# Ecopedagogical Insights in Ambikasutan Mangad's Swarga: A Posthuman Tale

Dr.S. Lavanya<sup>1</sup>, Ms.M. Kavya<sup>2</sup>

<sup>1</sup>Assistant Professor of English, PSGR Krishnammal College for Women, Coimabtore <sup>2</sup>M. Phil Research Scholar, PSGR Krishnammal College for Women, Coimabtore

Abstract - Ecopedagogy was the movement introduced by Paulo Freire, a philosopher and educator who introduced revolutionary learning and teaching of environmental ethics. This paper focuses on the major issue of using Endosulfan, chemical pesticide through aerial spray and its long-term effects on human health and its effect on the biosphere. The novel Swarga by Ambikasutan Mangad, is a factual fiction which is based on real-life incidents. The protagonist is determined to create awareness among the innocent victims about the effects of the pesticide. He spearheads campaigns against the corrupt politicians to stop usage of endosulfan as it had caused health complications, deformed progeny among human and cattle, toxicity also causes psychological imbalance which in few cases turn fatal. The objective of this paper is to prove that literary texts can be used as pedagogic tools to create awareness regarding environmental conservation.

Index Terms - Swarga, Ambikasuthan Mangad, Ecopedagogy, ecocriticism.

### INTRODUCTION

Ambikasuthan Mangad is a Malayalam writer and an essayist. Mangad has written four volumes of literary criticism, a folk idioms dictionary, two novels and few short stories. He has won Ankanam Award, V. P. Sivakumar Keli Award, Ithal Puraskaram, Edasseri Memorial Award and many more. The novel *Enmakaje* was written in Malayalam by Ambikasutan Mangad and was translated to English by Dr. J. Devika as *Swarga*. She is an academician from Kerala, social critic, feminist and a professor. Devika has translated many fictional and non-fictional books of Malayalam and English.

## **ECOPEDAGOGY**

Ecopedagogy is a movement developed from Critical Pedagogy and introduced by Paulo Freire, who was an educator and philosopher. Ecopedagogy utilizes the discourse in critical pedagogy as applied to the conviction that all the biological systems and planet should be freed from human tyranny. Among the supremacies of planetary oppression recognized by Ecopedagogues are the authoritative belief systems of anthropocentrism. Ecopedagogy proposes genuine political and social change are essential to safeguard the biosphere and thereby ensure a healthy environment. "To stop the downward spiral of intensifying environmental violence that inevitably leads to social violence we, as humans, need to better understand what is at stake and to determine how to make changes at the root levels. Ecopedagogy is centered on understanding the struggles of and connections between human acts of environmental and social violence" (Misiaszek, 17). As environmental crisis has caused serious consideration to the sustainability of life on the planet, educating citizens about their role in environmental destruction becomes essential. Mangad through his novel has instilled societal and environmental consciousness among the

It is urgent that we assume the duty of fighting for the fundamental ethical principles, like respect for the life of human beings, the life of other animals, the life of birds, the life of rivers and forests. I do not believe in love between men and women, between human beings, if we are not able to love the world. Ecology takes on fundamental importance at the end of the century. It has to be present in any radical, critical or liberationist educational practice. For this reason, it seems to be a lamentable contradiction to engage in progressive, revolutionary discourse and have a practice which negates life. A practice which pollutes the sea, the water, the fields, devastates the forests, destroys the trees, threatens the birds and animals, does violence to the mountains, the cities, to our

cultural and historical memories (Freire, *Pedagogy of Indignation*, 46-47)

#### HARMFUL EFFECTS OF AGROCHEMICALS

Prolonged usage of toxic chemical herbicides and pesticides can cause hazardous symptoms such as seizures and spasms. The prolonged usage of pesticides may kill birds, animals, water creatures and can make the land barren. Chemical pesticides cause threat to environment sustainability. Rachel Carson published the book Silent Spring in 1962 which created awareness about the effects of the indiscriminate usage of pesticides on health and the environment. Rachel Carson says, "It is not my contention that chemical insecticides must never be used. I do contend that we have put poisonous and biologically potent chemicals indiscriminately into the hands of persons largely or wholly ignorant of their potentials for harm. We have subjected enormous numbers of people to contact with these poisons, without their consent and often without their knowledge" (Wilson, 12). Ambikasutan Mangad has envisaged the novel about the detrimental effects of the pesticide sprayed in Swarga. Endosulfan that is aerial sprayed in Swarga is highly dangerous as it causes health disorders which will pass on to the next generations. "Organochlorides can mimic hormones. Women's menstrual cycles will be upset. Men's sexual organs will also be affected – sperm count will fall" (Mangad, 146).

