

HUMAN COST OF CLIMATE CHANGE.
A RESPONSE TO THE FILM *KADVI HAWA*

JASMINE ANAND*

ABSTRACT. *Kadvi Hawa* (Dark/Bitter Wind), directed by Nila Madhab Panda, emerges as a significant climate film that poignantly encapsulates the multifaceted impacts of climate change within a fictional narrative. Released in 2017, it marks a rare exploration of emotional dimensions associated with environmental crises in Indian cinema, garnering a Special Mention at the 64th National Film Awards and support from the Ministry of Environment, Forest and Climate Change, Government of India. The film's symbolism—representing the once life-giving winds now transformed into harbingers of drought and cyclones—reflects a stark reality of the Anthropocene, where the expected seasonal cycles have been disrupted. This paper interrogates the interplay between dystopian and utopian imaginaries prevalent in cultural discourse, asserting that while narratives of climate catastrophe may reinforce feelings of helplessness, they also provoke critical reflection on human agency and collective action. By engaging with contemporary climate science debates, notably the uncertainties highlighted by scholars like Kathryn Yusoff, this analysis underscores the necessity of confronting fear and hope in the face of environmental degradation. While Timothy Morton's concept of hyperobjects presents a chilling perspective on humanity's entanglement with global warming, this paper argues for the relevance of cultural narratives that illuminate our present realities and future possibilities. Ultimately, *Kadvi Hawa* serves as a clarion call, urging both the readers and viewers to grapple with the complexities of climate change and our role in shaping the future amidst uncertainty.

KEY WORDS: climate change, farmer suicides, climate films, ecological grief, slow violence

Water has no mouth, but swallows many.
Light has no hands, but touches many.
Wind has no feet, but carries many.
Darkness has no teeth, but devours many.
Matshona Dhliwayo

* JASMINE ANAND (PhD 2019, Panjab University, Chandigarh, India) is Assistant Professor of English, Mehr Chand Mahajan DAV College for Women, Chandigarh, India. E-mail: jasmine18anand@gmail.com.

Introduction

The cost of climate change is multifarious. The nexus of its various components- the atmosphere, hydrosphere, cryosphere, lithosphere, and biosphere governs the change in earth's climate. The heating and cooling of air creates wind currents that carry water vapour and move heat from one part of the earth to another, water in its various forms is the climate regulator, ice not only sends back the solar radiation but activates water circulation deep down the ocean and its melting brings in change to the sea water level, the texture of the solid land further impacts the affect of wind/water, and the interaction of living plants, animals, and humans on earth further catalyses its local climate. The biosphere in the current scenario, especially, the human induced climate change weighs heavy globally.

Apart from technical and scientific literature the wild and its wilderness along with the anthropocene finds a miniscule of a space in the area of fiction and films based on climate change. After long in India, for the first time, the film *Kadvi Hawa* (Dark/Bitter Wind) directed by Nila Madhab Panda released in 2017 evokes an emotional aspect of climate change. The film received a Special Mention (Special Jury Award) at the 64th National Film Awards in India and is supported by the Ministry of Environment, Forest and Climate Change, Government of India. *Kadvi* means dark, bitter, poisonous, sullen, ill; that is, symbolically the wind that used to bring clouds and was responsible for changing seasons has gone amnesiac or rebellious because it's sick resulting into two extreme phenomenas on the land of India- drought and cyclones. A film made so late under the rage of climate change as a 'global construct' and lately the tumultuous affect of climate change in India affirms how the word "Climate change' is a thoroughly un-Indian word" (Dubash 2020: 127). Since 1972 when Indira Gandhi used the dictate of "development before environment' at the United Nations" India has not been sensitive regarding environment and its predicament on the natives of that environment (Nilekani 2008 :430). Hence, the climate policy in India is all about contributions to the world emissions at the global level than led by the local pocket concerns of cyclones, floods, droughts, smogs, and uneven weather cycles. Citizens of India are more focussed on the issues related to pollution and development than the overall impact of climate change. In this regard the Hindi terminology of climate change is clumsy yet facinating to note, "*jal-vaayu parivartan* (water-air changes)" (Dubash 2020 :128).

