessive greenhouse gas emissions, the destruction of biodiversity, the overuse of plastic bags, etc.
- **Education stimulates sustainable behaviour:** A true education promotes the knowledge and behaviours necessary to build a sustainable world, such as reducing the level of greenhouse gas emissions and the use of plastic consumption, preserving biodiversity, and conserving natural resources etc. Which contributes to favourable environmental outcomes.
- **Education supports sustainable development:** Education supports environmental protection and conservation, advances social equity, and stimulates economic sustainability by cultivating sustainable behaviour and awareness. Thus, it may be concluded that education is an effective weapon that advances both national prosperity and sustainable development.

**Objectives:**

- To know the vision of the NEP 2020 of India for Sustainable Development.
- To discuss some initiatives taken by the Government of India to promote ECE and sustainable development.
- To describe the relevance of early childhood education for Sustainable Development in India.

- To describe the contribution of ECE in developing sustainable behaviour among young children in India.
- To know the challenges involved in ECE for promoting sustainability in India.
- To suggest measures for overcoming challenges and effectively implementing early childhood education for sustainable development in India.

**Methodology:** The researcher conducted a literature review to get background data and pinpoint pertinent concerns about this study. The necessary data was gathered from a variety of secondary sources, including books, journals, websites, peer-reviewed publications, and articles. The analytical method was employed in this investigation.

#### **Vision of India's New Education Policy (2020) for Early Childhood Education and Sustainable Development:**

The Indian government introduced its first National Policy of Education (NEP) of the 21<sup>st</sup> century in 2020, which strongly emphasizes the importance of ECE for young children of India. The 4<sup>th</sup> goal of Sustainable Development is to provide an equitable and good quality education for everyone. The 4<sup>th</sup> goal of Sustainable Development has 10 targets. Among the 10 targets, 2<sup>nd</sup> target includes introducing universal pre-primary education for the proper development of every child in the early childhood stage. For maximum achievement of this goal, NEP has focused on the development of education through structural changes and development in all education sectors in India. The NEP 2020 has specifically taken into consideration the requirement to create sustainable growth in India to meet the predetermined goals and targets within the allotted time frame. For sustainable development, NEP 2020 emphasises environmental education, integrating environmental education into school curriculum and increasing environmental awareness, such as sanitation, water and energy conservation measures.

According to NEP 2020, the current education structure is recommended to be 5+3+3+4. These consist of four years of the Secondary stage, three years of the Middle stage, three years of the Preparatory stage, and five years of the Foundational stage. This Foundational level includes early childhood care and education (National Education Policy, 2020). NEP 2020 therefore emphasises imparting environmental education for sustainable development. For this, NEP 2020 recommends training teachers to be environmentally sensitive, especially

through sustainable development education, to develop young children to be environmentally aware and sensitive.

A significant area of attention both domestically and globally has been education for sustainable development, or ESD. Considering how recently NEP was adopted, more work must be done before the policy is fully and successfully implemented. Up until that point, the country can continue to adopt and use best practices, work to integrate ESD components and all ECE-supportive suggestions of NEP into curriculum methods, and take steps to ensure that these components are taught in all Indian educational institutions (Choudhary, 2022).

**Initiatives taken by the Government of India to promote ECE and Sustainable Development:**

The seeds of how a person will behave in the future are embedded in the child in childhood. Even if a child lives in a remote area, provisions should be made to ensure that the child gets food, sports and education. Because the physical, mental and intellectual advancement of the child is essential to become a good citizen of the country in the future. India has taken some policies, initiatives or schemes to promote Early Childhood Education and Sustainable Development. These are: National Policy on Children (1974), Integrated Child Development Services (ICDS 1975) Scheme, National Education Policy (1986), National Policy on Early Childhood Care and Education (2013), Swachh Bharat Swachh Vidyalaya (2014), Swastha-Sabal Bharat (2017), Samagra Shiksha (2018), Swachh Bharat- Swasth Bharat (2019), National Education Policy (2020), Nipun Bharat (2021), Vidya Pravesh Scheme (2021), Sashakt Bharat- Sabal Bharat, Samagra Bharat- Saksham Bharat, Satat Bharat- Sanatan Bharat, Sampanna Bharat- Samridh Bharat, National Framework for Early Childhood Stimulation for Children from Birth to Three Years (2024), etc.

