



Ecopedagogical Practices Prevalent among Manger Community of Sikkim

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ABSTRACT

Ecopedagogy, a sustainability-based education, represents a novel paradigm aimed at fostering sustainable civilization through an ecological perspective. It serves as a transformative approach to address the existing state of human, societal, and environmental interdependencies. The state of Sikkim encompasses a group of people known as the Manger community, classified as part of the Most Backward Classes, who have traditionally concentrated in rural, forested areas. The researcher utilised an unstructured interview methodology and conducted extensive field data collection to obtain a comprehensive understanding of the various ecopedagogical practices employed within the Manger community as part of a qualitative research study. The researcher investigates and explores the various manners in which the Manger community engages with nature-centric indigenous medicine, social oriented belief and rituals, nature-centric beliefs and rituals, culturally significant food practices connected with nature, and the utilisation of ecologically sustainable tools and how these practices is transferred to upcoming younger generations.

Introduction

The primary goals of education are the acquisition of information and the growth of one's character traits. Individuals that use this resource are better able to learn new things, their critical thinking abilities are developed, and they are motivated to engage in actions that benefit society. The purpose of education is to ensure that the knowledge and experiences of one generation are passed on to the next. One way to do this is to raise awareness of environmental values, beliefs, and concerns. The population explosion, explosion of knowledge, and expectation explosion that distinguish the 21st century represent a few examples (Aggarwal, 1999). These explosions have had significant adverse effects on the environment as well as every element of human civilization. The contemporary society is marked by increasing complexity and environmental degradation, leading to significant pressures on human interactions, cognition, emotions, and aspirations.

On April 22, 1970, the first Earth Day was observed, marking the beginning of the National Environmental Policy Act in the United States. The purpose of this law was to strengthen and protect people's awareness of environmental issues around the world. Furthering the advancement of environmental awareness and education, the North American Association for Environmental Education (NAAEE) was founded in 1971. The first Earth Summit was held in Rio de Janeiro, Brazil, in 1992. The summit's main objective was to create a comprehensive declaration on the challenging subject of humanity's complex connection with the planet. The goal of the project was to create a text that would comprehensively address environmental challenges in education from an ethical and ecological perspective. The United Nations Conference on Environment and Development, 1992 (as cited in Kahn, 2008, p. 2) asserts that Chapter 36 of the Earth Charter emphasises education's role in sustainable development and helping people address environmental and developmental issues. Environmental and ethical awareness, beliefs and attitudes, skills, and sustainable development behaviours are vital. These influencing factors additionally promote public participation in decision-making.

The term ecopedagogy refers to the branch of pedagogy that deals with the practice of education in accordance with sustainable principles and practices (Gadotti, 2010 as cited in Putu, Surata & Lansing, 2015). There are many different approaches to education, but eco-pedagogy is not one of them. As a new model for sustainable civilization from an ecological perspective (Integral Ecology), it requires changes to economic, social, and cultural structures, but it also has meaning as an alternative global project concerned with nature preservation (Natural Ecology) and the impact made by human societies on the natural environment (Social Ecology). Thus, it is an approach to transforming the current social,

political, and ecological order. The fundamental principles of ecopedagogy are thus explored here (Antunes & Gadotti, 2005). The educators on ecopedagogy like Paulo Freire, Moacir Gadotti, Francisco Gutierrez and Cruz Prado, Patricia Abuhab and Guilherme Blauth (Latin America), Richard V. Kahn (North America), and Stefan K. Grigorov (Europe) have turned ecopedagogy into a planetary educational project, a new model of sustainable civilization from the ecological point of view and a new science based on respect for all life. Moacir Gadotti (cited in Jennifer et. al., 2012) coined the term "Earth's Pedagogy" to describe the emerging movement of ecopedagogy as a project for a New Ecologically Sustainable Civilization that children and youth can undertake with the support of teachers and the general public. It is a new type of scientific inquiry that aims to create a more equitable, ecological, and peaceful sustainable civilization in addition to the traditional sciences like mathematics, history, and economics. The destruction of nature (including air, water, food, forests, animals, and plants), climate change, fracking (hydraulic fracturing), and geoengineering; ozone layer depletion; urban decay; the crisis of human communication; technological dependency; the protection of children who use the internet; endless war; and a growing population are just a few of the most critical problems affecting today's as well as tomorrow's youth, and ecopedagogy seeks to equip them with the tools they will.

