

Veins of Poison: Intersections of Green Criminology, Environmental Justice, and Toxicity in Ambikasutan Mangad's *Swarga*

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ABSTRACT

*In this anthropocentric era, toxicity has become inseparable from ecocritical and environmental discourse. All of Life is contaminated by toxic agencies, affecting natural resources, humans and non-humans. Green Criminology as a study considers such contamination a criminal act, as it also incorporates disciplines like Environmental justice and rights to raise concerns for the environment and find solutions that would eradicate such acts of environmental 'violence'. This article establishes that fiction is a medium to unearth this crime committed against the earth, relating Environmental rights and justice as it remains closely intertwined with human and non-human lives. Arguing that novels allow deeper introspection into environmental violence from a cultural and personal perspective, the article explores this intersection of green crime, environmental and human rights, toxicity and awareness through Ambikasutan Mangad's novel *Swarga*, deploying how narratives of victims and descriptions of the land and faith add to conversations of criminology, aiding the enforcement of environmental justice.*

Keywords: Environmental Justice; Green Criminology; Ecocriticism; Narrative Analysis; Ambikasutan Mangad

INTRODUCTION

History testifies that man and nature's relationship can never be compromised. Bards have penned countless poems on nature's indelible glory, songs have been sung in praise, and scientific discoveries have proven that it is an irreplaceable resource. However, nature's 'silence' is interpreted as a sign of weakness that leads to exploitation seeping into territories of human rights and slow violence. Nature is viewed as an object, a source of capital and development. Literature is called the mirror of society and presents a corrective to it (Duhan, 2015). This is precisely why scholars and critics worldwide have been surprised at the sheer lack of environmental narratives in this age. The century is marked with "potentially cataclysmic human environmental impacts: mass extinction, invasive species, climate change, increased atmospheric levels of carbon dioxide, rising sea levels, and the dumping of nuclear or chemical waste" (Parham & Westling, 2016, p. 1), yet fictional representations of these vast global problems are rarely portrayed.

The literary approach of ecocriticism deals with the natural environment and its representation in various forms. This criticism does not limit nature to being a mere backdrop or setting in literature and art. It sheds light upon multiple issues that stretch beyond the character analysis and background of the work to ponder matters concerning politics, socialism, economy

and the environment. David Mazel (2001) writes that ecocriticism takes an earth-centred approach to literary studies. This is because the concept of ecology is crucial to our knowledge of how humans are an inherent part of nature. Not only does it inform the changes in the climate, but it also helps us learn about the interdependence of humans and non-humans.

Ecocriticism as a theory is at a very nascent stage. The term 'ecocriticism' was first introduced in an article by William Rueckert in 1978 titled *Literature and Ecology: An Experiment in Ecocriticism*. The term, however, did not make much noise in the literary community. Lying dormant for a long time, ecocriticism was again stirred up by the collection of essays edited by Cheryll Glotfelty and Harold Fromm in 1996. The introduction of the collection, penned by Glotfelty herself, urged the literary community of scholars and critics to observe the environmental context in literature, shifting focus from human contexts such as gender, class, ethnicity, economy, and colonialism. Glotfelty and Fromm's (1996, p. xviii) definition is the one most widely quoted in the field; this was simply stated as "the study of the relationship between literature and the physical world".

'Wave' terminology is frequently used to delineate the developments in the field. The first wave began around 1980 when scholars and critics began to use the term 'ecocriticism'. However, this criticism was limited to the genre of nature writing, consisting of literary nonfiction work focused on the wilderness, the virgin lands, and anything untrodden by the human being. Nature and human beings were seen as two extreme binaries during this period. The second wave, however, blurred these boundaries in great measure. The field expanded in the mid-1990s to include criticism of narratives of urban and suburban contexts to include local perspectives in environmental movements. Slovic and Joni Adamson introduced the third wave in their article in the journal *MELUS* in 2009, which incorporated diverse environmental narratives and authors worldwide. It included eco-cosmopolitanism, neo-bioregionalism, material ecocriticism, gendered approaches to ecocriticism and various ways of eco-activism (Slovic, 2015). This list is not exhaustive and does not fully represent the field's breadth.