**Relevance of ECE for Sustainable Development in India:** ECE for sustainability includes making young children understand the value of resource conservation, waste reduction, environmental protection, and the advancement of a just and healthy community. This is crucial because the world of our next generation of children will be greatly impacted by the decisions made in the present. Teaching children about sustainability at a young age helps them understand their role in building a sustainable future. Additionally, it encourages responsible citizenship and teaches kids how to make thoughtful decisions regarding their health and the environment. We can contribute to the development of a generation of

environmentally conscious people who are dedicated to changing the world by teaching young children about sustainability.

Children who get early sustainability education are better able to understand their role in creating a sustainable environment. It also teaches children how to make sensible choices about their environment and personal health, which promotes social responsibility. Teaching young children about sustainability can help children become aware of their environment and motivate them to contribute positively to protect the environment. If the United Nations SDGs are to be attained by 2030, India must ensure that every child receives early childhood education.

### **How ECE can contribute to the development of sustainable behaviour among young children in India:**

A fundamental right of every child is early childhood education. The influence of family, community, institution, and environment shapes the present child into the future adult. They influence their family, community, and environment again in the future. Every child has so much potential. But the harmful influence of society has a bad effect on the child's immune system, brain, social relations, and daily activities. This results in increased negative outcomes in adulthood and the child becomes a detriment to society in the future. It also increases the risk of violence and crime. Again, if the family, society, and environment positively affect the child's brain, immune system, and gene expression, the child becomes healthy, normal, educated and employed as well as the risk of violence and crime is reduced. Multilevel ECE is therefore essential for prolonged peace and sustainable development in society. Children's parents, teachers and school authorities can provide early education through the following ways so that children can learn sustainable behaviour: -

- **Role modelling and family engagement:** Most of the behaviour is learned by children through imitating their parents, teachers and elders. Therefore, parents and teachers can act as role models to demonstrate and maintain sustainable behaviour such as not littering everywhere, using reusable bags, not wasting water and electricity, not cutting trees unnecessarily, not hurting any animals and birds etc. so that children can also learn those behaviours. Engaging families in environment-friendly endeavours can also have a profound effect because children are enthusiastic to learn their acquired habits and knowledge from their loved ones.



- **Playing and exploring:** Children should be familiarised with the environment and explore all living things that exist in the environment by playing with them. Play is the cornerstone of early childhood education. Therefore, children should be taught through play to develop sustainable behaviour among them.
- **Learning and connecting with nature through nature study:** A sensation of pleasure and admiration can be sparked through spending time outside and experiencing the beauty of nature. Children can learn how all living things are interconnected through activities like excursions, caring for a little garden, planting, or enjoying nature walks. This experience helps children to understand how human actions might affect ecosystems and its sustainability.
- **Encouraging critical thinking:** Young children have a natural curiosity for everything and are always asking questions about it. This curiosity can promote critical thinking abilities. One way to encourage their problem-solving skills is to tell real-life environmental problems and pose open-ended questions about how they would handle those environmental issues. Through these activities, children are not only encouraged to think creatively but also feel like they have a voice in solving environmental issues.

**Challenges Involved in ECE for Promoting Sustainable Development in India:** In the present scenario, the importance of ECE has increased in India's sustainable development, but some factors continuously affect the effective implementation of ECE to a greater extent. These include:

- ❖ **Lack of public awareness and understanding:** People in India, including the general public, educators, parents, and students, are not aware and well-informed on sustainable development. This hinders the expansion of ECE, which is vital for sustainable development in India.
- ❖ **Inadequate infrastructure:** The majority of India's preschools and kindergartens lack the tools and resources needed to properly teach the principles of sustainable development. This includes having insufficient playgrounds, classroom spaces, instructional resources, etc. These adversely affect India's ECE system for sustainable development.