Review of Related Literature

Sahu (2017) emphasized using ecopedagogy to teach English at the higher secondary level explores the application of ecopedagogy as a teaching approach for English instruction. The study raises awareness specifically to those enrolled in schools affiliated with the Central Board of Secondary Education about ecological concerns such as deforestation, global warming, and the importance of fostering empathy and unity in addition with to enhance students' English language. The report continues by suggesting that the difficulties faced by the contemporary world, such as environmental conservation, sustainable development, gender justice, and the need for empathy and understanding can be addressed through the teaching of English. Jaseena (2019) in her study the level of awareness of ecopedagogy among students in higher secondary schools within the Trichur district of Kerala explored the environmental impacts associated with population expansion. The research findings indicated that there was no significant difference in environmental pedagogic awareness among higher secondary learners based on gender and there are distinct differences in environmental pedagogic awareness across high school students in the science and art streams. Okur-Berberoglu (2015) examined the impact of ecopedagogy-based environmental education on the environmental attitudes of in-service teachers in the city of Hamilton in

New Zealand. The study revealed that the implementation of ecopedagogy-based environmental education resulted in a positive shift in the environmental attitudes of in-service teachers. In particular, this change was predominantly noticed among male in-service teachers. Lee, Y. et al. (2015) conducted a study on Community-Based Eco-Pedagogy Towards Change of Parents' Lifestyles in South Korea. The study revealed that parents must learn to apply ecological knowledge and founds that an ecologically-centred culture should encourage community members to act environmentally.

About Manger Community

The Manger community classified as part of the Most Backward Classes of Sikkim (Gazetteer of Sikkim, 2013) has a long history of inhabiting forested regions and is often believed to have come from the eastern region of Asia. They worship nature and *Kul Pitra* (ancestral spirits) through the practice of presenting diverse natural offerings to them. Traditionally, the construction of their house involves the use of elements like stone, mud, bamboo, and wood. These people were involved in the practice of animal husbandry, including the raising and care of animals including cows, goats, pigs, and hens. Names like *Mansara* (a child with right thought), *Sansara* (a child with good attitude or behaviour), *Devisara* (a child who resembles a goddess and is beautiful), *Dilsara* (a child with a good heart), and *Jaisara* (a child who resembles a flower) are given to their kids in the Manger language, which is based on nature. The main occasion observed by the community is known as *Bareimijong*, where "*Barei*" represents the abstract notion of divine nature while "*Mijong*" symbolises the sacred space designated as the residence of the divine creature.

Research Questions

1. What are the ecopedagogical practices prevalent among Manger Community?
2. How the ecopedagogical practices of Manger Community is transferred to the younger generation?

Objectives of the Study

1. To explore the ecopedagogical practices prevalent among Manger Community.
2. To explore the ecopedagogical practices of Manger Community transferred to younger generation.

Research Method




The researcher used qualitative research method to study the various ecopedagogical practices and its ways to transfer to younger generations among Manger community of Sikkim. In order to understand this, the researcher used unstructured interview along with intensive field data collection among Manger community of Sikkim. For this, a total number of 30 Manger community people from all the four

districts of Sikkim were taken as sample and interviewed.

