

# Scaling up Safe and Green Schools - A Need of An Hour

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**Abstract:-** Education provides children with the skills and abilities to harness their strengths, creativity. Global crisis has changed teaching learning scenario; the system needs to put in place so also need to strengthen to respond future needs as well as National Education Policy (NEP 2020) requirements. This paper aims to discuss briefly the school education scenario after covid-19 and note the new challenges handled by various initiatives; one of them is green school. Emerging world will take far off towards achieving the world agenda vision 2030. In view of this; given that the local and global needs of the country, NEP 2020 fundamental principles guides us as full equity and inclusion, extensive use of technology, multi disciplinarity requirement of learning. Scaling up the existing school infrastructure will definitely able students to engage actively also connect in remote learning so that learning itself becomes more resilient.

**Keywords:-** School infrastructure, green schools, improvements, education policy.

## I. SCHOOL EDUCATION -IN PANDEMIC

Unbelievable situation due to pandemic has resulted in schools shut all across the world. Globally, over 1.2 billion children are out of the classroom and suddenly the learning space has changed so the technology. According to latest data by UNESCO, more than 888 million children worldwide continue to face disruptions to their education due to full and partial school closures. In India, closure of 1.5 million schools due to the pandemic and lockdowns in 2020 has impacted 247 million children enrolled in elementary and secondary schools.

The consequences of the school closures are far-reaching, affecting nearly every aspect of human development. Online education is not an option for all as only one in four children has access to digital devices and internet connectivity but this connectivity will require further access along with actual classroom teaching learning. Internet connectivity is a key issue in few places in India and prolonged school closures are giving rise to many issues but there are efforts done at government or non-government level done to fight against all odds.



FIG 1: --Jharkhand village school turns mud walls to blackboards to continue classes during Covid-19 (INDIA TODAY, September 28, 2020).

Teachers also adopted to this new mode of teaching, getting access to digital platform. Those who were unfamiliar with electronic tools had a tough time educating and connecting with their students. Because of the lack of preparation, classroom sessions were disrupted, lectures were interrupted, and technical faults and glitches occurred, students needed time to acclimatize to the new setup as well. Following this pandemic education is going to change profoundly.

Ranjitsinh Disale, a teacher at the Zilla Parishad Primary School, Paritewadi, Solapur, Maharashtra, who received the Global Teacher Prize in 2020; his initiative of embedding digital content in QR code helped students to learn at their own pace anytime, anywhere even if they miss the class. The first time they see the video, second, they see the quiz, they have to pass it. With this Disale, not only empowered girls' students via education but also stopped teenage marriages happening in the village.

After the reopening of schools, focus has been laid on bridging the learning gaps during the initial months and introduction of smart classrooms, which will facilitate a blended model of learning. Mr. Swami said the schools would help in "digital empowerment" of students, teachers and parents to build on the progress made in digital learning with the target for democratization of education in the long term (the Hindu). This digitalization and infrastructure improvement, as well as the need for a digital classroom, are all necessary. This digital readiness for teaching will now continue in some ways after school reopens, but what is the state of our current school infrastructure?

## II. GREEN SCHOOLS-A BRIEF REVIEW

The United Nations launched the Decade of Education for Sustainable Development (DESD) in 2005 with the goal of integrating the principles, values, and practices for nurturing sustainable development. Education for Sustainable Development demands a Whole School Approach wherein participation of each stakeholder is crucial to the accomplishment of the desired goals and objectives of ESD (Education for Sustainable Development). The Whole School Development Plan (WSDP) under SSA (Sarva Shiksha Abhiyan) envisions child-friendly schools, responsive towards the needs of all children by ensuring safe, secure, clean and hygienic environment for all children with optimum resource utilization through environmentally sustainable practices.

The concept of Green School was introduced in Europe in the 1990s 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". A green school is a school that

creates a healthy environment conducive to learning while saving energy, environmental resources and money (U.S. Green Building Council 2020). The Whole School Sustainability framework describes what successful green schools have learned about how to make this sustainability thinking stick. It explains that, in these schools, the educational program, physical place and organizational culture all support sustainability, and that each aspect of the school does its important part in making the whole picture work (Anisa Heming, 2017).

