

Journal of COMMUNITY SAFETY & WELL-BEING

Environmental degradation and climate change as violence against the Earth: Associations with violence against women's bodies

T. Modie-Moroka*, T. Malinga*, M. Dube[†]

ABSTRACT

Violence against women (VAW) and violence against the Earth (VAE) have always shared a unique and complex association yet to be explored. The fields of VAW and VAE have evolved in separate routes, with divergent theoretical foundations but with little integration. While the impact of VAW has received much attention over the years, relatively little thought has gone into the intersections. Drawing parallels between society's treatment of the physical and natural environment and its treatment of women, this paper will pull in insights to broaden and clarify the way VAW has been conceptualized, its association with the physical and natural environment (Mother Earth), and the constructs and the commitments that flow from them. In this paper, we formulate, cast, and present an expanded understanding of the relationship between violence against the physical and the natural environment and VAW. The article, an offshoot of our conceptualization on the inter-linkages between VAW and VAE, is being submitted for interpretation and application.

Key Words: Violence against women; violence against the Earth; physical and the natural environment.

INTRODUCTION

Violence against women (henceforth VAW) and climate change, often referred to as violence against Mother Earth, are pressing global threats and critical launching pads for ending the violence against nature and VAW, placing them at the centre of theorizing and knowledge development (Arora-Jonsson, 2014; Bulkeley & Kern, 2006). Increasingly, studies have analyzed the parallel effects of such relationships with the natural environment or even the built environment and VAW and violence against girls (Ćorić, 2014; Fairbanks, 2010). These two issues are perceived to have unique and complex drivers that affect the security and well-being of nations, communities, and individuals. There have been attempts to understand, measure, and seek solutions to the twin problems across societies. The impact and intersections of these problems has received much attention and traction over the years. Emerging thinking in VAW and violence against the Earth (VAE) suggest that women and the Earth have always shared a unique and complex association (Cook, 2003; Corić, 2014; Fairbanks, 2010). Drawing parallels between society's

treatment of the physical and natural environment and women, this paper will examine VAW's leading issues and characteristics within the context of environmental and sustainable development. In this paper, we formulate, cast, and present an expanded understanding of the relationship between violence against the physical and natural environment and VAW using the ecological/systems ecofeminism approach. The paper will spot the drivers and inter-linkages between the two factors to enhance our understanding and conceptualization. Taking a different approach, we describe and understand the effects of violence on the climate and determine how the rehabilitation of nature and Mother Earth could be instigated and strengthened in VAW.

BACKGROUND ON VIOLENCE AGAINST WOMEN

Violence is the intentional use of physical force or authority against another person, group, or community. VAW persists worldwide despite efforts to end it (World Health Organization, 2013a, 2013b). Violence affects entire populations, families, and communities (Ellsberg et al., 2008). Discriminatory

Correspondence to: T. Modie-Moroka, University of Botswana, Department of Social Work, Candler School of Theology, Emory University, Private 00705, Gaborone, Botswana, Southern Africa. E-mail: Modiet@Ub.ac.bw

To cite: Modie-Moroka, T., Malinga, T., & Dube, M. (2024). Environmental degradation and climate change as violence against the Earth: Associations with violence against women's bodies. *Journal of Community Safety and Well-Being*, 9(3), 141–149. https://doi.org/10.35502/jcswb.348

[©] Author(s) 2024. Open Access. This work is distributed under the Creative Commons BY-NC-ND license. For commercial re-use, please contact sales@sgpublishing.ca. SPUBLISHING Published by SG Publishing Inc. CSCA Official publication of the Community Safety Knowledge Alliance.

gender norms and legislation justify violence. VAW reinforces gender inequality by exercising authority, dominance, and exploitation. In 2018, over 30% of women who have been in a relationship experienced physical and sexual assault, according to the World Health Organization. Studies show that intimate partner violence harms women's emotional and physical health. Based on age, gender, colour, and ethnicity, intimate partner violence (IPV) - including physical, sexual, and psychological abuse - varies widely within and between nations. Despite a surge in complaints of violence against men and boys, women remain the main victims and survivors. Different measurement methods in study cause prevalence data to vary greatly. Disparities in the criteria of violence, abuse, maltreatment, victimization, and harassment prevent many survivors from reporting violence. Flexibility in concept use has also reduced data reliability and accuracy. Additionally, most intimate partner violence (IPV) perpetrators are men. Rape, assault, and homicide data on women have been consistent. Women are most often murdered by intimate partners. Most gender-based violence victims know their abusers. Girls are more vulnerable to sexual violence from teachers, family, boyfriends, and neighbours. A romantic partner kills women more often than an unfamiliar person.

