

# Empowering India Through Education: Alignment with the Sustainable Development Goals

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## Abstract

India, being a developing country, needs to focus on progress, where education serves as an important aspect for societal progress and sustainable development. Hence, by aligning its education plans with the Sustainable Development Goals (SDGs), India aims to address many opportunities and challenges. The purpose of this research paper is to explore comprehensively how India's education plans intersect with the SDGs. Education plays a vital role in the growth of any country. The recent execution of the National Education Policy (NEP) 2020 focuses on fostering quality, inclusive, and equitable education for all, which directly relates to the 4<sup>th</sup> goal of SDG, that is, "Quality Education". This paper focuses on comprehensive strategies within India's education system and examines how they contribute to the attainment of SDGs such as Quality Education, Gender Equality, and Reducing Inequality. The Indian education system equips its citizens with skills and knowledge, and the values required for social, economic, and political growth. It also focuses on vocational training and skill development among students. This paper focuses on understanding the importance of education and SDG-4 for transformation among youth. The study connects the dots of inclusive education for all through NEP, 2020, wherein Academic Bank of Credit (ABC), National Higher Education Quality Framework, Learning Outcome Based Curriculum, and Multidisciplinary education are the key factors for achieving SDG-4. The study aims to inform educators, policymakers, and stakeholders about the importance of education in advancing sustainable development.

*Keywords:* SDG-4, Quality education, National education policy 2020 (NEP), growth and development

**1. Introduction** Sterling defined 'sustainable education' as a "change of educational culture that develops and embodies the theory and practice of sustainability"-Transformative Paradigm. Sustainable Development Goals (SDGs) are the goals which are adopted by the United Nations to

meet urgent challenges faced by the world, which include political, economic, and environmental issues. In 2012, the SDGs were formulated at the United Nations Conference on Sustainable Development took place in Rio de Janeiro. There are 17 goals, 169 constituent targets, and 230 indicators, and these goals are correlated with each other. Mainly, these are for developing countries that are furthest behind (UNDP). Before the SDGs, the Millennium Development Goals existed, whose period to complete goals was till 2015; later SDGs were introduced in 2015. Interactive meetings were conducted to select goals. These meetings are organised by UN bodies with the integration of international organisations (King, 2016). The role of sustainability comes with a paradigm to oversee developments with the UN countries as a resolution of 'Transforming Our World: The 2030 Agenda for Development'.

These were first accepted by the UN General Assembly on 25th September 2015. SDGs were adopted with increasing concern about environmental damages that are caused by existing living patterns of people (Chaturvedi et al., 2019). SDGs start with SDG1, with no poverty, covering all important aspects that are related to global concern. Interconnections with all SDG goals suggest planning, implementation, and monitoring challenges. It becomes necessary in resolving vast and complex issues globally (Pakkan et al., 2022). There are three main aspects for doing sustainable development, namely doing development without any harm to natural resources, with economic development, and with protection of social and economic environment (Chaturvedi

In the present time, the whole world is concerned and planning to achieve the goals of the SDGs. One of SDG's concerns regarding education arises from the need to have sustainable education for a sustainable future. Education is a very important factor for the growth of any economy; it's not only growth but sustainable growth. Hence, it arises a need to focus on sustainable education. Sustainable education is an inclusive pedagogy where no discrimination is made. It is seen as a way to provide basic education, skills, and training to all groups of learners to make productive use in the present time (Doungel and Rajesh, 2021). One approach in SDG is holistic. It includes all situations that need to be undertaken by different countries. Process is a multi-dimensional approach, and if one sector is focused and the other cannot be ignored. Education is one of them. In this, if one has gained something, he will surely educate his close one, then only Education will sustain forever (Chaturvedi et al., 2019).

