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Education, Culture and Sustainability: the Role of National Education Policy 2020

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Abstract

The National Education Policy 2020 is the policy based on which the present education system is designed in India. The policy's interest in recruiting elements from the ancient and indigenous knowledge system makes it further interesting. A section of it aims to promote the Indian culture, art and language and the curricula have been designed to achieve this. This initiative will give representation to diverse cultural groups of the country which can ensure an inclusive education system, a step towards meeting the Sustainable Development Goals. Another goal of striking importance under the Sustainable Development Goals agenda is about dealing with the environmental concerns. The world is increasingly recognizing the importance of the indigenous knowledge system in this regard. This paper intends to explore the contributions that this new education policy can possibly make to environmental conservation by virtue of the importance it is giving to the indigenous knowledge system that exists in diverse parts of the country.

Introduction

The Stockholm conference recognized the relationship between environment and development which then became a global agenda. The 1972 UN Conference has introduced concepts like 'sustainable development' and followed by it was also the formation of the United Nations Environment Program (UNEP). The Stockholm Declaration 1972, consists of 26 principles, out of which the 12th principle highlighted the role of education in environmental protection by making people aware about environmental crisis. The Indian education system also has recognized this largely (Swaroop & Verma, 2022) [11].

Education is often shaped by the society as elaborated by E.B. Tylor's work (1920). He writes, "culture is that complex whole which includes knowledge, belief, art, morale, law, custom and any other capabilities and habits acquired by man as a member of society". Ideas are the non-material aspects of culture which are written down in form of books and other literary works in literate societies. These ideas can also be in the form of science, folklore, religion, art, etc. and are transmitted and acquired from one generation to another through socialization. (Bierstedt, 1974) [3].

Karl Manheim's sociology of knowledge explains the relation between knowledge and existence. It studies the social conditioning of knowledge by adopting empirical means to come to conclusions. It sees that our way of conceiving things depends upon our social and historical setting and our thoughts are influenced by the social relationships? Hence, thoughts are not isolated ideas of an individual's intellect. The interpretations of the ideas, values, knowledge, beliefs, art; are the expressions of any culture that give us an in depth understanding of the culture of a community.

This paper intends to understand the significance of restoration of the ancient and indigenous Indian knowledge system (a representation of local culture) under the NEP 2020. The focus will be on how this initiative holds potential in shaping environmental education and environmental conservation.

Methodology

A review of the secondary data is done to understand the concepts and the scenario better. Accordingly, analysis is made out of this and is supported by a case study.

Literature Review

Rabindranath Tagore in his essay "The Religion of Forest" wrote about the nature- human relation. He viewed that biodiversity teaches us values of democracy which is to live sustainability. Thus, the culture of forest shapes the culture of the civilization, Tagore added. In India, the elements of nature, like, mountains, rivers, forests; are worshipped (Tagore, 1922) [13]. The ancient Hindu texts, including the Vedas, Puranas, Upanishad all talk about environmental conservation. There were rituals and prohibitions against exploitation of the nature as in the *Prithvisukta* in the Atharva Veda (Swaroop & Verma, 2022) [11].

These texts were also taught along with other subjects like science, medicines, illness, literature; in the ancient Indian educational system called the 'Gurukul system'. This system of education aimed at the holistic development of the students including, mental, physical and spiritual development. The learning took place in a natural surrounding near the Guru's (Teacher) house where the students learnt to work in group developing a feeling of brotherhood, love, kindness, respect and discussions among themselves. Overall, the Gurukul system imparted moral values, cultural knowledge and basic life skills (Sharma, 2023) [8]. These values continued to prevail among the indigenous communities. The traditional knowledge refers to the broader political, economic, social and cultural system of these indigenous communities that ensures there continued wellbeing over generations (McGregor, 2018) [4]. In recent years, the advocates of Traditional ecological knowledge have brought to surface its potential to boost agricultural production systems, environmental conservation as well as sustainable development. It is a knowledge system which equally represents the interests of the small and marginal farmers which otherwise got neglected by the technically oriented knowledge of modern times. Today, this form of knowledge has captured the interests of different social scientists as well as the administrators (Agarwal, 1995) [1]. An example of this is the tribals of Chattisgarh, who planted a breed of rice using traditional methods which is ideal as much as the High Yielding Variety seeds used during the green revolution. In fact, their breed of rice is more adaptive to the local environment. Cultivated using traditional methodologies, there existed thousands of rice varieties in India prior to 1900 and this proof the effectiveness of the traditional knowledge that have been transmitted from generation to generation (Shiva, 1988) [9].