The modern environmental movement sees its origins in Rachel Carson's *Silent Spring*, published in 1962, as it was able to spiral from the traditional nature writing format to taking varied approaches that began introspecting into environmental criticism and ethics. Carson's narrative could be stark in its morals, but unlike science fiction, it does not eliminate the possibility of a future. It presented evidence against the harsh realities of our current practices, drawing people's attention toward environmental justice and its importance in this era of the Anthropocene. After her, many critics and scholars investigated harmful practices misleadingly termed as *sustainable* or *development*, which does not alter the reality. Carson's work altered the nature vs. human belief to establish a cyclical relationship between nature and human beings.

THE ENVIRONMENTAL JUSTICE MOVEMENT AND LITERATURE

The environmental justice movement began in the 1980s in the US. Joni Adamson (2016) notes that the development of this movement is evident worldwide, now steering its premise towards "intergenerational justice" (p.1) that benefits communities and their non-human counterparts for the generations to come. As the environmental hazards escalate rapidly, their consequences are suffered majorly by people of colour, the economically poor and women as they cannot afford better living conditions. These discriminations become the cause of the growing numbers of

displaced environmental refugees as well (Buckingham & Kulcur, 2009; Bullard, 1994; Roy & Hanaček, 2023).

As defined by Joni Adamson et al. (2002), the "environment" refers to the "places in which we live, work, play, and worship" (p.4). The environmental justice movement underscores the rights of all organisms to share the benefits of the earth equally. Literature and the environmental justice movement is an essential point of intersection that brings into the conversation environmental contamination, human rights, environmental rights, gender issues and communities of the economically poor. These communities bear the brunt of capitalisation and development and are the first to be affected by the state's exploitation. T.V. Reed (2002) argues that environmental criticism should provide a discussion that represents race, class and culture as "Worst forms of environmental degradation have been enabled by the governmental and corporate policies of dumping problems on communities of colour, poor whites, and the Third World" (p. 146). Environmental justice ecocriticism incorporates all the ignored questions in conversation with various other movements and critical agencies that can illuminate the interrelated problems faced by humans and non-humans.

Fundamentally, the environmental justice movement is a political discourse. However, literature about environmental justice challenges the mainstream focus of the original movement. Julie Sze (2002) writes that Literature "places people, especially racialised communities and urban spaces, at the centre of what constitutes environment and nature" (p.163). Literature presents a different perspective on environmental justice studies as it offers a wider outlook on sociological analysis and statistics to images, metaphors, culture and history, "Other methods, such as narrative analysis of cultural texts, offer an alternative strategy to analysing the roots of environmental racism" (Sze, 2002, p.165). Literature and environmental justice studies can open up a plethora of narratives that were ignored under a more objective approach to environmental issues and impacts. Sze (2002) also notes that literature, through its images and metaphors, offers a more flexible outlook on environmental justice, "one with a global view and historical roots" (p.163). Environmental injustice is not a standalone problem as it interlocks with various other origins of discrimination within its discourse. A narrative analysis of literature that depicts environmental contamination and discrimination can unearth how they are linked to colonisation and gender issues (Sze, 2002). Toxicity levels are higher in the global south as many places are threatened due to polluted air, water and land dictated by large corporations and global economic forces (Opperman, 2016). Such an environmental crisis does not spare the non-human as well. "In the Global South, as Heise concurs, 'human populations and natural systems disproportionately suffer the consequences of economic exploitation, toxification, and climate change'" (Opperman, 2016, p. 414).

Literary scholar Rob Nixon (2011) discusses how toxic contamination is a slow process, camouflaging itself under various titles such as green revolution, mono-crop culture, deforestation, etc. Events of slow violence become an unavoidable part of the lives of the poor and the indigenous, causing various health problems and displacement. Such toxic contamination raises concerns of environmental injustice among activists and scholars of indigenous activity. Environmental degradation is not limited to humanity alone. Contamination of land and water resources extends its consequences to the resources and non-human bodies. If left unattended, this would further snowball into a large mass of toxicity that human beings cannot tend to at all. Forms of literature and art employ these theories to convey to their readers while engaging them to 'make kin', a concept by Donna Haraway, with all organisms that walk the earth (Haraway, 2015).