SDG 1	End poverty in all its forms everywhere.
SDG 2	End hunger, achieve food security and improved nutrition and promote sustainable agriculture
SDG 3	Ensure healthy lives and promote well-being for all at all ages
SDG 4	Ensure inclusive and equitable quality education and promote lifelong learning opportunities for all
SDG 5	Achieve gender equality and empower all women and girls
SDG 6	Ensure availability and sustainable management of water and sanitation for all
SDG 7	Ensure access to affordable, reliable, sustainable and modern energy for all
SDG 8	Promote sustained, inclusive and sustainable economic growth, full and productive employment and decent work for all
SDG 9	Build resilient infrastructure, promote inclusive and sustainable industrialization and foster innovation
SDG 10	Reduce inequality within and among countries
SDG 11	Make cities and human settlements inclusive, safe, resilient and sustainable
SDG 12	Ensure sustainable consumption and production patterns
SDG 13	Take urgent action to combat climate change and its impacts
SDG 14	Conserve and sustainably use the oceans, seas and marine resources for sustainable development
SDG 15	Protect, restore and promote sustainable use of terrestrial ecosystems, sustainably manage forests, combat desertification, and halt and reverse land degradation and halt biodiversity loss
SDG 16	Promote peaceful and inclusive societies for sustainable development, provide access to justice for all and build effective, accountable and inclusive institutions at all levels
SDG 17	Promote peaceful and inclusive societies for sustainable development, provide access to justice for all and build effective, accountable and inclusive institutions at all levels

Source: [www.un.org.my](http://www.un.org.my)

et al., 2019). The list of all the SDGs is as follows:

Figure 1: Sustainable Development Goals

### 1.1 Targets under Sustainable Development Goal (SDG)-4

The Sustainable Development Goal on education focuses on providing inclusive, equitable, and high-quality learning experiences while emphasizing lifelong educational opportunities for everyone.



Source: sustainable tech

Figure 2: Sustainable Development Goal 4

The 10 targets proposed under SDG-4 are as follows:

1. It is targeted that by the end of 2030, every girl and boys get equity and quality in both primary and secondary education.
2. By 2030, it should be ensured that every girl and boy has quality childhood development at an early stage, and also gets care and pre-primary education.
3. All men and women do necessary technical, vocational, other tertiary education, and university education.
4. The target is to increase the number of youths and adults having technical and vocational skills for employment and decent jobs in entrepreneurship.
5. People with disabilities, special children, and indigenous persons should not be ignored and should get equal access to quality education.
6. Literacy and numeracy should be achieved by all men, women, youth, and a portion of adults.
7. Till 2030, it is to ensure that all learners get that much knowledge and skill which can be used for sustainable development, sustainable life, human rights, promotion of cultural peace and gender equality, and global citizenship.
8. Upgrade education facilities that can provide a safe, non-violent environment, effective and inclusive learning to children, disability, and gender sensitive people.
9. Boost scholarship programs for students in developing regions to facilitate their participation in higher education, vocational studies, and technical disciplines such as ICT, engineering, and science.
10. Raise the number of qualified teachers through international cooperation for teacher training, especially in developing countries and least developed countries.

All of these targets are to be achieved by 2030, and to eliminate discrimination in education and increase the Gross Enrolment Ratio (GER).

## 1.2 India's Education Plan

Education in India has a history since ancient times when the Gurukul system prevailed in India, where students used to live in gurukuls with their gurus. Later, famous institutes like Takshashila and Nalanda were established as major centres for learning that focused mainly on subjects like philosophy, mathematics, scripture, and science. Later in the 18th century, British colonisation introduced the Western education system that emphasized the English language. Formal education in India includes five years. After independence in 1947, India adopted a divergent framework for education, which resulted in the construction of thousands of government schools, private institutes, and universities all over India. The government focused on providing free and Compulsory education to students between the ages of 6-14 years. The

spending of the government on education is around 6% of its GDP. Many high authorities make policies for benefit of students which includes Ministry of Education (MoE), University Grant Commission (UGC), Central Advisory Board of Education (CABE), National Council for Educational Research and Training (NCERT), State Council for Educational Research and Training (SCERT), National Education Policy, 2020 and the Programme of Action (POA). Some of the major initiatives taken by the Government of India for education are as follows:

### 1.2.1 Government Initiatives for Students:

- Sarva Siksha Abhiyan 2002
- Beti Bachao Beti Padhao 2015
- Balika Samridhi Yojna
- Swachh Vidyalaya Abhiyan
- Shiksha Parv Initiative
- National Means cum Merit Scholarship (NMMS)
- National Talent Search Exam (NTSE)
- ISHAN UDAY
- Ishan Vikas

### 1.2.2 Government Initiatives for Digital Education:

- PM E-Vidhya
- DIKSHA
- National E-library
- Swayam Prabha
- Swayam
- Vidya Daan
- E Pathshala
- SMART India Hackathon

### 1.2.3 Government Initiatives for disabled students:

- Inclusive Education of the Disabled at the Secondary Stage
- International Economic Development Council
- SAKSHAM
- Identification camps for CwSN

## 2. Literature Review

Mohanty (2018) studied the role of education for sustainable development in India and developed a conceptual model of sustainable education in the Indian school system. The author

focused on three drivers: profit-MHRD, people-HR, and planet-Education Ecosystem. The author concluded that SDG4 has to be achieved; then, we need to adopt ESD (Education for Sustainable Development) to make our education system progressive, sustainable, and robust.