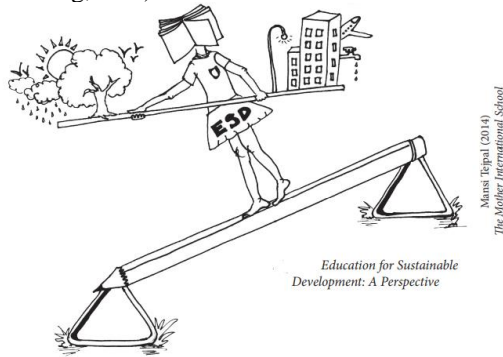


FIG 2: -- Green School: The Concept

The 'greenness' of a school can be seen in many different characteristics of its surroundings. The Green School is located in a clean, healthy, safe, and environmentally friendly environment. Green school is inclusive as it: has infrastructure suited to the requirement of all children including those with special needs, to facilitate their learning; encourages respect for each other's' rights, dignity and fosters equality; does not exclude, discriminate etc. It is effective for learning as it: promotes developmentally appropriate teaching and learning processes and encourages cooperative and democratic learning; and provides appropriate environment and opportunities (content, materials and resources) to the students.

#### Guiding Principles for Whole School Development Plan (WSDP)

1. Infrastructure plan to follow the education plan.
2. Child-centred planning with overall development of child (physical, social, emotional and cognitive) addressed.
3. Responsive towards the needs of all children and the diversity they bring to the school.
4. Entire school space (indoor and outdoor) as learning continuum for a child and the teacher — this is to be recognised by all stakeholders while planning.
5. Developing the entire school space as resource for fun and learning activities using ideas of Building as Learning Aid (BaLA).
6. A safe, secure, clean and hygienic environment for all children.
7. Maximising the entire school as a resource — not just for children and teachers of that school but also for the community and neighbourhood schools.
8. Respectful towards the local context and traditions — wisdom, social and educational needs, culture, geology, climate, flora, fauna, etc.
9. Optimum resource utilisation and cost-effectiveness.
10. Integrates good practices in environmentally sustainable designs — to demonstrate and practise them.
11. Scope for future expansion.

FIG 3: -- Sarva Shiksha Abhiyan and Green Schools

The Green School is envisioned as a place where teachers and students may fully utilize all resources and possibilities both inside and outside the school to raise environmental awareness among teachers and students through active community participation. Students' learning experiences in a learning favorable setting are no longer limited to the classroom, but extend to the field as well. These venues provide as resources and possibilities for students to engage in direct and first-hand experiences; in this regard, school infrastructure

planning is critical. Whereas the notion of 'Whole School Development' as envisaged in SSA pertains primarily to the optimum and appropriate usage of school space and resources but Saving money in operations is beneficial to school performance because it frees up those operational funds for more teachers, equipment, and activities. After the pandemic situation challenges faced by all stake holders especially students from rural area these green school will provide better environment for blended learning.

### III. NATIONAL EDUCATION POLICY 2020

In July 2020, the central government announced two major decisions in the field of education on Wednesday. First – Union Ministry of Human Resource Development (MHRD) has been renamed as Ministry of Education. Second – New National Education Policy (NEP 2020) has been approved. Existing 10 + 2 + 3 systems have been replaced. This has been changed to 5 + 3 + 3 + 4. 5 years of foundation education, 3 years of preparatory, 3 years of middle and 4 years of secondary schooling. The diversity of India and the technological changes required in education required a multidisciplinary approach; NEP 2020, provides solutions for curtailing dropout rates, ensuring universal access to education, incorporation of early childhood care, and various other suggestions. The Policy envisions that our institutions' curriculum and pedagogy develop in students a deep sense of respect for Fundamental Duties and Constitutional values, a sense of belonging to one's country, and a conscious awareness of one's roles and responsibilities in a changing world; attempting to match the goal of the global education development agenda reflected in Goal 4 (SDG4) of the 2030 Agenda for Sustainable Development, adopted by India in 2015 - seeks to "

A good education institution is one in which every student feels welcomed and cared for, where a safe and stimulating learning environment exists, where a wide range of learning experiences are offered, and where good physical infrastructure and appropriate resources conducive to learning are available to all students, as mentioned in NEP document, the stake holders need to change their view & will require training with reference to digitalization, sustainable initiatives

Currently, children in the age group of 3-6 are not covered in the 10+2 structure as Class 1 begins at age 6. In the new 5+3+3+4 structure, a strong base of Early Childhood Care and Education (ECCE) from age 3 is also included, which is aimed at promoting better overall learning, development, and well-being. For universal access to ECCE, Anganwadi Centers will be strengthened with high-quality infrastructure, play equipment, and well-trained Anganwadi workers/teachers. Every Anganwadi will have a well-ventilated, well-designed, child-friendly and well-constructed building with an enriched learning environment (MHRD pp.7). These centers should be coherent with primary schools also. As mentioned for anganwadis, NEP 2020 states that Besides providing regular trained teachers at each stage, special care shall be taken to ensure that no school remains deficient on infrastructure support. Additional supporting infrastructure or quality school building to be built which will ensure creating holistic and well-rounded individuals equipped with the key 21st century skills. Steps to be followed by all higher education institutes

are listed in the NEP 2020 document; sets out a very ambitious plan which consists of making disability-friendly infrastructure and educational resource available in all schools across the country.