GREEN CRIMINOLOGY

Large populations are being traumatised by climate change and fast-developing health ailments. Most are forced to leave their habitat owing to protection policies or land degradation. According to the UNHCR (The UN Refugee Agency) Global Trends Report 2021, there have been 23.7 million displacements of people within their countries due to life-threatening weather conditions like floods, droughts and storms (United Nations Refugee Agency, 2022). It further becomes important to trace the ways in which environmental degradations and changes are causing harm to the population overall. Green Criminology studies showcase how anthropocentric activities deform the environment, causing it harm. It is considered criminal as it is formed intentionally despite awareness of the destruction of land, air and water bodies. Nellemann et al. (2016, p.17) expand on the main focus of environmental crime, stating that it is:

Most commonly understood as a collective term to describe illegal activities harming the environment and aimed at benefitting individuals or, groups or companies from the exploitation of, damage to, trade or theft of natural resources, including, but not limited to serious crimes and transnational organised crime.

Green criminology studies crimes committed to the environment that cause damage to humans and non-humans. These crimes are rather broad and include failure of protection policies that affect the environment and the people and agricultural policies like the green revolution. However, its reach is not limited to such activities alone. Green criminology also brings together the victims of such environmental damage (Melangadi, 2017; Nurse, 2017). It highlights how justice can be ensured when extensive criminal activity has destroyed human, animal and plant life. This interlaces the premise of this article with the contemporary environmental justice movement, for such criminal activity is ignored in the traditional canon of criminology.

Primarily, this article discusses how the study of green criminology could interact with and draw from the principles of environmental justice and toxic discourse through fictionalised narratives. As explained by Buell in his concept of toxic discourses in 1998, these narratives provide alternative critiques to contemporary novels that include toxicity or even describe a risk landscape that looks at risks that originate from the advent of globalisation and modernisation. Ursula Heise (2002) draws from Buell's concept to further extend the critical analysis of contemporary environmental literature that utilises chemical substances as a method for "blurring the boundaries of body and the environment, public and domestic space, and harmful and beneficial technologies" (p. 748).

A cultural medium such as a novel would help to foreground discrimination and the impact of such crimes on the grassroots level, possessing the ability to present how activities that raise toxicity in the environment affect ordinary people who hold great reverence for their surroundings but, due to capitalism and neo-imperialism, suffer the consequences. Fictional representations of green crime would allow greater depth into the ideologies of green criminology to strengthen its reach. Ahmed and Hashim (2015) write about literature and art's prominence in bringing a wave of 'green resistance' as they tell stories of human beings and nature collectively revolting against the power structures. The article, thus, extends on such resistance against the state's power chokehold on the region and its people via Mangad's *Swarga*.

SWARGA: THE TOXIC HELL

The novel chosen to explore this intersection between toxic discourse, environmental justice, and green criminology is *Swarga*, written by Ambikasutan Mangad. Mangad is a professor of Malayalam and a renowned activist who raised his voice against Endosulfan use in Kerala, India. His works, such as *Marakkappile Theyyangal*, *Randu Malsyangal*, *Jeevithathinte Mudra* and so on, also focus on environmental literature and are written in Malayalam. This novel, originally titled *Enmakaje* (2009), was translated into English by J Devika in 2007 and renamed *Swarga: A Posthuman Tale*. It is a fictional representation of the damage caused by the widespread aerial spraying of the Endosulfan pesticide on the cashew plantation in Kasargod. As the narrative follows the novel's characters, readers are made aware of the brutality of the after-effects of the pesticide as it continues to poison their lives through water bodies and the air they breathe. In the novel, the ecosystem becomes brittle as the pesticide makes the place hell, ironically called Swarga (which means 'heaven'). The widespread use of pesticides, which causes serious health problems in the region of Kasargod in Kerala, also sees the slowly degrading ecosystem of Swarga. Slow violence is a prominent theme throughout this novel, as people are largely unaware of the origins of the disaster that threatens the ecological balance of the region. Evidently, this brings us to the urgent address of the perception and seriousness of environmental crime. Melangadi (2017) points out that green crime "came into the limelight after realising the intensity of harmful activities on the environment mainly in the form of discharge of harmful substances into the air, water and soil (collectively, polluting the environment), deforestation, mining, etc." (p. 2).