Patriarchy and the belief that women are inferior and oppressed drive VAW. Gendered systems target women in predictable ways that differ from other socio-demographic groupings, resulting in VAW. VAW is common in every clan, caste, kinship group, and culture, suggesting gender-based social structures. In understanding VAW, Brownmiller (1975) used the patriarchal system to evaluate men's power and women's subjection. Power dynamics and systems that support dominance are called patriarchy. According to Onwutuebe (2019), patriarchy underlies gender power disparities. "Patriarchy maintains gender inequality by favouring men" (p. 1). According to Sen and Östlin (2008), gender roles and prescriptions are socially constructed and shaped by power dynamics and authority between men and women. VAW may be normalized in societies that encourage it. Men use this violence to dominate women, dehumanize their victims, and justify their conduct (Breines & Gordon, 1983). Das (2006) states that households, schools, religious organizations, and community activities teach and promote violence, making it normal. Culture portrays women as meek and wanting to be ruled (Das, 2006). Several academic fields have used structured social movements to raise awareness of gender-based violence (Renzetti et al., 2001; Yllo, 1993). The normalization of violence allows men to control women's lives and bodies overtly and covertly (Bervian et al., 2019). Following Setswana "mantwane" (playing house) traditions and age-based customs, boys can fight and use weapons to build strength. Girls are urged to collect firewood, soil, and pots while pretending to "cook" for male "hunters" during these games. Thus, patriarchy is maintained by several interdependent and interconnected institutions that work seamlessly as a well-oiled system.

BACKGROUND ON VIOLENCE AGAINST THE NATURAL ENVIRONMENT – THE EARTH

Climate change which affects mostly the natural environment refers to human-induced or human-caused climate change, which results in earthquakes, tornados, flooding, and droughts - the increasingly extreme variation of longterm average weather conditions worldwide. Climate change is increasing in frequency and intensity of natural disasters around the world. The impact of global warming is also accelerating. The "natural environment" refers to several spheres, including the atmosphere, geosphere, hydrosphere, biosphere, and noosphere (Berry, 1988). The United Nations Intergovernmental Panel on Climate Change (UNIPCC) has defined climate change as "any change in climate over time, whether due to natural variability or as a result of human activity" (UNIPCC, 2007, p. 30). The United Nations Framework Convention on Climate Change (2022) defines climate change as "...a change of climate which is attributed directly or indirectly to human activity that alters the composition of the global atmosphere and which is in addition to natural climate variability observed over comparable time periods" (Article 1.2). The climate crisis has been associated with inconsiderate human action. The first kind of climate change is natural climate cycles, which have caused wet and dry years and hot and cold seasons. Throughout our history on this planet, these natural cycles have caused us to experience flooding and droughts. The second type of climate change is anthropogenic climate change, which means human-induced or human-caused climate change. The anthropogenic type interacts with the natural cycles of the climates. Human-led activities on this planet are affecting the environment. Climate change, therefore, includes the continued growth and changes in atmospheric concentrations of greenhouse gases which ultimately result in disruptions of global biogeochemical, ecological, economic, and social systems (UN, 2020). Human activities are considered a major driving important force driving climate change by altering the atmosphere (Gifford, 2008). Climate change results from the cumulative effects of greenhouse gas emissions, caused by more than a century and a half of burning fossil fuels like coal, oil, and gas resulting from industrialization, as well as increased deforestation, fertilizer use, and livestock production (Lindsey & Dahlman, 2020; UN, 2020). The gases then absorb and discharge the sun's energy, leading the Earth's temperature to rise steadily. Climate change occurs because extreme weather patterns have adverse impacts, leading to widespread natural disasters and emergencies (Blaikie et al., 1994). Climate change alters weather patterns, resulting in heavier rainfalls, floods, prolonged droughts and higher temperatures, crop failure, livestock and wildlife loss, and food insecurity. When the atmosphere has warmed up, it collects and preserves more water, negatively affecting weather conditions, such that dry areas become drier and wet areas become wetter (Lindsey & Dahlman, 2020). Higher temperatures cause the Earth to become hotter, so oceans become warm and expand. Snow and ice melt and diminish. Sea levels rise, leading to a feedback loop that exacerbates the readily existing adverse effects (Denchak, 2017; Lindsey & Dahlman, 2020; UN, 2020). The adverse effects of climate change are natural disasters, including storms, floods, hurricanes, wildfires, droughts and sea level rise, heat waves, and rising insect-borne diseases. Climate change affects virtually everyone on Earth, both directly and indirectly (Denchak, 2017; UN, 2020).