THE AGE OF TECHNOLOGY: ACCESSIBILITY CHALLENGES—

NEP 2020 does emphasize the infusion of technology into the education system. It seeks to develop e-courses, set up virtual labs, and establish a National Educational Technology Forum (Himanshu Mishra et.al 2021).

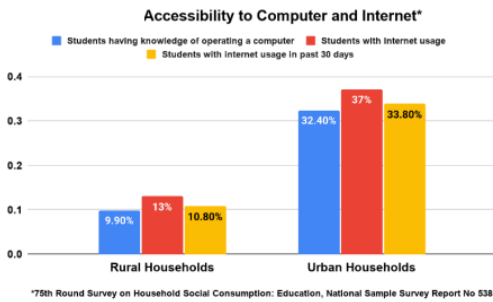


FIG 4: -- Access to e facility

It also reflects the deep digital inequality which can only be reduced by building an affordable and accessible digital infrastructure and dispensing digital literacy. A separate unit for orchestrating the creation of digital infrastructure, digital content, and capacity building would be created in the Ministry to look after the e-education demands of both school and higher education, according to the NEP 2020 whitepaper.

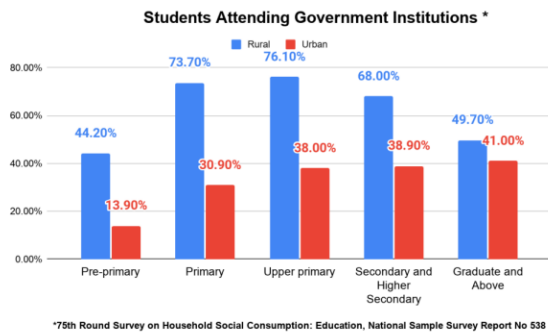


FIG 5: --students attending government institutions

It pursues to create a systematized arrangement to provide the requisite support to students from rural backgrounds. The NEP's recommendation in this regard was to provide safety through adequate infrastructure, which included expanding existing government schools and constructing new schools in areas where none existed, as well as providing secure transportation and/or hostels, particularly for female students. Looking at this stage, a lot of improvisation or the formation of new infrastructure is required.

IV. SCALING UPINFRASTRUCTURE



FIG 6: -- Learning Online

Education will change dramatically as a result of this pandemic. In what ways, though? This thought led to a consideration of the education scenario, various initiatives, and policy frameworks; all of which will lead to education in a built environment that is responsive to the growth of children, our future. A school is more than a physical structure, the timetable or even the textbooks. It comes to life only when the students come and start interacting with their peers, the teachers, the curricular material and the school environment (physical, natural and socio-cultural).

While both the NEP and the response to COVID-19 emphasize the necessity of adopting digital technology in the future, there are numerous reasons why digitalization will only offer a portion of the educational infrastructure in the future. All of these efforts are amplified if we feel connected to the school and its environs. This sense of belonging comes from actively engaging with the school in a variety of ways, and **scaling up the infrastructure** will strengthen the tie.

Green school efforts are widely acknowledged and undertaken in various parts of globe to name a few -- Woodstock School Mussoorie, Uttarakhand, India; Green School Bali, Indonesia; English Schools Foundation (ESF) Hong Kong SAR China. Environmental studies and practical eco initiatives on school grounds are also promoted by progressive education pioneers. Renewable energy, recycling, gardening, and even the use of sustainable building materials is becoming more common, and they help schools set a good example for students.



FIG 7: -- Zero Energy School Wablewadi, Dist. Pune



FIG 8: -- Learning space extends outdoors in Zero Energy School Wablewadi, Dist. Pune

Even after controlling for demographics, better school facilities can contribute 3 to 4 percentage points to a school's standardized test scores, according to Douglas E. Gordon. With the scaling up school infrastructure in light of the aforementioned considerations presented in this article, one of the most important indicators of their success is their usefulness as teaching tools.

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