Ambikasutan Mangad's *Swarga* is a fictional articulation of one such man-made disaster and the consecutive effects of using the pesticide Endosulfan in the Kasargod district of Kerala in India, known as "God's Own Country", owing to its evergreen and unique landscape. Mangad's narrative opens up in an eco-utopian setting where the protagonists live amidst nature and possess the ability to communicate freely with animals and other non-humans. The narrative takes a fable-like narrative before they are met with the real circumstances of the village.

The two protagonists, Neelakantan and Devayani, act as the medium through which the readers are introduced to the grave situation at Swarga. The reality of pesticide poisoning is presented through the interactions between the main characters, the village's residents, the village's healer, and the workers of the government-owned cashew plantations. As the plot progresses, many interconnections are shown with imagination, fiction, myth, history, and a dark web of agencies that lead to Endosulfan toxication. Mangad ensures that his readers are able to dip into mythical tales that explore the land's history with parallels in the modern world. Mangad attempts to comprehend the complex web that green crime and neo-imperial vessels of dominations create in third-world countries by employing theories of slow violence, scientific knowledge of toxicity, ecocriticism, storytelling, imagination, and law. Evidently, the novel threads in both the religious beliefs of the villagers, the sinister aims of the power structures and the trope of good over evil. The narrative probes its readers to question their actions and ignorance.

Readers first meet Neelakantan and Devayani, as the characters willingly move to an isolated hill in Swarga to lead a life which removes them from humanity and society. After they shun humanity, the two characters are addressed only as Man and Woman (drawing from the biblical Adam and Eve). In contrast, the animals that Man and Woman interact with are named and addressed as the protagonists. Objects and natural entities also have the ability to express their views. Man and Woman's names are revealed to the readers only after they step back into

humanity, coming to terms with the toxicity of pesticide spraying and its destruction of the ecosystem at Swarga.

When Devayani finds an ill child and brings him to the house, the couple discovers an ailment that has spread like wildfire. Accompanying the Panji, an old local esteemed healer of the land, Neelakantan was astonished to find children in each house who had been born with or developed strange deformities, as the following description shows:

She stood with a big tongue jutting out through her mouth. A rosy red tongue. It lay well below her chin. Moments passed, but she did not take it back and closed her mouth. 'She can' close'er mouth,' said Sivappa sadly.

(Mangad, 2017, p. 69)

The child's parents describe how it is difficult for the child to eat, retorting to soft food that she can quickly swallow. This, however, is not the only instance where the novel introduces us to the violent remains of the effects of the pesticide. In one house, there is a child whose head was abnormally larger than her body, children who were mentally affected and had been kept in chains, children whose growth had been stunted and looked twelve despite being twenty-six, children whose legs are paralysed and whose eyeballs are shrinking, and children who have features of a monkey and are unrecognisable as human beings, and the child that the couple found whose body is covered in sores and has greying hair despite being only seven years old (Mangad, 2017, p.71, 74, 75, 83). Young children like these, who are affected by disease, are forced to give up education and cannot lead a normal life. The diseased, still conscious of their miserable life, beg for death or commit suicide due to the unbearable pain they are enduring.

The native people of Swarga do not know the reason for such illness in their children and console themselves by saying that it is *Jadadhari's curse*. The innocent villagers, borrowing from the myth of the *Jadadhari Bhoota (the local deity)* and his anger on being captured in a copper pot by their ancestors, accepted this disaster to be a result of the god's anger. The myth also followed a similar trajectory where terrible things struck the village. Mangad clarifies in the novel that this man-made disaster is not the fault of the innocent village folk; rather, the state's mindless aerial pesticide spraying in the area are the real criminals. So rare is the occurrence of such adversities that the region's doctors seem equally clueless regarding such widespread illness in the area, as he explains to Neelakantan.