Pandey (2018) explored the shift from quantity to quality education through the implementation of SDG 4. The author considers gross enrolment ratio, average annual dropout ratio, social expenditure, and adult literacy rate, etc. The author concluded that the new and innovative programmes should be implemented with adequate infrastructure, an inclusive environment that could result in better learning outcomes.

Sharma (2019) conducted a comparative study of the education condition in Chhattisgarh in India in achieving Sustainable Development Goal (SDG)4 by considering current statistics. The author concluded Indian state of Chhattisgarh is slowly moving towards quality education SDG4, but the government needs more push to better align with SDG.

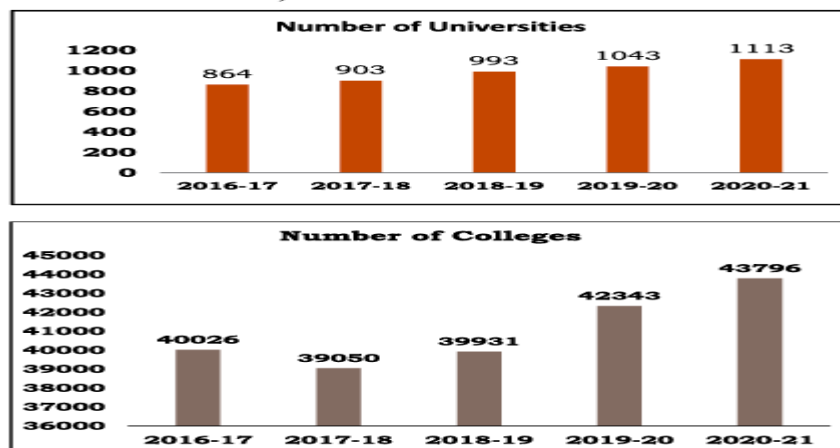
Dabroo (2020) focused on financial challenges in achieving quality education from an Indian perspective. After analysing the secondary data, the author concluded a strong challenge until new measures are taken to achieve the goal by 2030. The author suggests that the use of ICT in education could lead to favourable results in providing quality education.

Muralidharan *et.al* (2022) studied the new education policy 2020 and digitization in education concerning quality of life. According to the author's main focus of SDG4 is to provide quality education and equal education opportunities. Authors find it difficult to measure variables like quality of life and education quantitatively. The author highlighted social challenges for the implementation of NEP 2020. It was concluded that the policy looks better on paper, but in reality, it's hard to implement it on the ground level.

Saini *et.al* (2023) analyzed the perspective of SDG 4 to work for quality education and different initiatives implemented by the government of India in line with SDG 4, achieving its objective. The authors used different statistical techniques to measure the association, such as exploratory data analysis, QuantMiner genetic algorithm, and numerical association rule mining. The result showed a significant degree of correlation in understanding the impact of one indicator on another.

## 1. Current Scenario of Education in India

The Indian education system is one of the largest and complex education systems in the world. The current status of education in India has gradually improved over the past years. The Indian education system consists of different levels, starting from early childhood education to primary education, secondary education, higher education, and vocational education. According to the Unified District Information System for Education (UDISE) database, the number of schools in India recorded as on 30th September, 2021 is 14,89,115. The total number of enrolments in education in schools is about 26.52 crore, with 48% of girls and 52% of boys. While in higher education, its ecosystem in India includes 1,000+ universities and 42,000+ colleges. Indian higher education consists of different types of universities, including central universities, state universities, deemed universities, and private universities.



\*Source: AISHE

**Graph 1: Increase in the number of universities and colleges**

From the above graph, it could be concluded that the Total number of enrolments in education had gradually increased with the increase in institutes.

The post-independence scenario in education showed a rapid rise in education and literacy rates. While the government of India is putting a lot of effort into education by launching different initiatives at every level of education. Literacy rate in India during 1950-51 was around 18.3%, and now in 2020-21 has increased to 77.70% (males-84.7% and females 70.3%).