Cinematic Climate Change

The idea of how man gets wild ethically as well as vulnerable amidst wild fury of nature hit by drought and cyclone respectively is played upon in the film *Kadvi Hawa*. Ironically, the climate crisis is also a crisis of culture; the lack of humane emotions and care for each other. There has been a greater derangement in our doings and also in our response to the catastrophe of our doings; the current paper is a response to such change both inside and outside us in the wake of climate vagary. Climate is largely studied as science but it needs to be studied socially, culturally, psychologically, economically, as well as politically for better policy development and sustainable living. There is surprisingly paucity of studies in literature and cultural studies describing the multifarious impact and the cost attached to climate change. However, the unflinching developments in technology and communication have led to a shift known as “pictorial turn” which manifests itself in a field of inquiry ranging from academics to culture to philosophy to politics (Mitchell 1994: 9). Film as a visual medium of representation and interpretation through the sequencing and juxtaposition of images, and its inherent dialogism advances and tries to establish the issue at hand, further.

The film *Kadvi Hawa* is set up in the ravines and dryland of Chambal where it has not rained for the last 15 years. The film is shot on 16 mm reel that covers the grittiness and texture of arid landscape full of sand mounds and low dusty cliffs that serve the purpose of showing the climate degradation sans water in high temperature which any digital medium would not have captured to its authenticity. 16 mm celluloid allows bare minimum editing and avoids manipulation unlike the digital medium; hence it captures the depth of the landscape as well as the character focussing on human evolution in a documentary style of slow paced drama, as the whole focus is on the story and the character and not the post production tricks. Maintaining the gravity of subject the film has been shot in sombre tones of sepia to show barrenness and aridity of land, and drudgery and struggle of peasants in Bundelkhand region of India.

The film comments on the challenges posed by climate change upon its worst recipients, the poor people, since, they don't have resources to mitigate the risk of climate change. It showcases how a farmer who has no role in global warming is impacted the most as he is at the bottom of the chain. Drought sets off a vicious cycle of socioeconomic impacts beginning with crop-yield failure, unemployment, erosion of assets, decrease in income, worsening of living conditions, poor nutrition, and, subsequently, decreased risk absorptive capacity, and thus increasing vulnerability of the poor to another drought

and other shocks, including suicides and death of their loved ones. The “spectacular violence” of immediate impact that is evident in a cyclonic calamity remains hidden in the “slow violence” and vulnerability of “disposable people” or the “environmentalism of the poor” in a drought prone area with its unspectacular time where ironically everything seems calm (Nixon 2011: 4). Droughts result because of rainfall deficit and/or level of impacts on hydrological cycle and agro-ecosystems, thus, can be meteorological, hydrological, or agricultural drought. As per the National Drought Manual, 2009:

About 68% of the net sown area of India is prone to drought. Three hundred and twenty nine million hectare of land covering 103 districts and 16 states of India are chronically drought prone. (Gupta 2014: i)

Strangely, the lack and excess of water marks the prologue and epilogue of the film. It is a catch-22 situation for Gunnu Babu (Ranveer Shorey), a debt recovery agent in a bank who is a climate refugee to a town Dholpur near village Mahua (Chambal) who loses his whole family in the Odisha cyclone, unable to bring them to a safe haven, that is, Chambal. In the film Gunnu’s safe haven Chambal becomes a death trap for Mukund, a farmer (Bhupesh Singh) and many others who are unable to payback their loans because of drought and crop failure. The irony in the film is projected through escape from climate change of the characters who are trying to find safe abodes for their loved ones. For Heddu (Sanjay Mishra), Odisha is a dreamland where there is water every where, good enough for drinking and cultivation, and Gunnu finds Bundelkhand as the paradise since there is no water, and thus no danger of a cyclone eroding his family and property.