This lan' is ful' of diseases I havent seen in medical books and journals. My med'cine isn' workin'. Thi' boy's paren's ha' delusions... I 'ad given the' med'cin'. Both killed themselves. Ther' 're fifty mental patients i'the small numbe' o' 'ouses just aroun' 'ere. Lots o' absortion, cancer. My personal opinion is tha' some terrible poison ha' sprea' all o'er the soil and wate' 'ere. Jus' can' make ou' wha' tha' is. The little boy you saw befor', Abhilash? He wa' jus' like a monkey when he wa' small, now somewha' human in form... wha' is that forc' that's reversing evolution? I 'ave no clue.

(Mangad, 2017, p. 83)

Neelakantan aptly expresses the view that the native people of the land are unaware and do not deserve such sin. Unlike city dwellers, the people of the tiny village do not have the resources or the financial support to get their children treated in hospitals. They instead resort to praying for mercy (Mangad, 2017). Sony et al. (2023) refer to this phenomenon as "undone science" (p.157), as the government bodies and scientists do not research a few chemicals. This ambiguity is strategically used to manipulate narratives of health risks.

IMPACT ON THE NON-HUMAN

Continued exposure to Endosulfan alters the DNA in adults and children, with residual effects lingering in future generations. The names of the pesticides also expound violence- Machete, Prowl, Avenge and so on (Mangad, 2017). However, it is vital to note that this violence takes its toll on humans and non-humans alike. Although the images of human ailments dominate the novel, Mangad places equal emphasis on the effect of the toxin on non-human animals and nature. The canals, once replete with aquatic animals, seem silent as there are no fish, frogs or other water creatures (Mangad, 2017, p. 87). Images of calves with three legs or two heads are also described as countless other animals dying before it is even born. The fictional Jadadhari hill, which the people once feared due to its large population of snakes, has also been affected by the curse that befell the village.

Violence to humans, animals, and nature are all intertwined: local honey farmers have stopped farming, and with the advent of Endosulfan spraying, all the bees have also died in the area. A strange sight thus unfolds, where the flowers bloom, but no insect hovers over it. The toxicity reaches the land and stays in the soil for many years, thus poisoning the plants and not yielding as before (Mangad, 2017). The characters are also shown to be experiencing ecological grief, which is a contemporary response to the rapidly changing and altering environment and feeling helpless. The characters aptly deliver it in the novel. Neelakantan expresses his guilt when he imagines a crab accusing him (humankind) of the destruction of their homes and fellow animals.

LOSS OF SWARGA- PARADISE LOST

The village of Swarga is a place of natural beauty. The biodiversity of Swarga was its pride, as was the diversity in its population- people from various castes speaking different languages, living in harmony, and respecting each other's customs and practices.

The people of the village have a sense of great ecological importance. Their interaction with Neelakantan reveals how much reverence and respect they hold for nature and its animals. They claim that the animals, even the deadliest python, would not harm human beings unless provoked. Swarga is presented as an example of a green utopia where all elements of 'life' live in harmony and with compassion. Enmakaje, as the natives called it, was the "land of *surangams*" water flowed to everyone's homes through these naturally made canals; the people never needed to get water from a different place:

Thi' abundance of water whic' made this place heaven is wha's makin' it hell now... Twenty-five yea's, the poison's been sprayed on these waterbodies! If it wer' a well, you coil' cover it. Bu' the poison tha' falls on the hill, it gets int' the surangas an' reaches you' home. Isn' tha' why this place is full of sick people?

(Mangad, 2017, p. 127)

The poison eventually transforms Enmakaje into a grave. The people of Swarga repeatedly bemoan the lack of any animal, insect, or bird in the area. The setting up of cashew plantations, which spreads across acres of land, highlights the vast deforestation in the region: "Long ago, this too must have been thickly wooded" (Mangad, 2017, p. 102); we find Neelakantan pondering. However, these cashew plantations are not limited to Swarga alone. Mangad writes that there are fourteen more panchayats in Enmakaje alone, which rounds up to five thousand hectares of cashew plantations and even vaster effects of the pesticide, which the government officials claim to be a medicine. Its application is not limited to cashew plantations but extends to tea plantations, banana gardens and everyday vegetable farming (Mangad, 2017).