Result

In order to gain a better understanding of the ecopedagogical practices of the Manger Community, a theme based information is gathered namely: nature oriented local medicine, social oriented belief and practices, nature oriented beliefs and practices, food, culture and nature, and environment friendly tools of Manger Community which is categorically designed as follows:

Nature oriented local medicine

	<p>The Manger Community historically used a herbal plant called "Abijalo" (<i>Drymaria Cordata</i>) to treat pneumonia by drinking the juice extracted from the plant and then applying the residual juice to the forehead to soothe sore throat pain, lower fever, alleviate headache pain, and cool the body.</p>
<p><i>Abijalo</i>" (<i>Drymaria Cordata</i>). Picture taken by the investigator</p>	
	<p>The <i>Tarul</i> (<i>Dioscorea bulbifera</i>) has been traditionally used in the treatment of 'Masi' (hematochezia) and diarrhoea by extracting the plant juice and taking it orally.</p>
<p><i>Tarul</i> (<i>Dioscorea bulbifera</i>). Picture taken from Top Tropicals</p>	
	<p>In cases of severe abdominal discomfort, <i>Kalo Chittu</i> (Unknown scientific name) a medicinal root derived from a plant is used, which includes the process of grinding the plant on a grinding stone and afterwards extracting its juice by placing it on a clean cloth.</p>
<p><i>Kalo Chittu</i> (Unknown scientific name). Picture taken by the investigator</p>	

Social oriented beliefs & practices

The Manger community are referred as *Machey Gotra* (a Hindu clan tracing its paternal lineage from a common ancestor, usually a saint or sage) and because of this they do not consume *Jal Kapur Macha* (a fish species). They also did not kill peacocks as it is believed that once there was a Manger King of San Hari Thar named King Jaisinghay where the King gets engaged with his own daughter mistakenly. During the *Swayambar* (a hindu ritual in which a woman chose a man as her husband from a group of suitors) when the bride was asked about her maternal family, they realized that they were father and daughter. Though they didn't indulge in any sexual intercourse but once the word about their marriage got out, it was considered a sin. So the King told his daughter that they have to flee from the kingdom. So, while they were fleeing, they turned into peacocks. The peacocks & peahens never live together neither indulge in sexual intercourse although they are male and female. However, during thundering season the peacock dance & peahen watches & while dancing, the peacocks drop their seed from eyes and the peahen eats it and that's how peahens are impregnated. Hence, because of this belief Manger people never kill peacocks.

In Manger community, there is a practice that a pregnant woman and husband is not allowed to see dead bodies being bound as it is believed that it will affect their mental health & growth of embryo too. After the birth of a child, a ceremonial act of purifying the child and mother is performed by spraying a combination of gold and teel (sesame) water which they believed that gold and sesame are pure natural products. In the cultural practice of *Sawne Sakrati*, it is customary for the mother and daughter-in-law to refrain from drinking water from the same spring. This tradition involves the daughter-in-law being sent to her family early in the morning, and the husband afterwards retrieving her on the following day. However, the underlying rationale behind the practice of this ritual remains unknown.

Nature oriented beliefs & practices



A place where *Pitri Devta* is kept. Picture taken by the investigator

Manger community worships *Pitri Devta* (Spirit of Ancestors) with a belief that everything in this world that grows from the land, like plants, water, crops, etc., are the blessings of ancestors. They also believed that *Pitri Devta* also protects their family members from diseases, accidents and other worldly pain & sorrows.



Devithan where *Devi Puja* is performed. Picture taken by the investigator

They perform *Devi Puja* (worship of goddess) generally under a tree or on a rock by tying religious threads believing that *Devi* resides there which in turn the people will not pollute that area along with preserving tree & rock.



Sacred thread. Picture taken from Quora

The sacred thread, crafted from silk, made into seven knots known as "*Sath Gathe*" and three knots "*Teen Gathe*" fastened to various parts of the child's body like in waist, wrist, neck, and leg with the purpose of providing protection from diseases and evil spirits.



Bhisenpati (Buddleja asiatica lour). Picture shared by Prakash Manger

The *Bhimsenpati* (*Buddleja asiatica* lour) an ethnic herbal ayurveda medicine is also used while practicing *Achamani* (the ceremony of showering holy water) for the child & mother in order to protect them from skin diseases.