Gunnu is the victim at the hands of climate change in Odisha and at the same time perpetrator of victimization leading to farmer suicides as he recovers the loan amount forcefully out of the farmers leading to lucrative double commission for recovery in village Mahua, the village of Heddu. He is called as a *yamdoot*, God of death, the powerful one; yet he himself is a vulnerable climate refugee both escaping to save himself and looking for a better and safe life for his family in Bundelkhand from Odisha. Gunnu’s character perpetrates “structural injustice” in the lives of many farmers. Structural injustice as defined by Young is a situation in which “some people’s options are unfairly constrained and they are threatened with deprivation, while others derive significant benefits. ... [it] is a kind of moral wrong distinct from the wrongful action of an individual agent or the repressive policies of a state. ... most part within the limits of accepted rules and norms” (Young 2011 :52). Gunnu

Babu who is the perpetrator himself becomes the prey at the hands of climate fury. United Nations estimates that there will be a million climate refugees or more by 2050 as sea levels rise and places become drier. It was examined that the “greatest single impact of climate change could be on human migration—with millions of people displaced by shoreline erosion, coastal flooding and agricultural disruption” (Brown 2008: 9). Further, the report gives a dismal picture of climate extremity that:

By 2099 the world is expected to be on average between 1.8°C and 4°C hotter than it is now. Large areas are expected to become drier—the proportion of land in constant drought expected to increase from 2 per cent to 10 per cent by 2050... Rainfall patterns will change as the hydrological cycle becomes more intense. In some places this means that rain will be more likely to fall in deluges (washing away top-soil and causing flooding). (Brown 2008: 16)

As mentioned, contrary to rapid onset disasters like cyclones, droughts normally lack highly visible impacts; instead, their impacts are generally non-structural and spread over long periods and large areas essentially in terms of economy as well as demography. *Kadvi Hawa* portrays how the human and social costs of drought have been and remain devastating for many in the Chambal region of Bundelkhand, and juxtaposingly also due to cyclone in Odisha. In the Nixonian sense it is a “slow violence... that occurs gradually and out of sight, a violence of delayed destruction that is dispersed across time and space, an attritional violence that is typically not viewed as violence at all” (Nixon 2011: 2). The cyclonic violence is immediate, eruptive, and spectacular unlike the slow violence of drought.

Ecological grief and physical-emotional loss marks the lands of Vidarbha and Bundelkhand in India where maximum farmer suicides happen due to unemployment and lack of agriculture because of no rainfall and no artificial irrigation method. In the film Mukund’s and other villager’s suicides are result of ecological grief. Ashlee Cunsolo in an interview said, “Ecological grief is the grief, pain, sadness or suffering that people identify as experiencing when they lose a beloved ecosystem, species or place” (The World Staff 2019). In a research “Ecological grief as a mental health response to climate change-related loss”, both Ashlee Cunsolo and Neville Ellis (2018: 276) further divide ecological grief into three contexts: “grief associated with physical ecological losses (land, ecosystems and species), grief associated with disruptions to environmental knowledge and loss of identity, and grief associated with anticipated future ecological losses.” With this kind of a research it is important to

have an insight as to how climate change is enmeshed in our everyday living that engages responses on emotional level and other levels.

Climate related emotional costs can be linked to sadness, despair, helplessness, hopelessness, fear, frustration, stress, depression, ideas of suicides, attempts of suicide, human cost in form of death by suicides, and identity crisis/attachment crisis to loss of place, culture, or knowledge. Ecological grief has either an acute immediate impact or a slow impact as seen in terms of the character of Gunnu (when cyclone strikes his family in Odisha) and Hedu (the slow and creeping changes in climate of Mahua and the ensuing farmer suicides). Hedu is a blind yet poignant character suffering thoroughly “seeing shifts in environments and ecosystems over months, years or decades and feeling that ongoing sense of pain and suffering of watching a beloved place change” (The World Staff 2019). His grief is isolating and debilitating at the same time leading to the loss of many lives around him and by the end of the film his own son’s death in the name of farmer’s suicide due to climate change. The mourning begins from the first frame of the film through Hedu’s steps of anxiety traversing through the Bundelkhand ravines randomly meanwhile examining and “working-through” for his future generations, especially his son Mukund. *Kadvi Hawa* addresses how the psychological aspects of climate change are more important than ever as we trudge into a rapidly changing environmental climate.