### 3.1 India's Alignment with SDG 4

To make education inclusive of all factors, three groups should be focused on: marginalized, adults, and differently-abled children. The Right to Education Act 2019 is a paradigm shift to make education inclusive. Not only does it include free and compulsory education, but it also reserves one-fourth seats in private schools for students who are from the economically weaker section. The government started a scheme of Saakshar Bharat Programme (SBP) to increase the



adult literacy rate (Draboo et al.2020). India has achieved significant progress towards the goal of Education for All. Many policies were implemented to provide free and compulsory education from 6-14 years of age. Programmes such as Right to Education (RTE) and Sarva Siksha Abhiyan (SSA) and had an impact on the education system (Pandey, 2018).

While measuring SDG across the world, emphasis shifted to a large perspective from small perspective. In this, mainly three pillars are included: environmental, social, and economic sustainability (People, Planet, and Profit).

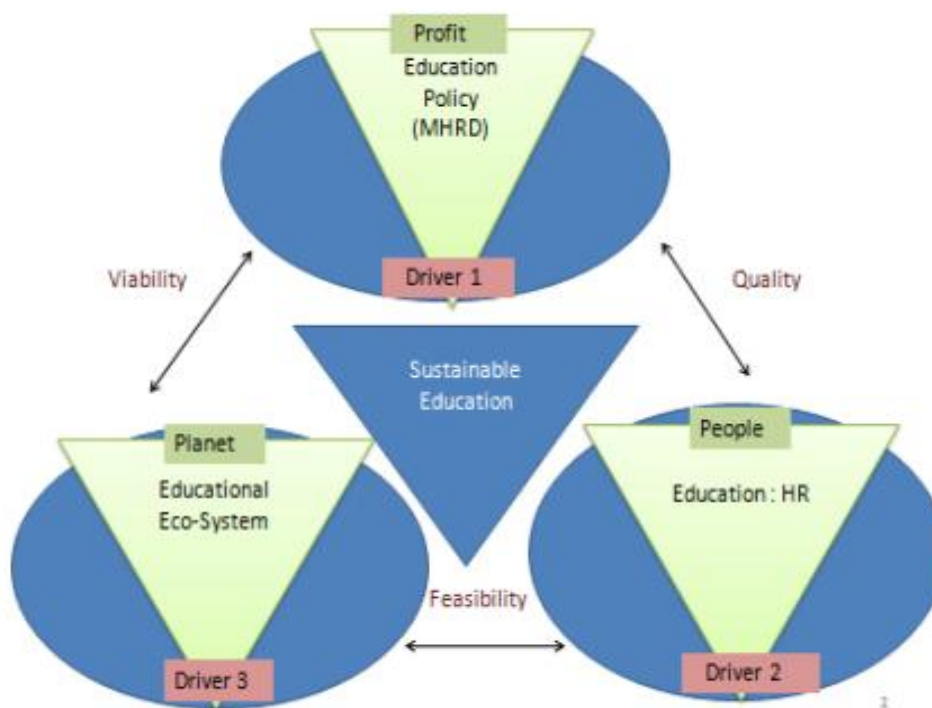


Figure 3: Conceptual Model of Sustainable Education

Education, along with its programs like training, capacity building, communication, public awareness, research, information sharing, networking, and partnerships, serves as a crucial strategy for achieving the Sustainable Development Goals.

The model consists of three vital elements – Profit, People, and Planet, which include:

- (Profit) – “Ensuring learning outcomes through effective curriculum, pedagogy, assessment, and technology”.
- (People) – “Enhancing educational human resource competences through training and practices”.



- (Planet) – “Strengthening the educational ecosystem through good infrastructure and technology access (Mohanty, 2019).”

### 3.1.1 Some Schemes for Schools:

Name	Year	Objectives	Achievements
Mid-Day Meal Scheme	15th August 1995	<ul style="list-style-type: none"> <li>• Enhancing the dietary status of children studying in government schools or government-aided schools.</li> <li>• Motivating children coming from a socio-economic weak background</li> <li>• Providing support to children in drought-affected areas</li> </ul>	<ul style="list-style-type: none"> <li>• Increased number of school-going children</li> <li>• Helped in providing free and nutritious food to kids</li> </ul>
Saakshar Bharat	8th September, 2019	<ul style="list-style-type: none"> <li>• The scheme aims to promote adult learning and try to give education to those who are away to pursue formal education.</li> <li>• Includes basic education, skill development, and vocational education.</li> </ul>	<ul style="list-style-type: none"> <li>• 5.88 million Learners successfully passed the basic level of literacy.</li> <li>• Reduced gender gap.</li> <li>• Minimised regional and social disparities.</li> </ul>