- ❖ **Insufficient funding:** ESD demands substantial resources for programme creation and implementation but the sector of ECE in India is insufficiently funded. Therefore, initiatives for sustainable development in ECE are difficult to implement.
- ❖ **Limited teachers' training:** Through ECE, teachers play a significant role in building a sustainable society in India. However, many ECE teachers lack the proper training and expertise required to educate children about sustainability in India.
- ❖ **Student-teacher ratio:** A major obstacle in ECE is the imbalanced student-teacher ratio; in most early childhood education centres, there are fewer teachers than there are children. This makes it difficult to provide each child with the equal attention they need. As a result, it becomes difficult to achieve sustainable development through early childhood education.
- ❖ **Institutional barriers:** Due to institutional hurdles such as the location of ECE centres, conventional child-rearing techniques, a lack of communication between teachers and parents, etc early learning is not always available to all children.
- ❖ **Socio-economic disparities:** India has large socioeconomic disparities that make it difficult for some children to receive ECE for sustainable development. It is not easy to enhance sustainable development in India because many children from disadvantaged families lack access to high-quality early childhood education.
- ❖ **Focus on traditional education and methods:** India's educational institutions place a strong emphasis on didactic approaches or classical teaching techniques. Early childhood educators use reading, lecturing, or other presentation methods to instruct young students. Within the early childhood education curriculum, there is little scope for environmental education, nature studies, field trips, and other activities. Because of this, early childhood education in India faces difficulties in advancing sustainable development.
- ❖ **Resistance to change:** People who are involved in early childhood education policymakers, educators, parents, the community, and child caregivers are resistant to change because they are used to conventional educational methods.

**Suggestions to overcome challenges and educational planning for effective implementation of Early Childhood Education for Sustainable Development in India:**

The following are some suggestions to overcome the problems arising in the field of the



effective rollout of ECE and to ensure Sustainable development of India through early childhood education:

- ❖ **Increase public awareness and promote understanding:** Education can educate and sensitize common people, society, parents and children of India about sustainable development. Therefore, early childhood education should educate children, parents and society about sustainability and help them understand the relationship between education and sustainable development.
- ❖ **Provision of sufficient infrastructure:** The Indian government should arrange sufficient infrastructure in early childhood education which includes ventilated classrooms, playgrounds, teaching materials etc.
- ❖ **Allocate sufficient funding:** The creation and execution of programmes about education for sustainable development necessitate substantial investment. Thus, it's crucial to provide early childhood education programmes with adequate funds for sustainable development projects.
- ❖ **Strengthen teachers' training and professional development:** A significant part of advancing sustainable development in India is played by teachers. Therefore, it is important to provide teachers with the proper training and necessary skills they need to teach young children how to contribute to creating a sustainable India.
- ❖ **Integrate sustainable developmental concepts into the ECCE curriculum:** The Government shall take appropriate measures to link the concept of sustainable development into the curriculum of early childhood children and include subjects in the curriculum that will help to develop a proper understanding of sustainable development in young children.
- ❖ **Encourage stakeholders' involvement and active engagement in the ECCE programme:** The curriculum expert must consider the involvement of stakeholders and the local context. Parents, community members, and other early childhood education stakeholders should be included in the meetings and lesson planning of the early childhood education centre. A special emphasis should be placed on how early childhood education stakeholders can participate in preschool activities and support India's sustainable development.
- ❖ **Foster collaboration and partnership:** The private sector, the government and the pertinent stakeholders must work closely together to adopt sustainable practices in

early childhood education. This will make financial support and resource management relatively easier to deal with.

- ❖ **Technology integration:** Technological facilities should be included in early childhood education. Teachers can use technology in his/her teaching to impart knowledge about the environment, introducing children to various animals, birds, plants, mountains, rivers etc and making the child realize their importance in making sustainable India.
- ❖ **Regular monitoring and evaluation:** Regular monitoring and evaluation are needed to see if children are receiving appropriate ECE and how sustainable development is being promoted in India through early childhood education.
- ❖ **Implementation of various educational initiatives:** The Indian government should introduce various types of educational schemes and initiatives related to early childhood education and sustainable development and make appropriate arrangements for the implementation of these in India.

**Conclusion:** According to UNESCO (2015) “Education can, and must, contribute to a new vision of sustainable global development”. ESD is a valuable component of curricula for early childhood education (ECE) because it develops young children's ability to solve problems and deal with both current and future challenges. Implementing this strategy in both formal and informal learning environments will improve our children's sustainability in the future. Therefore, to effectively promote early childhood education for sustainable development in India, parents, educators, legislators, and community members must work together. Each of these stakeholders plays a vital role in supporting the advancement of young children and fostering sustainable development. By encouraging Early Childhood Education India can develop an equitable, inclusive and sustainable society. Therefore, proper arrangement of ECE should be prioritised by the government to create a sustainable and prosperous India in the future.

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