POISONS OF THE LAND: PESTICIDES, CAPITALISM AND PROFIT

Mangad, in his narrative, incorporates various threads that intricately delineate how and why the environment in this village suffers as it does. The people are shown to be unaware of the government's proceedings or the pesticide's effects on them.

Endosulfan is a pesticide that kills tea mosquitoes that destroy cashew flowers. As the plantations are spread over acres of land, the pesticide, which was previously spread by hand, became (in 1979, as mentioned in the novel) spread via aerial spraying. When the people of Swarga approach the workers of the Plantation Corporation of Kerala (PCK), these workers seem oblivious to the effects and connections between Endosulfan and the illnesses. They ignore the warnings and regulations regarding the usage of the pesticide. Neelakantan asks them:

Isn't there a rule that all waterbodies should be covered before aerial spraying? That people should be given two days' notice? That the spraying should be done only early at dawn? But aren't you flouting all these precautions in your spraying?

(Mangad, 2017, p. 105)

They retort by saying that it is impossible to cover all water bodies and that the government's financial gain would eventually benefit the ordinary person. This point highlights how the information is manipulated to present to the public. It, therefore, normalises toxic exposure among people (Buell, 1998; Kirchhelle, 2018; Sony et al., 2023). The pesticide holds people in a grasp, which is hard to escape. Jayarajan, a young activist, informs Devayani about the rise in Endosulfan ppm in breast milk, sheep's milk, cow's milk, fish, eggs, vegetables and any edibles. The poison spreads so slowly that its impact is often ignored or undetectable. The novel closely introspects this by having the characters interact with the intensity of the toxic element. Jayarajan describes it in the following way when probed on the matter:

It is a brown powder. If it falls on your body, that part becomes swollen and reddish. If it falls on an open wound, the person will become unconscious. It is like DDT- an organochloride pesticide... they sell it under fifty retail names...

(Mangad, 2017, p. 144)

DDT was a very popular pesticide before being banned internationally. However, its residual impact still continues to reverberate in communities through their food chain (John & Babu, 2021; Sharma & Singhvi, 2017). Sony et al. (2023), reporting the toxicity of Endosulfan, write that such persistent organic pollutants (POPs) can "remain active in the ecosystem for years after their application" (p. 151), majorly affecting the nervous system and acutely damaging other organ systems. Thus, the discussion points towards inter-generational damage due to this toxic exposure. However, the larger power structures are not held accountable for their crimes against the people and the place; instead, reports suggesting the great economic gain were published to support their blatant use of Endosulfan (Sony et al., 2023).

The introduction of pesticides into large-scale farming and mono-crop culture takes us back to the onset of the Green Revolution as a part of such neo-imperial measures to dictate and exercise control over initial colonies. The contemporary world perceives nature as raw materials which eventually would yield a profit (Guha, 2014). In this case, pesticides were a tool to increase demand and profit from agriculture. Post-war, the pesticides were re-purposed from warfare to insecticides to "save the industry" (Melangadi, 2017). Despite being banned in many countries, the pesticide is approved by the government and used without following the instructions and safety

regulations. Government officials may deny these accusations, but the narratives of those suffering a toxic reality are evidence of its after-effects. The government bribes the agricultural department for years to gain profit while poisoning the land and the trees they plant. The Green Revolution's success relied heavily on chemical pesticides and insecticides. While it did bring food security, John and Babu (2021) point out that the negative and lasting impacts of chemical usage on the land, human and non-humans, became a more significant ecological problem for the future.

