

# Greening of the Schools towards Sustainability: An Analysis

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## Abstract

*World is suffering from different global issues. Focusing to this, United Nations launched the Decade of Education for Sustainable Development in 2005 and even the Sustainable Development Goals (SDG) - 2015, which required the related concerns to be inculcated through school education. As per National Policy on Education 1986 and the Programme of Action -1992, environmental education has given priority in all the curriculum development programmes. It has been inculcated through curricular and co-curricular interventions. This brings the concept of 'Green Schools'. It is a school guided by the principles of environmental sustainability. It creates an environment to utilize all the resources and opportunities inside and outside the school. Teachers, students, different stakeholders must be sensitized enough and give the best effort for improving the environment of the schools and its surroundings. School must develop environmental ethics among students. The school environment should encourage, support and nurture students' growing capacities, through its green environment, curriculum and teaching-learning process. It helps to develop a sense of belongingness and sensitivity towards school and society. Beside this they also understand the importance of their own health and safety. This small study briefly discusses about the aims, importance and role of teachers in 'Greening of School', by throwing light on the 'Position Paper on National Focus Group on Habitat and Learning' (2006).*

**Key Words:** Environmental Ethics. Green School, Sustainable Development Goals.

## Introduction

The name sustainability is derived from the Latin "sustinere". Sustain can mean "maintain", "support", or "endure". Since the 1980s sustainability has been used more in the sense of human sustainability on planet earth and this has resulted in the most widely quoted definition of sustainability as a part of the concept of sustainable development, that of the Brundtland Commission of the United Nations on March 20, 1987, sustainable development is

development that meets the needs of the present without compromising the ability of future generations to meet their own needs. For this we have to focus on the important dimensions of the sustainability. This includes economy, society and environment. We call it as three pillars of sustainability in which both economy and society are constrained by environmental limits. Bringing all these concepts publicly and taking all these efforts in the global level world is suffering from different global issues. Even in the 2005 World Summit on Social Development identified sustainable development goals, such as economic development, social development and environmental protection. These three pillars are interdependent to each other. Even sustainable development talks about balancing local and global efforts to meet basic human needs without destroying or degrading the natural environment. We have to keep in mind that bringing these concepts and preparing some policies and reports have no place if the people in the society remain blind. Education is the medium through which we can make the people aware about the scenario of the world and how the world is suffering from different global issues. As a human being we must concern how to protect our world from these mal-issues. Focusing to this, United Nations launched the Decade of Education for Sustainable Development (DESD) 2005-2014. This includes education as an indispensable element for achieving sustainable development. The Decade was delivered by UNESCO as lead agency. The 4<sup>th</sup> aspect of the

Sustainable Development Goals (SDG) - 2015, clearly mentioned about quality education. It has been said that education is the key that will allow many other Sustainable Development Goals to be achieved. When people are able to get quality education they can break from the cycle of poverty. Education therefore helps to reduce inequalities and to reach gender equality. It also empowers people everywhere

### **Environmental Sustainability: It's Role in Curriculum**

As we know that environment is one of the most important pillars of the sustainability, environmental sustainability is the key concepts. Environmental sustainability is defined as responsible interaction with the environment to avoid depletion or degradation of natural resources and allow for long-term environmental quality. Keeping in mind about the importance of environment, efforts ranging from Mahatma Gandhi's Basic Education and recommendations by the Education Commission(1964-66) and National Policy on Education 1986 and the Programme of Action - 1992, emphasizing on the need of addressing and including environmental concerns at all levels of schooling. Even in the 'National Curriculum Framework for School Education' 2000 and 'National Curriculum Framework' 2005 very clearly mentioned that environmental education should be integrated in the curriculum. In view of all these aspect NCERT take the initiative at the national level to bring education for sustainable development as the core of the curriculum for each subject. The RTE Act-2009 is giving emphasis for all round development of children through education are also in line with the objective of education for sustainable development. The

to live more healthy and sustainable lives. Education is also crucial to fostering tolerance between people and contributes to more peaceful societies. In one word we can say quality education leads to the all-round development of the child. All this related concerns must be inculcated through school education and that must be from the primary level.

elementary education has been one of the priority areas of concern and many initiatives are taken up to foster quality teaching and learning that goes beyond the formal curriculum. Thus focusing to a holistic 'whole school approach' where the students experiences are not confined to the four walls of classroom but are the part of learning from both school and community. We can say it is the re-orientation of the thinking and practices of formal education-including curriculum, teaching-learning approaches, assessment and adopting sustainable principles at all levels of planning, decision-making and implementation in a school.

