

Environment Awareness in Anganwadis

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The climate crisis is making it increasingly important to make children environmentally conscious and to teach them about sustainability from an early age. Developing an ecologically empathetic attitude towards the environment by imbibing the habit of taking care of and protecting the environment around has become a part of education.

The National Initiative for Proficiency in Reading with Understanding and Numeracy, better known as *NIPUN Bharat*, a national mission on foundational literacy and numeracy, categorises learning outcomes for foundational learning into three development goals. The third goal is, 'Children become involved learners and connect with their immediate environment.' In *anganwadi* centres, this connection is established through various themes, such as plants and trees, animals, 'air, water and surroundings', fruits, vegetables, flowers and birds.

Early childhood education plays a crucial role in a child's overall development process. *Anganwadi* centres across the country serve as public preschools with *anganwadi* teachers taking care of not just pre-school children's nutritional needs but also their psychological, physical and social development. Children in their early years can connect easily with their immediate environment.

So, through various activities, like nature walks, field visits etc., *anganwadi* teachers create opportunities through which children are able to observe and explore local habitats and a foundation for greater environmental awareness is laid.

Theme-based curriculum

Many states have implemented a developmentally-appropriate curricula based on a thematic approach for early years. The themes are chosen based on children's interests, culture and environment. Since the thematic content is integrated with their lives, it helps children to understand it better. Of the 14 themes in the Telangana state ECE curriculum, nine are related to the environment. Conversation, stories, songs, play and games revolve around a particular theme in the *anganwadi* centre reinforcing the learning and, thus, ensuring that children retain the learning. Children learn by asking questions and exploring the world around them.

The teacher has the flexibility to modify the content of a theme to suit their local context and make it more relevant for the children in her *anganwadi*, for example, substituting local fruits, vegetables, trees and animals that children see and know in place of others that they may not. A child in the north will not know *gongura* leaves which may

Developmental Goal 3

Children become involved learners and connect with their immediate environment (IL)

KEY COMPETENCIES:

Sensory Development	Cognitive Skills	Concepts related to environment
<ul style="list-style-type: none">Sight, Sound, Touch, Smell, Taste	<ul style="list-style-type: none">Observation, Identification, Memory, Matching, Classification, Patterns, Sequential Thinking, Creative Thinking, Critical Thinking, Problem Solving, Reasoning, Curiosity, Experimentation, Exploration	<ul style="list-style-type: none">Natural-animals, fruits, vegetables, foodPhysical - water, air, season, sun, moon, day and nightSocial - myself, family, transport, festival, community helpers, etc.

be common for a child in Telangana. Children are also able to relate what is being taught to real-world experiences and learning built on their prior knowledge, which makes it more meaningful and interesting for them. The use of these themes also helps them to develop an awareness of the natural resources in their ecosystem.

Using these themes, teachers can actively engage smaller children in activities to introduce the concepts of sustainability and reduce-reuse-recycle for available resources. Energy and water conservation techniques, such as not wasting water and power by turning off taps, lights and fans when not in use, need to be instilled by example and reminders into habit-forming practices at the *anganwadi* centres and their homes.

Following are a few illustrations of themes around environmental awareness, how these impact young children, and what the *anganwadi* teachers do in the classroom.

Plants and trees

Many *anganwadi* centres, especially in rural areas, have trees and plants on their premises. The teacher takes the children out and helps them identify and name different plants and trees and shows them the different parts. The teacher guides them to touch parts of different plants and trees to help them feel the different textures.



Figure 1. Children exploring the texture of the bark of a tree on the *anganwadi* premises.

The teacher also asks the children to collect fallen dry leaves, twigs, seed pods and flowers in a small bag. After coming back to the centre, the teacher helps the children in sorting and grouping all the collected materials and in naming them. She also encourages them to explore what happens when they break open the seed pods.

As part of the conversation, the teacher discusses farming and how various products, such as furniture, paper, cloth and food derived from plants and trees are useful to us. The teacher also tells them about the importance of trees in giving us pure air and rain and being the home to birds, insects and animals, thus, emphasising the need to protect them.

Animals

Children are fascinated by animals that form a part of their world –they have pets at home, observe them in their surroundings, or see their pictures in books, cartoons or movies. Teachers help children recognise animals by looking at their shapes, size, colours and habitats and emphasise the importance of being gentle and caring to animals in their surroundings. Children enjoy imitating animal sounds. Teachers use flashcards and books to introduce wild animals, where they live, how they move and what they eat. Activities based on animals provide children with the opportunity to discuss how animals are useful and help us. Children who grow up with pets and domestic animals around them, learn to love and be empathic towards animals.

Air, water, surroundings

Children, like scientists, are naturally curious about their surroundings. They observe how things work and try to imagine why things happen as they do. The more opportunities the teacher provides, the better the children will understand and develop sensitivity to their surroundings. The teacher points to the clean and filthy areas when she takes them on a nature walk in the surroundings and discusses the importance of cleanliness in their homes, in the centre and outside.

Involving children in cleaning up the neighbourhood by picking up plastic bags and bottles creates awareness among children and through them to their families and community about keeping their surroundings clean.

When transacting the theme of water, the teacher initiates the conversation by asking the children to name all the things that they use water for and highlighting the importance of water. When washing hands before lunch, the teacher reiterates the fact that they should not waste it. The water from the hand-washing is directed to the kitchen garden, thus, reusing it. These practices help children be mindful of the conservation of naturally available resources from a very young age.