Natural disasters result from natural hazards. There is currently considerable scientific evidence suggesting the

existence of human-induced global warming, leading to rising sea levels (Flannery, 2009). The global climate is changing, with negative consequences (Flannery, 2009). The world has experienced rising temperatures and extended periods of delayed rains (especially in areas that depend on rain-fed arable agriculture) due to climatic changes and global warming, leading to poor yields for farmers (Rao et al., 2019). Drastic shifts in climate patterns and seasons manifest in prolonged dry spells and delayed rainfall. Livestock survival is threatened, as grazing land cannot sustain current herds until the next rainy and grazing season. Overgrazing is a real threat to livelihoods due to increased herd size (of both domestic and wild animals), prolonged dry spells, hot temperatures, increased soil erosion, inadequate water availability and general depletion of natural resources (Anderson & Bausch, 2006). Tacey (2009a, 2009b) and Lant et al. (2019) suggest that economically driven human activities are instrumental to carbon, water, nitrogen, phosphorus, and other critical cycles. The imbalances increase international air and water temperatures, rising sea levels, rising global temperatures and sea ice melting (Arora-Jonsson, 2011; IPCC, 2007). Changing weather patterns negatively affect people and the environment (Chinsinga & Chasukwa, 2018).

The UNIPCC conducted a study and recommended that global greenhouse gas emissions be cut in half by 2030 and entirely by 2040 to prevent the most catastrophic effects of climate change. The UNIPCC worked jointly with the United States Agency for International Development and the International Union for Conservation of Nature and gathered experiences from worldwide to provide environmental policymakers and practitioners with evidence of the multiple inter-linkages between VAW and environmental issues. The study, entitled Gender-based violence and environment linkages: The violence of inequality, reviewed over 1,000 sources of information, 100 case study submissions, and surveyed over 300 expert informant interviews (Castañeda et al., 2020). The study found that the VAW-environment linkages present barriers to proper, adequate, rights-based conservation and sustainable development. Until recently, climate change was separated from humanitarian responses. The commitment to taking a nexus approach is reflected in several global initiatives.

THE CONNECTION BETWEEN WOMEN, EARTH, AND VIOLENCE

Since time immemorial, women and Earth have been seen to share a caring bond, whose existence is critical for all humankind. Emerging research indicates that vulnerabilities related to climate change and its impacts on communities are gendered (Dankelman & Davidson, 2008; MacGregor, 2010). Patriarchal relationships between men and women have existed since time immemorial. These relationships, in their distorted interpretations, have consequently affected women who live with men and also the natural and physical environments where they live.

Gender Inequalities and Access to and Control over Natural Resources

Climate change has gendered impacts. Social inequality along the lines of gender, race, socioeconomic class, and all the ways that people in our society are either privileged or disadvantaged means that those different groups of people will be affected differently by climate change, and we need to prepare for that as well. Environmental degradation and natural resource scarcity pose significant threats to ecosystems and livelihoods, resulting in or exacerbating biodiversity loss, food insecurity, poverty, displacement, violence, and loss of traditional and cultural knowledge.

VAW has been employed as a method of quelling resistance from local communities during disputes and forceful evictions because of large-scale developments (Rustad et al., 2016). VAW is often employed to maintain these power imbalances, violently reinforcing sociocultural expectations and norms and exacerbating gender inequality. For example, when attempting to enter agricultural markets, women can experience partner violence as their partners seek to control finances and maintain economic dependencies. Armed military and security forces involved in large-scale infrastructure developments, extractive work, and protected area rangers have also deployed VAW to pressure local communities (primarily women) or exploit them.

Women are likely to be more affected when crops fail because they often have limited land ownership and less access to productive resources to improve yield. Because of poor yields in crop production, men may be forced to leave rural areas to search for greener pastures and better jobs, leaving behind wives, mothers, sisters, and dependent children. The burden of tending livestock, caring for dependent children, and crop production may fall entirely on rural women with limited resources to support their children. Women are therefore vulnerable to abuse from male employees on the farms and maybe to contracting HIV. Women are more likely to experience IPV if they have inadequate education, exposure to mothers being abused by a partner, abuse during childhood, attitudes toward accepting violence, male privilege, and women's subordinate status (Conroy, 2014; Devereux, 1999). Women are responsible for water collection, and a decrease in the availability of freshwater means women and girls will spend more time collecting water for their families. Additionally, the responsibility for caring for those who fall ill due to the increased water-borne diseases associated with the inevitable decrease in water quality will also fall on women and girls. The workload increase results in women and girls having less time to earn an income and education or contribute to community-level decisionmaking processes, including climate change and disaster risk reduction. An increasing population and demand for water from residential, commercial, and industrial sources, including mining, will interact with declining rainfall, rising temperatures, and increased evapotranspiration rates which exacerbate drought and water scarcity and high mortality among livestock and wildlife.