Case Study

Pareek & Trivedi (2011) discussed about an example from Rajasthan which can be used as a case study in this paper. Here the indigenous communities have their own indigenous knowledge system to understand and observe the environment and deal with the natural disasters. There are Sutras in ancient books which inform people about monsoon and hence the farmers consult the Brahmins to know this in advance before the agricultural year. These predictions are made based on cloud colour and flow. Some of such facts forecasting climate are-

a) Appearance of flowers and new leaves in Ficus species indicates rain
b) Appearance of a large number of butterflies also indicate rain and a good weather
c) The frogs making a lot of noise is also an indication of the onset of rain, etc.

Similarly, there are many beliefs like if cloud is formed on Friday and remain till Saturday, it will surely bring rain. If in mid monsoon South east win blow then a famine will hit the Marwar region.

Such traditional knowledge is of great value even today in environmental conservation, disaster prevention and preparedness. Many of this traditional knowledge are now published in local language. Hence the case study of Rajasthan shows an unique sense of ecological knowledge derived from region based on which they deal with the natural resources in a sustainable way which makes the region rich in vegetation, forests and wildlife. They further use traditional innovative techniques like, rainwater harvesting, supplement irrigation, traditional farming methods to protect watershed, improve building techniques, improve water quality testing, community-based disaster management technique. These techniques are of also of low cost and needs national and international recognition.

In the post-independence era, the 42nd amendment to the Indian constitution was passed in response to the UN conference of 1972 which encouraged environmental awareness. Further the 'Fundamental Duties" were added expecting people to be more responsible. Later the Department of Environment was established in 1980, which was later named as the Ministry of Environment and Forests in 1985. Most education policies introduced by the government of India following this emphasized on environment. At school level, the National Council of Education Research & Training circulated a discussion document in 2002 seeking reviews from different agencies on environmental education (Sonowal, 2009) [10]. The National Curriculum Framework (NCF) of 2005 states that environmental education is integrated to all other disciplines like physics, mathematics, chemistry, biology, history, geography, political science, physical education, art and music. Hence, Environmental Education was added to school curriculum at a primary level. The NCF sees that this will help the students to understand the relation between natural, social and cultural settings and will increase their knowledge on environmental concerns (Swaroop & Verma, 2022) [11].

The NEP 2020 aims to build not only a discipline-based education but also a practical one. The need for critical and interdisciplinary thinking, discussions, debates, research and innovation was recognized. Agriculture education will build professionals with an ability to understand and adopt both traditional knowledge and emerging technologies, while being aware about the critical issues like climate change; decline in land productivity and food insufficiency for the rising population; use of sustainable agricultural methods. This agricultural education will be made accessible to the local community (MHRD, 2020, p. 50) [5]. The policy suggests that the curriculum of the higher educational institutions should add courses and projects in environmental education and value- based education. The environmental education will focus on arenas of climate change, pollution, waste management, sanitation, conservation of biological diversity, management of biological resources, forest and wildlife conservation and sustainable development and living (Muralidhar, 2022, p.10) [6].

The new policy has recognized the Gurukul system, its rich heritage and the ancient knowledge system under it. It has aimed at including traditional subjects like Yoga, Ayurveda, and Indian Philosophy in the curriculum. It is promoting the regional Indian languages which will help students from different regions to get access to education in their local

language (Sharma, 2023) [8]. Different languages see the world differently and hence represent the native speaker's perspective. (MHRD, 2020) [5]. Receiving education in regional language can enable the student to learn the traditional knowledge of their local community. The restoration of the traditional knowledge system will also enhance the country's socio- economic and political development. Adding such knowledge to the curriculum can make a difference in the education system, which is otherwise subject- oriented. This historic initiative was taken by India following its signing of the UN's sustainable development goals in 2015. Although Indian Scientific Institutes and NGOs are taking steps to preserve traditional knowledge, they still are not effective enough. This is also because the younger generation of the indigenous community is getting more attracted to the modern lifestyles and practices. Steps like, making the tribes feel equally like any other citizens and not restricting their knowledge system only to the community, can help. The NEP 2020 is making an attempt to represent more and more the voices of the marginalized and under-represented groups. The curricula are designed based on local culture, traditions, heritage, language and geography. (Akriti, 2020) [2].