In a study conducted in India by Leiserowitz et al. (2013) “Global Warnings’s Six Indias”, it was examined that there are six distinct groups (“Informed”, “Experienced”, “Undecided”, “Concerned”, “Indifferent”, and the “Disengaged”) within the public of India with their varied responses to global warming. It mentions that

The Informed (19 per cent) are the most aware and convinced of the reality and danger of climate change and highly supportive of national actions to mitigate the threat. The Experienced (24 per cent) - the largest of the Six Indias - know less about climate change, but are convinced that it is happening and a serious problem, in part because they say they have personally experienced the impacts more than any other group. Three other Indias—the Undecided (15 per cent), the Unconcerned (15 per cent) and the Indifferent (11 per cent)—represent different stages of understanding and acceptance of the problem. The final India - the Disengaged (16 per cent) - have never heard of climate change and have no opinion about it, even when it is described. (6)

Climate Change and Rural Depression

The study on the response of six types of Indians to global warming claims that the literate urban elite have more knowledge about climate change than

the people residing in rural areas. As obvious the “Disengaged Indians” said that they were not aware of the cause of global warming and comprised mostly of “rural and female” respondents (Leiserowitz et al. 2013: 9). Interestingly, *Kadvi Hawa* portrays Hedu, an old blind peasant who is differently-abled but not blind to the changing apocalyptic scenario around him. He gets the audience to see the reality when he uses the leitmotif of *hawa* (wind). Reminiscing the time goneby he revels in the thought of the wind and says “*yahan par bhi [charaon] mausam haut the ... hawa hai to badal aat hai, hawa hai to sardi garmi sab aat hai; hamare zamane me, chaar alag alag dishaon se khushboo leke aat thi wo, ab najane kya hogaya hai usko, jaise bimaar ho gayi ho*” which means there was a time when Mahua, the village had four seasons; because of wind the clouds travel, wind is the reason of season change – coming of summer and winter; in the past from the four directions the wind carried the scent of the earth and was moisture laden due to rainfall; now something has happened to the wind as if she has fallen ill. The dialogue signifies nostalgia and in an elegiac tone the loss of a sense of self, as there is no more the presence of four seasons as well as rainfall and the aroa of wet soil along with the resulting greenery and the crop cultivation with which Hedu associated himself. Wind seems to be a central character who has been personified too; ruling the life of all the characters in the film. The dialogue shows how the nature and the peasant are closely connected and a peasant might be illiterate or unaware about the definition of global warming but he can read the weather and its change better than any modern literate millenial obsessed with his/her gadgets/vehicles increasing the carbon footprint.



Image 1¹

1 Image 1 was taken from <https://www.rediff.com/movies/review/review-rage-turns-into-beauty-in-kadvi-hawa/20171124.htm>.

Film *Kadvi Hawa* opens with Hedu crossing the ravines of Chambal. The mise-en-scene of barren ravines and Hedu's rawness and aimless wandering are layered on each other to show the hopelessness, struggle, dryness of the environment around. The tinge of his clothes and demeanour is one with the dusty chromeness of the land around. With the non-digetic solemn music one hears the sound of wind. It is followed by a bus travel to Dholpur where one hears bus chatter consisting of fragmentary dialogues like "bad odour" and "increase in temperature". The next frame introduces Gunnu, the debt recovery agent in the bank who asks Hedu, "Which Mahua are you from... the *nadi* (river) one or *bihad* (wasteland or dessert) one?" to which Hedu replies "*bi-had*".

To all the questions that Hedu's granddaughter Kuhu asks him, he replies to them as "hawa" (wind). She goes to school where the conversation between the teacher and students in the geography class is noteworthy about studying environment; the teacher recites in chorus along with the students, "*mausam ka chakr chalta hai, wo chalta hi rehta hai, kabhi rukta nahi hai*" (seasons are cyclical, they come and go throughout the year). The intellectual irony of climate change soon turns into a farce in a peculiar dialogue between the teacher and the student:

Teacher: How many seasons are there in a year?

All Students: Four.

One Student: Two.

Teacher: Who is the one, who said two? Are you coming from Antarctica?

Student: No sir, Mahua.