- Samagra Siksha 9th May 2023
- Aids states and UTs in executing the National Education Policy 2020 recommendations (NEP 2020).
  - Delivering high-quality education and improving students' learning outcomes;
  - promotes inclusivity and participation across all schooling levels
  - Providing a safe, secure, and pleasant learning environment, as well as meeting minimum educational criteria
  - 10151 schools have been upgraded at all the levels (Elementary, Secondary, and Higher Secondary levels.
  - New hostels have been opened.

### 3.1.2 Some schemes for Higher Education:

Rashtriya Uchchatar Shiksha Abhiyan	2013	<ul style="list-style-type: none"> <li>• It is a holistic scheme of development for higher education in India</li> <li>• It focuses on ensuring equity in higher education by promoting inclusive education.</li> </ul>	<ul style="list-style-type: none"> <li>• Reduce the gaps in higher education.</li> <li>• Established universities for rural and unserved countries.</li> </ul>
Saksham Scholarship scheme for Specially-Abled Students (Degree)	2014	<ul style="list-style-type: none"> <li>• Provide guidance and assistance to differently abled students in technical education.</li> <li>• Provide rupees 50,000 to students per annum.</li> </ul>	<ul style="list-style-type: none"> <li>• Encouraged especially able children to pursue education</li> <li>• Reduced the gap between the rich and the poor.</li> </ul>

## 2. Opportunities and challenges

There is widespread concern today over the growing inequalities among countries, but also within them. The successful execution of SDGs can ensure advancements in education, economic growth, population management, energy, and governance, with health serving as a major factor for sustainable social development and prosperity. Some opportunities could be:

- As higher education in India works towards its goal, it must develop an understanding of sustainable development and what role it should play. This can help in creating an opportunity for stakeholders within and outside of HEIs.
- Another opportunity with HEIs that can increase training provisions for various sectors, including teacher education.
- The need is not only for increasing teachers, education, and training, but also for adults. Institutes must be open and flexible to operate based on necessity. Additionally, Collaboration with stakeholders is essential in developed nations to access financial support for infrastructure and growth-related initiatives.

With opportunity, some negative aspects should also be considered to accomplish goals. In SDG-4, a roadmap to education faces many difficulties, like a lack of educational opportunity, poverty in India, inequality between rural and urban areas, also between girls and boys, and armed conflict.

- Goals are interconnected that one goal can't be completed without another; this means that one level of education will affect the other.
- HEIs need to increase enrolment or participation to cover the gender gap in targeted areas.
- Lack of sufficient infrastructure, shortages of books, and basic facilities in government institutes and schools.
- Challenges like gender discrimination, high dropout rates, lack of information and communication technology, and inadequate funding by the government.

### 3. Conclusion

Among all SDGs, SDG 4 is the most important one as it focuses on education, and when it comes to sustainable development, education plays a very important role. SDG4 focuses on quality education, inclusive and equitable, by 2030. As we know, India is a developing country, and education is very important for the country to grow; hence, the Indian government has initiated many policies and programmes in line with achieving the SDGs. Many steps have been taken to provide free and compulsory education to children in the age group 6-14 (Right to Education).

Similarly, the Sarva Shiksha Abhiyan (SSA) programme was initiated so that no child in India stays away from basic education. In conclusion, this research has focused on the crucial role of education in empowering India and making progress. After analysing India's education plan, many challenges have been uncovered in achieving the Sustainable Development Goals. Our findings reflect the importance of education in the overall development of the country. The Government of India needs to make more investments in the education sector, especially in underdeveloped regions of India, and efforts are to be made to remove the disparities in access and quality. Also, there is a need for effective implementation, monitoring, and evaluation. Together, we need to empower India and create a prosperous and sustainable world for future generations.

#### 4. Future implications

The future implications of this research paper offer valuable insights for the future in the sustainable development and education field. Future initiatives should explore innovative pedagogical approaches, advancements in curriculum, and partnerships with stakeholders to promote education in India. A holistic approach in education should be adopted to integrate education with social and environmental dimensions. The motive of this paper is to inform policymakers, stakeholders, and educators about the need for education in the development goals. Further studies can be done about other SDGs and can analyze the development status of India.

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