Kerala also implemented the green revolution in the 1960s and was the leading producer of cashew nuts during the period of 1960s to 1970s (Stevetal, 2018). Large acres of land had been cleared up, felling many varieties of biodiverse trees to incorporate the mono-crop culture for higher profit. The farmers of the land were introduced to chemical fertilizers and pesticides that aided the growth of the HYVs or High-Yielding-Variety seeds incorporated during the Green Revolution. This switch deeply impacted soil fertility reduced the growth of indigenous crops, and organic methods of farming were abandoned (Eliazer Nelson et al., 2019; Melangadi, 2017; Palackal, 2019). A favourable yield of the HYVs heavily relied on the usage of chemical fertilisers and pesticides (Santhakumar & Rajagopalan, 1995). The agricultural focus had a major shift towards producing cash crops like cashews. Endosulfan was introduced during this period and marketed as an insecticide. The endosulfan tragedy marked the ills of this chemical when, between 1976 and 2000, 50,000 people living in the Kasargod district of Kerala fell victim to it (Palackal, 2019). The PCK grabbed the lands of many tribal communities, thus displacing them from their habitat (Satheesh, 2017; Sony et al., 2023). Many studies have further proven that the Endosulfan levels in the land are way above the recommended levels. However, pleas and reports of the occurrence had been denied by the PMFAI (Pesticide Manufacturers and Formulators Association of India) to protect the large pesticide industry globally (Endosulfan Industry's Dirty War). The novel *Swarga*, through its narrative, informs its readers regarding the grave situation of the village and its people:

...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, 2017, p. 174)

Even after being aware of this, the novel's PCK employees dismiss the cries of the people by claiming that other factors and not Endosulfan caused the illnesses. It is noteworthy that often, the employees were also unaware of the schemes of the state, and they worked with the chemical without any safety gear and precautions. Some reputed institutions collected samples from the region but gave it a pass after rigging the data for money and later published reports that stated how important the chemical was in helping the cashew export business thrive (Sony et al., 2023). A dark web of conspiracies follows the simple execution of banning the pesticide, as Mangad describes:

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, intellectuals, officials in the department of agriculture, many doctors, the young scientists in the agricultural colleges...
(Mangad, 2017, p. 180)

As discussed, post-war, these organophosphate compounds were relaunched as insecticides in the market. Thus, the need for these chemicals was created and not required. Leela Kumari Amma, an agricultural scientist turned activist who complained in 1998, finds a mention in the novel as she raises her voice against the poisoning of the land. After witnessing the ill effects of

Endosulfan in the Kasargod district, she petitioned against its usage. However, it only led to instances of organised crime and harm directed towards her. Through her dialogues, readers get a glimpse of the development of the pesticide and the struggles of those who fought on despite their lives being threatened. Further instances of organised crime are hinted at when Jayarajan, Neelakantan and Devayani start protesting against the PCK, attracting media attention. Threatened by their efforts to halt the production of the pesticides, the leaders of the PCK kill Jayarajan brutally, hanging him from a tree, and attempt to disgrace the couple by hanging them naked on trees and trying to burn them alive on the Jadadhari Hill when a golden-coloured serpent bites the leader leaving the two unharmed. The narrative takes a more positive turn at this point as Mangad takes the trope of good over evil. The two protagonists are saved by the land's mystical powers that have been the guiding light for the characters in the book.

Addressing the ambivalence and unknown ubiquity of such toxic chemicals, this novel can inform, make aware and resist instances of green crime. In the novel, Leela Kumari Amma clarifies that "The tea mosquitoes is just a myth. It's just an excuse to spray poison and swallow commission and bribes... In the 1980s, it used to be Endrine. Now it is Furedan. People drank it to commit suicide" (Mangad, 2017, p. 190), highlighting how the pesticides have been used under different labels. *Swarga* can present why environmental exploitation should be considered a *crime* as it tugs at other threads that connect it to ecological destruction, voicelessness and manipulation of information. Tying together mythical explanations that construct the history of the region with the modern-day exploitation of the same, the book helps readers comprehend the land's history with harm. The villagers learn from such indigenous stories that sprout from the land to respect the ecosystem that helps them survive. On the contrary, a detached outlook would allow mindless exploitation of the earth. Julie Sze (2002) writes, "Environmental Justice can be read and understood not only through the narrow grid of public policy, but through the contours of fantasy, literature, and imagination as well" (p. 173). She further delineates that literature is not a tool of escapism here; rather, it is a link that shows indirect violence affects people. Landscape degradation is connected with unseen legacies of colonialism, which turns the land and bodies into wastelands (Sandlos & Keeling, 2016). In twenty years, the PCK gradually poisoned the land where the people of Enmakaje had lived for decades.