Teacher: Why have you mentioned two seasons ... which ones are they?

Student: Sir, one of summer another of winter.

Teacher: You missed out the rainy season!

Student: But it doesn't rain here, just showers for 2-4 days in a year... at times in summers, other times in winters.

To this all the students laugh and the teacher frowns and scolds the student who said there are only two seasons in a year. The scene goads us to laughter at the innocent reason of the student; but the dark comedy is inlaid with a dig at our own situation because of which the four seasons have dropped down to two. The seriousness of climate change further develops in a scene in which a news reporter on TV informs how lentils will be imported by India now to

meet the demand and supply because of crop failure that was consequent to erratic monsoons.

The ecological grief purges out in the dialogues of Hedu with his buffalo named Annapurna, he tells her that Mukund has got some employment in town and how the intermittent work will keep the mind of his son cool, away from the ruinous thoughts. The scene when Hedu and Mukund refuse to eat food under the stress of loan, family responsibility and suicides all around them can be well studied as representative of pre-traumatic stress disorder (PTSD). In the total fatalist Indian sense, Hedu comments that when a child was born in their house rather than destiny line, the child carried the loan line in its hands. The slow payback of the loan and the wretched life was subsequently shared by Hedu's father, Hedu, and now his son. This slow pressure of debt, that is, the "slow violence" present in the drought prone area of India is quite heavy on the farmers and their families. In another frame, Hedu opines that the wind is quite arid to which Gunnu replies that the wind will bring rainfall the next year, and he should not worry. Earlier there used to be crop yield twice a year, now the land is barren and arid without crop produce, employment, and with an additional burden of loans on farmers. Hedu confesses that he is afraid that by then this disease (farmer suicide) may not eat his son. It can be seen how the suicides are not just attritional but their impact has been exponential in the villages of India; the suicide threat has multiplied to an extent that sustainable living in a drought prone area is degrading and difficult. Gunnu who is from Odisha tells Hedu that he has both suffered and given hard times to people in life. Knowing Gunnu is from Odisha, Hedu says that there is water all around and he has heard that there is a pond attached to every house there. He adds, "The wind has been very kind to you." "A bit too kind," Gunnu replies wistfully, recalling the deadly impact of frequent cyclones that ravage the coastal state. His home in Odisha was claimed by sea in due to climate change. His father died of grief and his mother still searches for the home and her husband under sea. His family is still in danger. He wishes and tries to bring his family to Bundelkhand before the rainfall in Odisha so that they can be safe here. One craves rain, and the other fears it and they help each other. The poster images (see image 2 and 3) of the film show the oxymoronic impact of water on earth along with the visceral emotions of the two characters.



(Image 2)² (Image 3)³

The subtle and political angle of human cost is well addressed through manipulation and maneuvering of Heddu. Heddu, the blind peasant in order to save his son from the clutches of *yamdoot*, Gunnu the debt recovery agent, gets into a Faustian bargain with him; the effects of which are far-reaching. Everyone knows in the village how the presence of Gunnu in their village is a precursor to farmer suicides. The pact between Heddu and Gunnu is based on love for family and their safety; the driven cost of which ultimately is unnerving and overwhelming. Heddu promises to give Gunnu clues about 34 villagers from Mahua and 50 of the surrounding area who can payback loan so that the amount of Mukund, his son shall be deferred. For Heddu, Gunnu is like rain; without the knowledge that this rain God may bring cyclone to his life with the eventual missing of his son surmounting to suicide. Where the drought has dried up the soil, there it leads to soiling up of human morals in dust. Just before Mukund's missing, Heddu informs Gunnu about a recovery from a peasant whose sister's marriage breaks because the collection of dowry for her is forcefully taken as recovery by Gunnu. The film represents how human emotions take over the inhuman realities of climate change. In a later frame, Gunnu's comment to Mukund blows his self-esteem; "*aam ka paisa hai bank ka paisa dene ke liye nahi hai, agar jab dena nahi hai to leta kyu ho, bank karja diya hai tumko daan thodi diya hai ... pet faad ke nikalunga ek ek paisa ... sharam aa rahi hai to kamse kam biyaaj to chukta karo*" (you have money to eat mango but not to return that to the bank, if you cannot payback why do you take the loan, bank has given you loan and not charity... I will take the money

² Image 2 taken from <https://www.nowrunning.com/movie/21930/bollywood.hindi/kadvi-hawa/>.