#### **FACTUAL-FICTION**

This novel is based on the fact that endosulfan was sprayed for twenty-five years in the cashew plantations owned by the government. The illiterate people were made to believe that the pesticide sprayed was a medicine for cashew plantation in a small village called Swarga, in Enmakaje. The villagers believed that their illness and deformities were due to the wrath of Gods. Neelakantan often wonders that he had never found any fishes, crabs, crows, butterflies, or worms in the hills. The water which used to be a medicinal has now become a deadly poison for the people. "This was no Swarga – heaven – but hell – Naraka. The land must have yielded gold before endosulfan's entry. The soil was so rich, so well endowed with water sources.

Maybe that is why it was named heaven" (Mangad, 112).

In Kasargod's Padre Village, residents reported that aerial spraying of Endosulfan in the cashew plantations began as early as 1976. A few years later, there were reports of calves being born with deformed limbs. Frogs, fishes, bee colonies, fireflies and jackals vanished from these areas. Many local children and a large number of people below the age of 25 were suffering from severe disorders. Families who lived along the Kodenkiri stream and its smaller tributaries endured the most. Protests and efforts mobilized by residents helped throw light on these troubles. However, it took many years for officials to fully address the dangers of the pesticide. (The Brogen Project)

# EVIDENCE OF THE EFFECTS OF ENDOSULFAN ON HUMAN HEALTH AND THE BIOSPHERE FROM THE NOVEL

Neelakantan was shocked to find that every house in the village has a sick child with uncurable illness or deformed progeny. He saw a girl born with a long tongue, "'She was like the' a' a babe born. Tongue hung out even in sleep. Can' eat anything' solid. We feel her witt paste of cook'd rice. Went to many vaidyas, doctors no use" (Mangad, 70). Another child had big head and tiny limbs, "Her body was grotesque her head was bigger than her body, her limbs were tiny" (Mangad, 71). In the next house a boy and a girl both of same age, were chained in a room as they are mentally ill. "The girl, old enough to be married, was asleep when they reached the house. The boy was about the same age. The house stank badly. Coming close, they saw that the boy was rubbing his own shit and piss into the floor" (Mangad, 72).

Neelakantan has a sick child at home named Pareekshit which was orphaned as its parents committed suicide. The child looked as if it is one year old, but Panji says that the child has been treated for six years by him. Another child in the village was twenty-six years old but looked as if twelve years old. "I saw a child today covered with sores, like ours. His name is Anvar not a child. his mother said he was twenty-six. But he looks twelve. His fingers are strangely long and thin like octopus' arms, all curled up. His eyes are all white with no pupil" (Mangad, 74).

Even the doctor was shocked and confused on seeing so many sick patients in the small village. Most of the sick children were born with congenital deformity. He says that he could not cure the illness which has spread all over Enmakaje with his medical knowledge. The doctor doubts that spreading of some poison in the air was the cause for the disease which was rampant in that area. "This lane' is full' of disease I have not seen in medical books and journals. My medicine is not working. There are fifty mental patients I have the small number of ouses just around here. Lots of abortion, cancer. My personal opinion is that some terrible poison has spread' all over the soil and water. Just cannot make out what that is. (Mangad, 83)

The aerial spray of endosulfan in the cashew plantation over the hills was the reason for the illness in Enmakaje. The plantation was owned by Kerala government and was maintained by Plantation corporation of Kerala (PCK). The pesticide spray was done aerially for almost twenty-five years without undertaking any preventive measures. "The curse of this land is the poison. That poison they bring year after year in the aeroplane and spray down below"" (Mangad, 101-102). The lack of awareness about the harmful pesticide was evident as the workers from the village were mixing the chemical poison with bare hands. "It is simply impossible to predict the effects of lifetime exposure to chemical and physical agents that are not part of the biological experience of man" (Carson, 185).

Pareekshit and other children were born with deformity which was the effect of imbuing the lethal poison for a prolonged period. "Endosulfan apparently causes rapid genetic change in creatures. In chromosomes, genes, why, even in DNA. I think that's why we are seeing strange-looking infants and calves in Enmakaje." (Mangad, 146). A young girl Harita committed suicide as she suffered psychological problem Dr. Arun says, "See, the' child', Mamta she's in Class Two, would' you believe? She started menstruation last year. We have the same with the dead child. many children in Swarga are the same." (Mangad, 110). The place was real hell for the people to live in because of some money minded and selfish people in power who were poisoning the land. "How could intelligent beings seek to control a few unwanted species by a method that contaminated the entire environment and brought the threat of disease and death even to their own kind?" (Carson, 7).