Food, culture & nature



Ghittha (*Dioscorea bulbifera*). Picture shared by Prakash Manger

The main food of the Manger community consists of *Ghittha* (*Dioscorea bulbifera*), a forest food which grows on creeper and are eaten boiled and is rich in fibre.



Vyagur (*Dioscorea deltoidea*). Picture shared by

Vyagur (*Dioscorea deltoidea*) a sweet juicy fruit like peer found in forest and rich in fibre.

Prakash Manger



Ban-Tarul (Dioscorea bulbifera). Picture taken from Wikimedia Commons

Ban-Tarul (Dioscorea bulbifera) a wild yam, usually eaten boiled but when eaten raw helps in reducing throat pain.



Ghar Tarul (Dioscorea alata L.). Picture taken from Cuisine Nepal

Ghar Tarul (Dioscorea alata L.), a cultivated white yam rich in protein, dietary fibre, potassium, and carbohydrates, helps to improve digestion, boost brain functions, keep the heart healthy, and help with weight loss.



Kodo-Dhero. Picture taken from Nepali Food Blog

Kodo-Dhero, a porridge-like alternation of millet, contains potassium and magnesium that help to regulate blood pressure, and due to its high calcium content, it strengthens bones. Iron in millet prevents anaemia. Regular consumption of *kodo* bread or *dhero* may relieve constipation and gas.



Fapar-Dhero. Picture taken from DesiDakaar

Fapar-Dhero, a porridge-like alternation of buckwheat, is a good source of *protein*, fibre, and carbohydrates that help improve heart health, promote weight loss, and help manage diabetes.



Gundruk. Picture taken by Investigator

Gundruk, a fermented dried pickled leafy vegetable, is abundant in vitamin C that contributes to the reduction of colds, influenza, and inflammatory conditions and it contributes to the reduction of diabetes, cardiovascular diseases, and infectious ailments. It also possesses potential benefits for gastrointestinal health because of its fermentation procedure.



Sinki. Picture taken from Hellosikkim

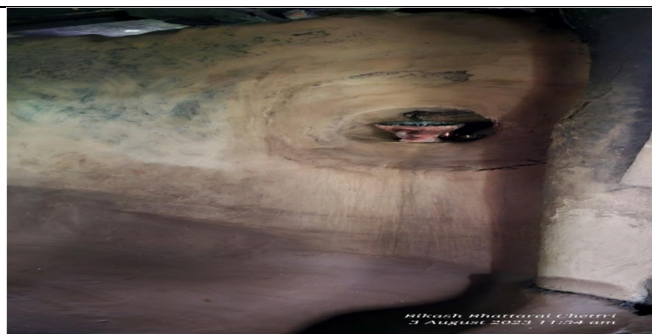
Sinki, a fermented radish roots are considered to be a highly abundant source of organic acids as well as essential minerals including calcium, iron, potassium, and antioxidants. It helps in combating inflammation as well as lowering symptoms related to colds and influenza. In addition, it benefits treating infections, cardiovascular disease, and diabetes.



Jirey Khorsani. Picture taken from Dolma Organic

Jirey Khorsani (hot chilies) contains essential nutrients such as potassium, vitamin A, vitamin E, and vitamin C, which helps in decreasing the symptoms of cluster headaches, migraines, and sinus headaches.

Environment friendly tools



Diyo. Picture taken by the investigator

Manger community made many things from mud like *Diyo* (a small container in which a thread is inserted along with mustard oil) and is used for lightning house.



Matyangra and Guleli. Picture taken by the investigator

Matyangra (a small mud ball used to scare peacock), *Guleli* (sling shot made from bamboo and used with *matyangra*) used to scare peacocks in the cultivating field.



Twak. Picture taken by the investigator

Twak (Containers) is made from bamboo and is used for storing various food stuffs.