³ Image 3 taken from <https://www.comingtrailer.com/movieposter/hindi/934639399/Kadvi-Hawa>.

out of you by hook or crook... if you are feeling embarrassed atleast pay back your interest). He threatens Mukund that wherever he goes for collection, he never leaves empty handed. When Mukund mentions that he would pay an amount on the 2nd, Gunnu without listening to the following phrase as “next month” tells him that the next day was 2nd and he should pay back the amount the very next day and ignores listening to him.

The entire debacle of climate change in the film is aptly put by the lyricist Mukta Bhatt in a song “*mai banjar*” (I’m barren) sung by Mohan Kannan. It showcases impotency and infertility of land resulting into barrenness of human values and burden of living. String instruments and their snapping along with percussion intensifies the tragedy of climate change and heightens the chasm of horrid reality. A poem by Gulzar “*banjaare lagte hain mausam*” (seasons look like nomads) for the film accentuates the thematic concern. It weaves in its narration the doings of humans (deforestation, building dams, urban development, natural wetland destruction, agricultural activities, irresponsible mining, and frackling for oil and natural gas) and how they have enslaved and bonded the earth, and turned the seasons into nomads who have no home to come to and rest as they used to. The film embroils together the fate of Hedu and Gunnu. Hedu has land but no water, Gunnu loses his land to the water of the sea cyclone. Finally, the film ends with Hedu losing his son to suicide and Gunnu receiving the news of hitting of 6B cyclone in Odisha indicating the loss of his family in it. Juxtaposing two characters, two different geographies, communities and lives affected by changing winds and global warming, Nila Madhab Panda simply asks us to open our eyes and face a bitter truth before its impact is irreversible. The film is a revelatory experience and not a redemptive one. It brings out the environmental crisis by bringing it close to everyday life and exposing the human cost of it- the cost of death, culture, and morals.

To conclude, for some of us the impact of climate change is yet to be felt, whereas, for others it is part of daily life. When the climate change becomes a ‘slice of life’ its cost becomes material, social, psychological, cultural, economic as well as political. *Kadvi Hawa* is a complete metaphor of “a perfect moral storm” where devastated by the climate challenge the costs intermingle with and drown the moral obligation to humanity. It also focusses on the predicament of ecocides and climate refugees. The film as a visual medium aids in understanding the climate problem as concrete social, political, and ethical issue, than, as abstract in terms of numbers, calculations, abstractions of economy and science. Humanizing climate change by addressing its psychological dimensions is important step in learning to address the issue of climate

change as individuals in a global community. Thus, in a climate study; ethical issues, slow violence, structural injustice, and ecological grief are some of the important factors to be focussed upon while developing action plans involving education, mitigation, adaptation, prevention, relocation locally as well as globally (Dryzek et al.). These nuances need to be the focus of environmental rights and development rights to call on climate justice all around.

Conclusions

The film *Kadvi Hawa* as a response to slow environmental degradation and human cost brings up a perspective and takes bold position on the past and ongoing wrong-doings of humans in relation to the environment and towards each other on the moral plane amidst the violence of climate instability. Thus, as a means of awareness the film is a medium of creating prosthetic memory, “an experience through which the person sutures himself or herself into a larger history... takes on a more personal, deeply felt memory of a past event through which he or she did not live” (Landsberg 2004: 2). This kind of a film shakes one who is distanced from the ground reality and the tragedy of living in another part of the world into awareness of what some of our less fortunate brethren are going through. To connect with people and start a healthy dialogue on ethics and conservation, the scientists and environmentalists need to appeal to the emotions and the experience of shared psychological stress of public at large through the fictional gaze of the doom that hangs on all of us. In the critical framework proposed by Kathryn Yusoff (2013: 164), films like *Kadvi Hawa* serve as a conduit for exploring the myriad uncertainties that plague our understanding of climate change, particularly what remains unknowable or elusive (2009). This discourse finds a compelling counterpoint in Timothy Morton’s assertion: “what has happened so far during the epoch of the Anthropocene has been the gradual realization by humans that they are not running the show, at the very moment of their most powerful technical mastery on a planetary scale.”