Harvesting of Natural Products and Violence Against Women

Gender roles such as gathering firewood and water collection activities are indirectly associated with VAW (Sommer et al., 2015; Wan et al., 2011). Women have been harvesting sand, thatching grass, phane (*Imbrasia belina*), insects (nyeza), veld vegetables (nyevi, mowa, delele) and fruits (swanja, zwigwa, phuzu, wakwa, thewa, etc.), veld roots (bande, nyingwe, bari, tenda, tjibu, etc.), firewood, and fish as sources of livelihood. Edible insects and phane are economically significant natural products and constitute animal protein sources in most African countries (Akpalu et al., 2009; Banjo et al., 2006; Chavunduka, 1975).

Since time immemorial, phane has been a reliable source of livelihood for Botswana, especially in the northeast, and other neighbouring countries. The ethnic groups that have depended on it have their systems of ensuring that some of the mature phane goes underground (referred to as sombe) to undergo a period of diapause, and then butterflies would lay eggs for the next harvest. A study conducted in Botswana found that most of the harvesting and processing of phane is done by women and children, giving the community a source of protein and an opportunity to make money. About 95% of harvesters were poor, rural women; of these, 73% lived within 50 km of the harvesting areas (Illgner & Nel, 2000).

Women are often responsible for most of the unpaid care tasks in the household, such as fetching firewood, water, and vegetables and fruits in the wild. Resource scarcity increases the risk that women will be victims of violence. Violence occurs during typically gendered tasks such as collecting water, sand, fish, wild fruits and other veld products, and fuel wood. The risk of sexual assault also increases, especially in regions characterized by armed gangs. Increasing drought and deforestation lead to the development of arid areas, making gathering firewood precarious (Kgathi & Mlotshwa, 1997; Kgathi & Motsholapheko, 2002). Their lives are directly affected by reduced water availability for drinking, cooking, and hygiene; food insecurity; and health consequences of nutritional deficiencies (Arora-Jonsson, 2011; Dankelman & Jansen, 2010; Denton, 2002; Kgathi, 1992). There is also an added burden of travelling long distances looking for firewood and water when nearby sources become depleted (Kakota et al., 2011). Policies designed to develop and strengthen local communities' resilience have been seen as the gendered nature of climate change and its effects (Alston, 2013; Terry, 2009), wholly either overlook or incorrectly formulate gender issues in policy development (Arora-Jonsson, 2011).

This shift takes time from focusing on educational or economic activities outside the home, thus reinforcing economic dependence on men as well as exposing women to risk of being sexually violated by men who waylay them on their paths. Low educational attainment can increase the long-term vulnerability of girls who cannot learn skills that might better help them adapt. Women also tend not to have financial resources to adapt to climate impacts, like the ability to afford drought-resistant crops. Consequently, impoverished women and girls (and also impoverished men and boys) may be forced to engage in unsustainable environmental practices to maintain a livelihood, such as deforestation (Röhr, 2007; UN Women, 2009). In combination with terrorism and communal conflicts, climate events have acted as a "threat multiplier," exacerbating and causing widespread insecurity, migration, and increasing levels of IPV, sexual violence, and child marriage. In East Africa, slow-onset adverse events such as drought and famine are directly linked to the risk of IPV, sexual violence, and early marriages for women and girls (Epstein et al., 2020; National Crime Research Centre, 2014). Also, a study found that during drought in Mozambique, transactional sex was high, and girls reported receiving gifts from older men in exchange for sex as they went to fetch water far away from home (IFRC, 2015). As fish has become scarce, women who live on Africa's coasts and lakes have suffered under the Jaboya System in the eastern African region around Lake Victoria (Asiki et al., 2011). Male fishers peddling their wares may expect payment but sometimes demand a sex-forfish transaction (Asiki et al., 2011; Béné & Merten, 2008). Male supervisors in natural resource industries such as fisheries and coffee picking abuse non-consenting women by consigning them to dangerous work or limiting hours if their sexual advances are denied (UN Women, 2018).