Presently in the NCERT curriculum, the teaching of language and mathematics has been woven around the children's immediate environment in class I – II. In class III-V separate textbooks for environmental studies have been provided. At higher school levels (upper primary to higher secondary) concerns are infused across different curricular areas, specially science and social studies. Thus it is the duty of the teacher to transact environmental education properly. Many times it is found that the project carried out by students are very mechanical and students

complete the task just by preparing one report which is evaluated by teachers by giving marks or grade. But NCF 2005 suggested that teaching- learning of the environmental aspect should go beyond the four walls of classroom and give full opportunities to the students to connect their knowledge with the real life situation the emerging issues in the surroundings.

Now we are in the stage where we are giving focus on the education for sustainable development which demands protecting the ecosystem and all its components. Therefore teaching and learning needs to take care of the **Green School**

The concept of Green School was introduced in Europe in the year 1990 while the Rio Earth Summit of 1992 took cognizance of the need to take action in “every area in which human impacts on the environment”. The World Summit on Sustainable Development (WSSD) in Johannesburg in 2002 catalyzed the efforts to bring about a shift in ‘educating about the environment’ to ‘educating for sustainability’. It was felt that there was an urgent need for everyone to be aware that as we continue to misuse and over exploit our natural resources in the interest of development, the future of humanity and our planet is at stake. This awareness can be done by enabling children to use appropriate skills to take necessary action on environmental, economic and social issues which are interconnected and need not be viewed in isolation.

### **Aspects of Green School Environment**

human resource. It should include the physical and emotional health of the children. Along with this we should concern about the environment of the entire school community and also neighborhood. We also include in our teaching learning process and make our students understand that each living being has the right to live in peaceful environment. Such education demands the schools to be a Green School that provides and make our students to understand about the optimum utilization of resources which is present in their surroundings and make them sensitive and responsive to different environmental issues.

The green school is a school guided by the principles of environmental sustainability. It seeks to create an environment to fully utilize all resources and opportunities inside and outside the school and sensitize both teachers and students for environmental sustainability through active involvement of the community. It is a continuous process and efforts should be given by all the stake-holders for improving the environment of the school and its surroundings. Thus school is not only for the development of knowledge and understanding but also create the foundation of environmental ethics among students. It is a well known fact that skills, habits, attitudes, and values are inculcated from the early years of an individual’s life. All these efforts become meaningful if we have a sense of belongingness towards the school and its surroundings.

The Green School has clean, healthy, protective and green surroundings. It also includes-

- Promotes both the physical and psychosocial health of learners and others in school.
  - Ensure a healthy that includes provision of health services such as nutritional supplementation and counseling, secondly hygienic that includes safe drinking water, neat and clean class room, play ground, emergency preparedness and disaster management, celebrating occasional festivals etc. and last is the safe learning environment with healthy good practices like a school free of drugs, corporal punishment and harassment.
  - Bring all the students closer to nature as far as possible and involves them in taking care of it.
  - Encourages respect for each other's rights, dignity and fosters equality.
  - The school does not exclude, discriminate, or stereotype on the basis of differences in caste, creed, gender, ethnicity, religion and abilities.
  - The school gives respects and responds to diversity by meeting the differing circumstances and needs of children.
  - It promotes developmentally appropriate teaching and learning processes and encourages cooperative and democratic learning.
- It brings all the stakeholders together like children, families, school management committees, village education committees etc by seeking their active involvement and ensuring their participation in different activities inside and outside the school.

Thus it can be said that to envisage such Green Schools into a reality a paradigm shift is needed. The Position Paper of Focus Group on Habitat and Learning, 2006, states that “the changes envisioned in this new paradigm involve a major shift in our thinking of education as a process which cannot be achieved by merely changing the curriculum and text books”. To meet this huge challenge this position paper recommended to initiate a new thinking in six major areas namely curriculum revision, development of locale-specific material, making effective usage of ICT, empowering teachers and making school habitat as a role model.