#### ECOMARXIST CONCERNS IN THE NOVEL

Ecomarxism critiques the capitalist's attitude that leads to environmental destruction at the cost of endangering the lives of the underprivileged people whose sustenance is based on the specific biosphere. Commodifying natural resources and market-based agriculture has led to environmental catastrophe. Chemical fertilizers, pesticides used for better produce can endanger the ecosystem to the extent of loss of biodiversity. The interdependence of human beings and the natural world is disrupted by the capitalists urge to make profit at any cost.

All progress in capitalist agriculture is a progress in the art, not only of robbing the labourer, but of robbing the soil; all progress in increasing the fertility of the soil for a given time is a progress towards ruining the lasting sources of that fertility. The more a country starts its development on the foundation of modern industry, like the United States, for example, the more rapid is this process of destruction. (Marx, *Capital Vol I*, 474 - 475)

The protagonist along with some major characters indulge in environmental activism to create awareness against the corrupt government to stop aerial spraying of pesticides as it causes health hazards. The villagers who were interested in environmental issues started new group called Endosulfan Spray Protest Action Committee (ESPAC). The members of ESPAC club went to the PCK corporation and asked them to stop the aerial spray as they are harmful. They met the political leader who was elected from their area to represent their problem and to hand over a complaint against spraying endosulfan. They were completely disillusioned by the way they were treated by the politician. Paulo Freire in *Pedagogy of the Oppressed* says, "Leaders who do not act dialogically, but insist on imposing their decisions, do not organize the people – they manipulate them. They do not liberate, nor are they liberated: they oppress" (78). The members of ESPAC decides to plan a rally to create awareness on endosulfan. The simple village people strive against the forces of power and money to stop endangering the biosphere from further damage. The issue reached media attention and a commission was sent for investigation. Officers came to Enmakaje for inspection to record people's health condition and to see whether PCK was following precautions while spraying pesticide. "The PCK claims that it will lose crores if the spraying doesn't happen!" (Mangad, 153). The officers were ready to submit the facts as they found presence of endosulfan in the water bodies around Enmakaje. The blood samples taken from few villagers, gives shocking range of endosulfan in their bodies. They also found enormous endosulfan in breast milk. "Lalitamma of Kumbadaja - don't be shocked, they have found 22.4 ppm of endosulfan in her breast milk! Do you know, even in water, only a maximum of 0.18 ppm is allowed? Do you know how much of it was found in this mother's blood? 176.9 ppm!" (Mangad, 174). But these officers were bribed or threatened by the politicians, thus profit from the cashew plantations were given importance than human life and spraying continued. "Many agricultural scientists are brokers of the pesticide lobby! This poison network is so huge – with money it swallows them all - politicians grown fat on public funds" (Mangad, 180).

Neelakantan met Leela Kumari Amma, who filed a case against Endosulfan spray. She was bold enough to stand against such injustice and filed a case against PCK. She met with an accident which was an attempt to murder her. "For three whole months, she lay unconscious in a Mangalore hospital. It was an accident,' Jayarajan said. 'A lorry that was speeding and on the wrong side of the road hit her when she was on her way to her office. It was not much after the court order was passed'" (Mangad, 191). Because of this pesticide, the land lost its fertility, water creatures died, and children were born with congenital disorders for generations.

Most of the biodiversity disappeared. The water sources dried up. The land is filled with sickly people like the eucalyptus plantation in Karnataka and the pine plantations in the Himalayas Look at the acacia forests in Kerala that was a plant meant to dry up swamps in Australia! That horrible tree is now turning Kerala into a desert, in the name of afforestation! Otherwise, it is hard to imagine why this useless plant, in fact harmful plant, which increases the acidity of the soil, sucks up all our water and causes allergies in people, was given such a welcome, in our land where mango trees and jackfruit trees grow so plentifully! This culture of monoculture is what a politics of diversity should end (Mangad, 155)

#### **CONCLUSION**

The novel is an eye-opener about the indiscreet usage of pesticides and advocates the readers to actively participate in environment conservation. "Our struggle is not just against endosulfan, it is against all pesticides that lead to the earth's desertification!" (Mangad, 177). This novel emphasizes educating people to develop environmental consciousness. Marx in Marxist Social Thought states "Man lives on nature means that nature is his body, with which he must remain in continuous intercourse if he is not to die. That man's physical and spiritual life is linked to nature means simply that nature is linked to itself, for man is a part of nature" (73). The novel is a resource for ecopedagogy as it creates awareness regarding the importance of healthy agricultural practices and the need for conserving our environment. Creating environmental consciousness is essential to make people to indulge themselves in sustainable practices on their own freewill.

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