Activities that instil sensitivity towards environment

Action songs and stories

Children get early exposure to the environment from the stories their elders tell them, which usually have animals as main characters. The *anganwadi* teacher builds on this by using songs and stories as a predominant way of teaching in the early years. Children learn the different characteristics and behaviours of animals, their habitats and food habits which increases their curiosity to explore the natural world further.

Nature walks and field visits

Depending on the theme, the teacher takes the children to visit nearby farms, cattle sheds, parks etc. to give them hands-on experience on a specific topic that the teacher is transacting at the time. For instance, rather than the teacher discussing different stages of growth of a plant from a seed, the children learn naturally by visiting a farm nearby

and seeing how grains or vegetables are grown by farmers. Children also learn from interacting with their community elders during field trips. Teachers instruct children not to pluck flowers or leaves from plants, not to throw stones at animals etc. before a nature walk which adds to their environmental awareness and sensitivity.

Nature walks instil a sense of wonder in children, feeding their curiosity and giving rise to many investigative questions that they ask their teacher. Hence, nature walks provide many opportunities for them to learn something new. Children also see plants and trees of different shapes and sizes, which makes them appreciate the diversity in nature.

Looking out for things during a nature walk encourages children to observe with all their senses. Observing animals in their natural settings and seeing the beauty of nature helps them appreciate the natural world and also creates an opportunity for joyful learning experiences.

PRESCHOOL 1	PRESCHOOL 2	PRESCHOOL 3 (BALVATIKA)
IL1.1 Uses all senses to observe and explore the environment	IL2.1 Uses five senses to observe and explore the environment	IL3.1 Uses all senses to observe and explore the environment
IL1.2 Identifies and names common objects, sounds, people, pictures, animals, birds, events, etc.	IL2.2 Describes common objects, sounds, people, pictures, animals, birds, events, etc.	IL3.2 Notices and describes finer details of common objects, sounds, people, pictures, animals, birds in the immediate environment.

Figure 2. Nature walk helps in achieving many of these learning outcomes.

*IL: Involved Learner



Figure 3: Children observing goats during the nature walk.



Figure 4: Teacher explaining the different parts of a plant during a nature walk to a garden in a nearby house. Children touch and feel the plants.

Kitchen garden

As part of the *Poshan Abhiyan* initiative, the Women and Child Welfare Department has been encouraging *anganwadi* centres to have kitchen gardens in which vegetable and fruit-bearing trees are planted on the premises. Children learn best when they do things themselves. Involving children in creating a kitchen garden helps them in nurturing plants, taking responsibility and caring for them.

The teacher conducts an activity to make children understand how a plant grows. She tells the children that they are each a small seed in the ground. Each one is asked to curl themselves up like a ball. She then says that it is raining followed by the sun shining. Every time she tells it is raining the children are told to move a bit and slowly uncurl themselves. She then asks the children to raise their heads saying that the seed is beginning

to grow, and they are now a small plant popping out of the ground. Then, the teachers ask them to slowly stand up indicating that the plant is growing taller and taller. Children are asked to raise their hands stretching them outwards indicating small branches. The children with closed fists are now asked to slowly open out their fingers to represent a flower blooming. Activities like these help children understand that plants too, like themselves, are alive and need to be cared for and protected.

The teacher then tells the children that they are going to plant a seed and take care of it till it grows into a big plant. She assigns a small patch of the ground to each child and asks them to loosen up the soil using a small stick. Then, each child is given a few seeds and asked to plant these in the ground and cover it up with soil. Every day, the children water their respective patches waiting for

the seed to sprout. Every week, during circle time, the children are asked how their plants are and the children share their experiences eagerly.

The teacher also plans other activities around the kitchen garden, such as asking the children to draw and colour their plants at different stages. They are encouraged to show their plants to their parents when they come for the monthly ECCE Day (parent-teacher meeting). Children are also helped in picking the vegetable from the kitchen garden and giving it to add to the mid-day meal. Children are thrilled when while having their meal, they are told that they are eating what they have grown themselves.

This experience of growing plants in a kitchen garden, watering them daily and observing them grow helps children understand the process of a plant growing and aids in cognitive development. Working in the garden helps develop their motor skills. Waiting for plants to grow instils patience and perseverance and improves concentration and

focus. Children develop a sense of responsibility and accomplishment through this process and caring for plants will gradually lead them to care for their natural environment.

Conclusion

Interacting with their natural world in the early years helps children build a connection with their surroundings. Learning from what they see daily makes it easier for them to relate to and retain what they have learnt. Talking about what they see with other children, teachers and parents helps build their social skills. When they learn the names of different plants and animals and their parts, it expands their vocabulary and enhances their language skills. This skill of observing things around them is a precursor to what they will learn more deeply about in primary classes. Creating environmental awareness and engaging children in their early years to participate in protecting the environment creates a lifelong impact.

<p>IL 1.8 b Expresses curiosity about the immediate surroundings and asks related questions</p>	<p>IL 2.8 b Expresses curiosity about the immediate surroundings and asks questions (develops related concepts)</p>	<p>IL 3.8 b Engages in investigating and manipulating objects in the environment, asks questions, inquires, discovers, and constructs own ideas and predicts</p>
<p>IL 1.8 c Demonstrates awareness and sensitivity towards environmental concerns (example - watering plants)</p>	<p>IL 2.8 c Demonstrates awareness and sensitivity towards environmental concerns (example - watering plants, not plucking flower, or do not hurt animals)</p>	<p>IL 3.8 c Demonstrates awareness and sensitivity towards environmental concerns (example - Do not waste water, switching of light when not in use, etc.)</p>

Figure 5. Activities related to the kitchen garden help children in achieving many of these learning outcomes.

*IL: Involved Learner



Figure 6: Children tending to young plants in a kitchen garden.

References

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