Nanglo and Thunchey. Picture taken by the

Nanglo (a winnow fan made from bamboo) is used for segregating muds and stones from food grains and *Thunchey* (a container made from bamboo) is used to store various food grains.

investigator



Theki and Madani. Picture taken by the investigator

Theki (a container made from wood) is used to prepare curd and *Madani* (a long spinning fan type made from wood) is used to prepare ghee from curd.



Doko. Picture taken by the investigator

Doko (wicker basket made from bamboo) is used especially for carrying fodder.




Namlo. Picture taken by the investigator

Namlo (tumpline made by grinding bamboo shoot & was boiled and dried and weaved) is used for carrying purpose of different materials.



Furlung (a basket made from bamboo) is used to keep different household things.

<p><i>Furlung. Picture taken by the investigator</i></p>	
 <p><i>Pecha. Picture taken by the investigator</i></p>	<p><i>Pecha</i> (a mad shape basket made from bamboo) is used to squeeze mustard seeds for deriving mustard oil.</p>

Ecopedagogical Practices of Manger Community

With regard to the ecopedagogical practices of the Manger Community, it is revealed that the Manger community basically uses local medicine to cure diseases. As one of the respondent uttered: “...*Pahila Ko Jamana Ma Kaha Testo Hospital Thiyo Ra Ni.... Ani Bimar Huda Tah Gharelu Dabai Pani Nai Khanu Paryo Ni....*” means in earlier times, there was no any such hospital available in surrounding; hence, whenever one falls ill, they used to give treatment by using local medicine. They also have social practice and beliefs in which they prohibit killing of peacocks and drinking of water from the same spring by the mother and daughter in law. Another respondent responded that “...*Hami Devi Dewta, Pitri Devta Ani Janai Dori Banney Ma Biswas Garchau Kinaki Yo Pujnaley Ya Puja Garna Ley Hamilai Prakitik Aapadha Ani Dusta Aatma Bata Bachaucha.....*” means they worship Pitri Devta, perform Devi Puja, fastening sacred thread with a belief that it will protects their family, crops, domesticated animals, land and environment from natural disasters and evil spirits. They consume local seasonal foods like Ghittha, Vyagur, Ban-Tarul, Ghar-Tarul etc. which they consider that it provides all the necessary nutrients required for maintaining good health. They produce their own handmade tools that is made from mud, stone and bamboo like Diyo, Matyangra, Guleli, Twak, Nanglo, Doko etc. which is eco-friendly and serve the purpose for which it is made. Hence, Manger Community practices various environment friendly activities that support towards maintaining a sustainable environment.

Strategies Used to Transfer Ecological Practices to Younger Generation in Manger Community

With context to transfer of ecopedagogical practices of Manger Community to younger generation, it is revealed that the younger generation of Manger Community did not know much about the local medicines used by their forefathers. One respondent (1) uttered: “.....*Ahiley Ta Sabai Bimar Ko Dabai Paihalcha; Jangali Dabai Lai Biswas Gardaina... Ani Kaslai Po Bhannu Yesto Kura?.....*” means now there is availability of medicine for every kind of disease and no one believes in the usage of local medicine so whom to share about local medicine? In addition to this, other respondent (2) says, “...*Ahiley Ko Naniharuley Bhagawan, Devi Dewta Ani Puja Patt Ko Teti Biswas Gardainann Kina Ki Yeniharuko Sochai Alagai Cha; Sayad Alik Pada Likha Bhayera Ho Ki...*” means the younger generation of these days very less believes in the existence of God, Devi Dewta and worship may be because of having different educated mind set. Another respondent (3) replied: “..... *Aba Ko Naniharulai Ghittha, Vyagur, Ban Tarul, Dheero, Bhanney ko Swad Kasto Huncha Kaha Thaha Huncha? Sabaijana Chitto Mitho Fast Food Pizza, Momo, Taipo, Faley Kai Matra Kura Garchan....*” means the younger generations have never tasted *Ghittha, Vyagur, Ban Tarul, Dheero* instead they are fond of fast food items like Pizza, Momo, Taipo, Faley etc. Other respondent (4) uttered: “...*Ahiley Ko Nanihruley Gobar Chunu Ghinauchan, Kata Kodalo, Hasiya Chudainan Na ta Doko Namlo Kei Bhari Boknu Manchan...*” means the younger generation of these era ignored to touch cow dung, never touched sickle and ploughing tools neither have carried fodder. Another respondent (5) says, “..... *Ahiley ko Naniharu Ley Thulo Manchey Ley Bhaneko, Sikako Sunnu Chahadainan.... Ahiley Mobile Ko Jamana Aayo Ra Sabailey Yesto Kurama Biswas Gardainan... Yesari Hamro Sabai Riti Riwarz, Bhesh Bhusa Ani Sabhyata Sabai Bistari Bistari Haraudai Jadaicha.....*” means the younger minds never accepts, learns and believes in moral values and sayings that may be because of digital mobile era; hence, resulting in slowly vanishing of our customs, traditions, belief and culture.