Even SSA aims at universalizing access to elementary education in accordance with the vision of the RTE Act. It envisaged the notion of ‘Whole School Development’ which pertains primarily to the optimum and appropriate usage of school space and resources. The principles for the Whole School Development Plan are as follows-

- Infrastructural plan to follow the educational plan.
- Child-centered planning with overall development of child (physical, social, emotional and cognitive) addressed.

- Responsive towards the needs of all children and the diversity they bring to the school.
- Developing the entire school space as resource for fun and learning activities using ideas of Building as Learning Aid.
- Maximizing the entire school as a resource- not just for children and

teachers of that school but also for the community and neighborhood schools.

- Optimum resource utilization and cost-effectiveness.
- Scope for future expansion.
- Respectful towards the local context and traditions-wisdom, social and educational needs, culture, geology, climate, flora, and fauna etc.

### Greening of Curriculum and Role of Teacher

As we are focusing to the Green School, eventually we are moving towards the 'Greening of Curriculum.' Greening the curriculum refers to the integration of environment and sustainability perspectives into the school curriculum. But misconception is there. People think of 'Green Curriculum' as 'nature studies' that supplement our educational system and limited to the activity that largely takes place outside the school. We have to keep in mind that the sustainability perspectives bring focus on the holistic nurturance of all living beings. The curriculum should naturally bring the learner closer to the world around them and appropriately respond to their socio-cultural context and emotional needs.

The characteristics of the 'Green Curriculum' are as follows:

- I. **It addresses environmental concerns holistically:** Environment is all encompassing, multidisciplinary and dynamic. It has scientific, social, economic, political and technological

dimensions. It is important that children visualize holistically, instead of viewing different aspects separately. It is also very important to connect the themes, topics and concepts properly within and across stages in a particular subject. It also holistically address the concerns like protection and conservation of natural resources, traditions, culture and heritage, safety and security, both physical and emotional assurance, health and sanitation issues, concern for equality and justice and interconnection between natural, social, physical and cultural environment. Here the teacher acts as facilitator where they provide time and space to the learners, where they can able to explore and discover the different facets of environment. Even with the enforcement of the RTE Act 2009, it is also important to introduce the educational practices that cater to the constitutional values which develop an overall personality of a child by



nurturing her physical and mental abilities to the fullest extent in a fear and anxiety free environment.

- II. **It is Process-Oriented:** It helps to structure and organize learning experience for children to explore, understand and experience their environment, through which they construct their knowledge, which would lead to development of attitudes, values and habits that would last for life and inspire positive action.
- III. **It connects to life outside the school:** The process of constructing the knowledge is a continuous one. It goes on throughout life and well beyond the formal schooling period. Learning is gained not only from transmission of information, but primarily by interactions with the environment around- nature, people, things, places. Children learn by fitting new information together with what they already know to understand the unknown, i.e. it is easier for them to move from their immediate environment like self and family to a wider environment like community, society, nation and the world. Teachers must concentrate and help the students in constructing their knowledge. Even teachers can give some activity like, list some of the things with the price and write it on the blackboard. Things like- Sweet box-Rs. 40, diyas- Rs. 10, chocolates-Rs. 10, a pack of candles-Rs. 10, fruits- Rs.20, crackers- Rs.30.
- Now teacher will ask to the students: what things would they like to buy if they have Rs. 50? Let each child draw in his/her notebook the things that he/she buys. Discuss about different combinations that children choose. Use this opportunity to sensitize children about crackers. Teachers should relate textbook examples to the children's own contexts which give children a better understanding and gives a feeling that this is something that relates to 'my own life' rather than what is there in 'my text book'.
- IV. **It ensures that learning is shifted away from rote method:** The learning should shift away from rote methods. Generally children are expected to primarily memories/mug up and reproduce text book information. Most textbook lessons end with a set of questions, the answers which are already given in the book. This does not require any exploration. The textbook lessons should design in such a way that the students should able to reflect and connect their own experiences then the lessons become more real to the children. For this the teacher must be competent enough to guide the students in this path.
- V. **It encourages multiple source of learning:** The text book is equated with the syllabus. Teachers are always busy to complete the 'syllabus' and they use the text book as everything and make the teaching learning process very

much confined. Teachers must keep in mind that text book is not all in all rather it is acts as the repositories of knowledge and information. The curriculum and learning tasks must ensure that children are encourage to seek out knowledge from sites and sources other than textbooks. Teachers must provide ample opportunities for children to explore and discover. They learnt from observation of one's surroundings, from talking to different people from their own community, especially elders and even from grandparent's stories, proverbs and songs. It is the duty of the teachers not only giving respect and value this exploration but this learning should share and integrated with the textbook teachings. This will contextualize the textbook concepts and encourage the students to appreciate that they can learn from anything and anywhere.