The portrayal of water—or its conspicuous absence—in the film resonates profoundly with Morton’s concept of hyperobjects, which encapsulates the nonhuman forces that envelop us, often beyond our conscious recognition. These hyperobjects exert a profound influence on our existence, revealing their overpowering nature once we become aware of their presence. In this light, *Kadvi Hawa* not only reflects the existential challenges posed by climate change but also invites us to confront the intricate interplay between human agency and the overwhelming forces of the environment. Hence, films on cli-

mate change become an important vehicle of shaping public “subjectivity and politics” (Landsberg 2004: 2) which is elemental and beneficial in understanding global warming and its concerns, and might construct “the grounds for unexpected alliances across chasms of [human] difference” (Landsberg 2004: 3) providing some ethical thinking and human connections along with strategies of political engagement [motivating human action/agency] for the present and the future of humankind.

References

- Brown O (2008) *Migration and Climate Change*. Geneva: International Organization for Migration.
- Cunsolo A, Ellis NR (2018) Ecological grief as a mental health response to climate change-related loss. *Nature Climate Change* 8: 75-281.
- Dryzek JS, Norgaard RB, Schlosberg D (2013) *Climate-Challenged Society*. Oxford: Oxford University Press.
- Dubash NK (2020) Climate change. In Nair RB and deSouza PR (eds) *Keywords For India: A Conceptual Lexicon for the 21st Century*, 127-129. London: Bloomsbury.
- Gupta AK, Nair SS, Ghosh O, Singh A, Dey S (2014) *Bundelkhand Drought: Retrospective Analysis and Way Ahead*. New Delhi: National Institute of Disaster Management.
- Landsberg A (2004) *Prosthetic Memory: The Transformation of American Remembrance in the Age of Mass Culture*. New York, NY: Columbia University Press.
- Leiserowitz A, Thaker J, Feinberg G, Cooper DK (2013) *Global Warming's Six Indias: An Audience Segmentation Analysis*. New Haven, CT: Yale University Press.
- Mitchell WJT (1994) *Picture Theory: Essays on Verbal and Visual Representation*. Chicago, IL: University of Chicago Press.
- Morton T (2007) *Ecology without Nature: Rethinking Environmental Aesthetics*. Cambridge, MA: Harvard University Press.
- Morton T (2013) *Hyperobjects: Philosophy and Ecology after the End of the World*. London and Minneapolis: University of Minnesota Press.
- Nilekani N (2008) *Imagining India: The Idea of a Renewed Nation*. New Delhi: Penguin.
- Nixon R (2011) *Slow Violence and the Environmentalism of the Poor*. Cambridge, MA: Harvard University Press.

- Panda NM (2017) *Kadvi Hawa*. Film produced by Panda, Drishyam Films and Akshay Parija.
- Young I M (2011) *Responsibility for Justice*. New York: Oxford University Press.
- Yusoff K (2009) "Excess, Catastrophe, and Climate Change." *Environment and Planning D: Society and Space* 27: 1010-1029.

Internet Sources

- Oberhaus D (2017) Climate change is giving us "pre-traumatic stress". *Motherboard*, https://www.vice.com/en_us/article/vvzzam/climate-change-is-giving-us-pre-traumatic-stress.
- Richardson JH (2015) "When the end of human civilization is your day job." *Esquire*, <https://www.esquire.com/news-politics/a36228/bal-lad-of-the-sad-climatologists-0815/>.
- The World Staff (2019) Is climate change causing us to experience "ecological grief"? *The World*, <https://www.pri.org/stories/2019-06-24/climate-change-causing-us-experience-ecological-grief>.
- Thomas M (2014) "Climate depression is for real: just ask a scientist." *Grist*, <https://grist.org/climate-energy/climate-depression-is-for-real-just-ask-a-scientist/>.