The novel ends with Neelakantan and Devayani discovering the Cave, which is personified with mystical presence and represents nature's divinity as it protects its animals from the poisonous land and almost denies entry to Man and Woman who have led to such incessant exploitation. The novel reconfirms the faith that the land possesses the strength to rise again as it did in the past. This transcendental figure, the Cave, mirrors itself in the power that nature holds to restore itself in an ecosystem. The portrayal of the Cave as a protector is established in the novel's discussion of various trees that possess the ability to de-poison the land that human beings have destroyed. In Mangad's fictional rendition of this true event, he ensures that readers are not left hopeless and defeated by the state's power schemes of imperialism and can correlate the legends of the land with the heroism of nature.

CONCLUSION

Ambikasutan Mangad's *Swarga* fictionalises this brutal act of environmental crime as readers live through the plight of the people in the area. He addresses the violence inflicted on the people and incorporates mythical tales and the history of the land to help comprehend the rich culture and collective ecological balance. Literature speaks against the slow violence that unfolds in a tribal community, showcasing the sinister ways global power structures brutally dismiss the misery of the people and the ecosystem. Green Criminology, Environmental justice and literature together are able to bridge the shortcomings in each of the discourses to present a holistic picture of those suffering due to indirect crime inflicted on them. These indirect crimes, or specifically green crimes in this article, are often ignored by mainstream criminology. However, the novel proves that any intentional use of means that cause long-lasting harm to the marginalised and the environment should also be part of justice jurisdiction. Looking through the prism of cultural tools like literature and art, environmental justice and criminology acquire better representation that incorporates empathy, along with statistics, to help create awareness and ensure that justice is provided to the victims as the readers go through their hopelessness, helplessness and ignorance. The novel's realist portrayal of the veins of poison gives the readers a dive into the region's many networks of exploitation of the marginalised and the environment.

Great emphasis has been laid on the monopolisation of agriculture and imperial measures introduced as a source of development. It is, however, evidently a case of blatant agrarian modernisation and recolonisation, while the victims become prey to this developmental model (Satheesh, 2017). Melangadi (2017) expands on environmental harms and what meets the criteria of such criminal intent, the offences, the victims and its prevention. Mangad's narration expounds on these criteria as there exists more than one offender and victim.

Neelakantan and Devayani move into the forests with the belief that moving amidst nature would be their escape from the brutality and evil of urban life; however, they come to face with something more sinister, where we find that power plays in terms of contamination. At the novel's end, we hear the Cave sheltering all of 'Life' in *Swarga*. It initially does not allow human beings (Neelakantan and Devayani), as though repelling the destroyers, the harbingers of violence and crime. Eventually, it lets them in, instilling the faith that nature is forgiving and that life will carry on despite destruction, though in adverse forms. Through the retelling of tales told by the Panji and other local people, we get a glimpse into the ecologically balanced life that the people had led before this destruction. Green Criminology stresses how crimes inflicted on the environment victimise many people and living organisms who have no direct relationship with the criminals and have respected the divine power of nature.

Mangad emphasises the uselessness of pesticides in the agrarian world in his narration in *Swarga*. As Satheesh (2017) writes, Endosulfan is introduced as an "agent of modernisation" in order to recolonise third-world countries (p. 5). In reality, the modified seeds and mono-crop culture place these crops at risk of being damaged and attracting pests. Leela Kumari Amma, the activist, claims, "Every pest in nature has other pests which eat it. If they need pesticides, those can be made from *Ketchikan* and *aryaveppu* (neem tree), too (Mangad, 2017, p. 190). *Aryaveppu*, or the neem tree, is a natural biopesticide that local people have used for decades. Many global corporations have patented products that use neem in their composition (Mangad, 2017). Neelakantan unknowingly planted many neem trees in the sparsely wooded areas on the hill. He also explains that *cheru* trees can extract poison from the land. Some studies prove that certain plants and trees have the ability to "clean up" contaminated land. Human beings fear the wild;

however, he himself is the beast, one devoid of "compassion" and filled with "selfishness" (Mangad, 2017, p. 235). Mangad's narration makes us aware of the destruction we have caused to ourselves and the circle of life itself. The narrative ends with a hint of the continuation of life, referencing Noah's ark, as life is protected within the Cave to re-emerge one day.

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