VI. **It is inclusive:** One of the major concern is socio-cultural and economic aspects. The education process must be such that needs to support the development of values that help to respect individual differences in terms of gender, socio-cultural and economic situations and physical and mental abilities. At the same time this also provides opportunity to discuss areas of inequality and discrimination in different aspects and sensitize children to these issues. The multilingual and multicultural composition of a group of children in itself provides great

potential for learning and understanding of richness and value of diversity. The teacher can organize 'community lunch' where children bring traditional dishes from their home and sit together to share and eat. The children may be asked to perform songs or dances which are special to a particular festival like Sankranti, Pongal, Baisakhi etc. These are some of the opportunities that a teacher can give to the students to understand how diversity in food, dress, customs and celebrations enriches our life.

VII. **It follows an Integrated Approach:** Learning is always holistic as children do not construct knowledge in a compartmentalized manner; rather they observe and understand their surroundings in totality. Integrating the subjects like science, social science, mathematics, language and environmental studies help children to understand their surroundings and day to day experience as a whole rather than dealing with them in isolation. Themes include topics related to children's everyday life helps to bring out the linkages and relationships between disciplines and subjects. To integrate for example if teacher teach a lesson on ' Food' in class VI, he/ she can organize the activities like:

- a. Make a list of five food items you like the most and five food items you like the least.

- b. Make a list of various food items that can be prepared from wheat.
- c. Make a list of food items that you and your friends have brought in their lunch boxes.
- d. Discuss food habits of people in your surroundings.
- e. Discuss- Many people in the society do not get sufficient food. What are the occasions on which you see food getting wasted. What can be done about it.

### **Promoting Green Practices within and beyond school**

The school environment comprises the physical and the socio-cultural environment as well. The physical environment includes the school building and the built structures of the school such as classrooms, library, labs and common spaces like corridors, school kitchen, toilets, school garden and the playgrounds. It is the organization and maintenance of these areas which are important indicators of environmental practices for sustainability. It should be keeping in mind that all the places in the school campus should be optimally use. Greening of the physical environment is impossible without the students and support staff that include teachers, administrative staff, helpers, gardeners, watchmen, cleaners and the community. The interrelationship with all the members and the physical environment of the school and its surroundings constitute the socio-cultural environment of a school. The school environment provides enormous teaching- learning opportunities. Students gain first- hand experience from their surroundings that go beyond the classroom and teachers must think about the strategies of engaging the students with it. The teachers can ask the students to take up simple action projects. These do not require any extra resources and

can be taken up by group of students. It should be properly planned and facilitated, so that different aspects of the school environment are taken up simultaneously, leading to the overall improvement of the school. The activities like land management, watering and cleaning activities of the school etc. Even now a day the concept comes like 'Building as Learning Aid'. Students with the help of their teachers, preparing the meaningful learning materials on the walls of the classroom, corridors and the display board. It is important that physical school space and its facilities are accessible to all students at all time. Sometimes students work at the surrounding area of the school like clearing of the clogged drain at the entrance of the school or removing the surrounding garbage to prevent the growth of the mosquitoes. It is very essential that the school authority make the student practice of 'Reduce- Reuse- Recycle' and optimal utilization of resources. For example a 'no plastic zone' school. Even teachers can involve their students in creating and maintaining compost pit. Plantation inside and outside the school is another important project. Thus we can say that with the help of these projects students will not only understand the importance of creating and



maintaining a safe environment but at the same time they will get hands on experience of different natural and social phenomenon that

### Conclusion

From the above discussions in the nutshell we can say a 'Green School' is identified with those elements and practices that develop sensitivity towards environment and promote environmental sustainability through various environment-friendly means. This makes the

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they read only in the text books. It will enable them to attain a deeper understanding and exposed to various values of working together.

student learn about the proper use of the resources. It also caters to the physical, mental and emotional needs of a child by ensuring a school environment which is physically safe, emotionally secure and psychologically enabling.

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