Discussion

The above literature review helps us see the interconnected relation between nature, culture and knowledge systems; a relation that can contribute in sustainability.
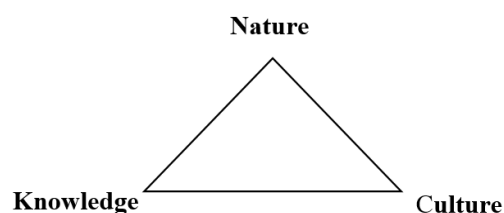

Fig 1: Depicts This Relation

Figure 1 depicts this relation. The Indian civilization has been shaped by the culture of nature. Existence of institutions like sacred groves in different societies and the set of cultures revolving around it is evidence to this relation. The culture of a society further encompasses the knowledge system. This includes both the ancient indigenous knowledge system as well as the knowledge system of present times. These sets of knowledge system can in turn promote environmental education.

Similarly, a reverse explanation of the diagram can be that environment related contents shape our knowledge or education system which influence culture and lifestyles. Thus, the culture will automatically be moulded to work towards environmental conservation.

The above explanations can be understood from a theoretical perspective by referring to the Treadmill Theory of production given by Allan Schnaiberg. It pointed that the constant drive for economic growth in industrial society led to a stagnant growth, ecological degradation and social inequality. Thus, in response to this crisis; other academic theories, like Ecological Modernization came which suggests changes in the approach of development, changes in the process of production and consumption. It urged on technological innovation which will ensure a sustainable economic growth. These modern academic theories are formed in response to environmental crisis and are shaped by the society to tackle the crisis. Likewise, the potential of

ancient education system and indigenous knowledge system is recognized by the National Educational Policy 2020 and these can be an impactful initiative to address environmental issues. Inclusion of this knowledge system along with scientific knowledge can make our education system more application based. Elements from the traditional system of Gurukul system can help in practical learning along with a moral sense of responsibility. The ancient religious texts mentioning about environmental preservation can be equally a guiding source.

Having a sense of the cultural history, art, language, tradition can develop a sense of identity and wellbeing. The NEP 2020's effort to preserve regional language, art and culture can be a step towards preserving the indigenous groups. These groups and their culture if are represented well in the education system then the children from such communities will be able to make others familiar with their indigenous culture and knowledge system. Initiatives like documentation of the languages and their associated art and culture through a web-based platform or portal or wiki, are aimed at preserving the endangered languages. The policy recognized the knowledge of the rich diversity of India which can help the learners to associate with it. Conducting educational tours for the students is seen as a nice way to not only promotes the tourism of such places but also will make the students learn about the diversity, culture, tradition and indigenous knowledge in different parts of the country (MHRD, 2020, p. 50) [5].

Conclusion

This paper focuses on use of both modern and ancient indigenous knowledge system in sustainable development. Earlier the view that prevailed was that indigenous knowledge was more concerned with the daily livelihoods of the people in agriculture, soil fertilization, multiple cropping pattern and so on. Western knowledge was viewed to be more an abstract and analytical representation of the world far from daily life. However, over the time this divide has become blur, the focus of both knowledge is becoming the other way round. Emergence of disciplines like Sociology of Scientific knowledge tries to understand the influence of scientific knowledge on the daily lives of people and if science is shaped by the culture of any society. It is also observed that many local groups are adding elements from scientific elements in their indigenous knowledge and hence forming newer approaches (Agarwal, 1995) [1].

The traditional knowledge needs to be transmitted from one generation to another. Teaching in indigenous language can connect the children to their indigenous community, their lands, and natural resources. This paper can be of help to see the great potential that the New Education Policy 2020 holds in this regard. The policy can further contribute in meeting sustainable development goals like, inclusive education. The paper thus contributes in developing an understanding of the inter- relation between environment (nature), culture and the knowledge systems of our society.

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