To conclude, in order to protect the indigenous practices; it is very essential to promote all these practices and beliefs through streamlining all these into educational arena which the National Education Policy 2020 makes an effort to covers up comprehensively.

Conclusion

The existence of various methods and practices among Manger community occupies a prominent place in context of conservation & protection of nature. The nature-centric indigenous medicine, social oriented belief and rituals, nature-centric beliefs and rituals, culturally significant food practices connected with nature, and the utilisation of ecologically sustainable tools provides a diverse range of

ecopedagogical content which is helpful in developing knowledge, attitude, skill and ability in order to take effective action towards issues concerning environmental problems, crisis and justice.

References

- Aggarwal, J. C. (1999). *Development and Planning of Modern Education* (Sixth Edition). Vikas Publishing House Pvt. Ltd., New Delhi.
- Antunes, A., & Gadotti, M. (2005). Eco-pedagogy as the Appropriate Pedagogy to the Earth Charter Process. *Earth*, 135–137.
- Gazetteer of Sikkim (2013)*, Home Department, Govt. of Sikkim, Gangtok, ISBN: 978-81-920437-1-5, 123-126.
- Jaseena, F. M. (2019). A study on awareness of ecopedagogy among higher secondary students. *International Journal of Education and Psychological Research (IJEPR)*, 8 (1), 67-69.
- Jennifer M. Gidley, Richard V. Kahn, Patricia Abuhab, Laura Battisti, Guilherme Blauth, Roberto Bombarda, Ivanize Bragaglia, Peter Buckland, Raquel Dotta Corrêa, Sara Dotta Corrêa, T. D. (2012). *International Handbook of Ecopedagogy for Students, Educators and Parents*. (S. K. Grigorov, Ed.). Sofia.
- Kahn, R. (2008). From Education for Sustainable Development to Ecopedagogy: Sustaining Capitalism or Sustaining Life? *Green Theory & Praxis: The Journal of Ecopedagogy*, 4(1), 1–14. <https://doi.org/10.3903/gtp.2008.1.2>
- Lee, Younsun; Jo, Heasoog; Lim, Booyeun (2015). Community-based eco-pedagogy towards change of parents' lifestyles in South Korea. *Procedia - Social and Behavioral Sciences*, Vol.- 174, p. 1997-2003
- Okur-Berberoglu, E. (2015). The Effect of Ecopedagogy-Based Environmental Education on Environmental Attitude of In-service Teachers, *International Electronic Journal of Environmental Education*, Vol.5, Issue 2, 86-110.



- Putu, S., Surata, K., & Lansing, J. S. (2015). Engaging Student Teachers in Designing Ecopedagogy Learning Modules for Bali's Subak Cultural Landscape. *NACTA Journal*, (June), 139–143.
- Sahu, R. (2017). Using Ecopedagogy to Teach English at Higher Secondary Level. *The Criterion: An International Journal in English*, 8 (II), 898-904.