SYMBOLIZATION OF THE EARTH AND THE BODY AS VIOLENCE AGAINST WOMEN

In Earth-centred mythologies, the relationship between the female body and the land is sacred for the well-being of all living beings. The connection between women and the Earth is also depicted in cultural symbolic narratives that link the womb to the soil. Symbolization is associated with symbolic interactionism by George Herbert Mead (1863–1931), who looked at how people assemble a sense of "self" over time based on social experience. Hence, through the human process of finding meaning in surroundings, people define their identities, bodies, and feelings and come to socially construct the world around them.

Women are viewed as nature, and some connections drawn between nature and women are menstruation and the moon, childbirth and creation, virgin earth, fertile land, and the reference to the soil as barren. Conflating productive and reproductive qualities of women and environment demonizes them (Barry, 2015). Sometimes, women are seen as nurturing mothers; but in other cases, they are viewed as harsh, uncontrollable, and wild. The earth, as symbolized by women, is viewed as the supporter of life and also the cause of disorder with natural disasters, storms, and droughts (Plant, 1989).

Cook (2003) contends that in their Mohawk language, the word for midwife is *iewirokwas*, to describe that women who are midwives are actually, "...pulling the baby out of the Earth," from water (read placenta in the mother's women, which is depicted as a dark wet place. Cook (2003) suggests that human life begins, in the womb. Cook (2003) suggests that in their Native American belief system, the waters of the Earth and the waters of our bodies are considered to be the same kind of water, with no distinction. Cook (2003) explains that women are connected to Mother Earth through the waters of the female womb and the breast milk. That being the case, one could see the first ecological connection between Mother Earth, VAE and VAW as cemented (Maracle, 2002).

Barrenness and "Cervical Hostility"

Barrenness and "cervical hostility" are applied to women perceived as delaying getting pregnant or having difficulty conceiving. Sperm has always been considered potent, with a never-ending ability to fertilize the women's womb (land/ ground) until it reaches a hostile environment inside the woman. At the cervix, it dies before fertilizing the woman. Women are accused of killing sperm with their cervix. Such a ground is considered thorny, dry, or rocky, poisonous enough to kill the potent sperm. Such narratives have led to violence where the woman is perceived as having a weapon inside her that kills a man's seed. Such narratives assume that only women can have reproductive difficulty, hence being labelled as barren. A womb (read land/ground) is expected to bear fruit without fail upon fertilization and watering. Symbolically, sperm is a seed planted for the womb to produce. The womb is considered a place where fertilization and fruition occur. Women are referred to as barren and not having the "fruit of the womb" when they have no children.

Rape Against Women's Bodies During War and Conflict Situations

The connection between environmental degradation through globalized capitalistic economic policies and VAW is made more poignant through the violation of women's bodies through rape and sexual assault of girls during war and conflict situations (Mies & Shiva, 2014; Saidero, 2017; Shiva, 1998; Vakoch, 2012). Rape is increasingly used as a weapon of war. Women experience more violence during environmental conflicts such as theft, physical abuse and assault, psychological abuse, sexual harassment and sexual assault, including rape, forced reproduction, unwanted pregnancies, and unsafe abortion, leading to high-risk pregnancies and sexually transmitted infections (Le Masson et al., 2016). Gender inequalities and violence are found in all places affected by environmental change and disasters.

In the case of illegal migrant women, rape may be seen as the payment for penetrating a foreign land and the subjugation of men. Narratives embody aspects of male dominance, presented as "the forced penetration of the virgin land"; conquest of the land also mirrors the mastery over the women who occupy the ground; hence, nature is seen as feminine (Sharkey, 1994, p. 18). Sexual abuse is faulted as a weapon of suppression and defeat, used to impose gender power inequalities (women on men and men on men), and dehumanizing, desecrating, and establishing the dominance of certain males and the possession over the foreign women's bodies in the absence of those women's desire. Such acts may lead to conflicts, estrangement, and erasure of passion, as the couple sits under the historical weight of the sexual violence, leading to rejection of one's body and self-hatred and avoidance of the partner. Belittled by the other powerful men, the men may resort to violence against their women. Maracle (2015) states that violent behaviours within the community arise from the historical legacy of colonialism due to the loss of lands, culture, health, and sense of nationhood. Deer (2004), therefore, suggests "rape as an unlawful 'invasion' of the body, mind and spirit [...] as a violation of a person's humanity" (p. 137). As such, healing can come from restoring the land-body-spirit connection by recognizing our mutual interdependence with the land (Deer, 2004, 2009) and embodying a feminine "ethos of partnership" (Eisler, 1987, p. xvii).

Culturally-based references to the male organ (penis) as "machine," "rod," "dick," "hammer," and "family knobkerrie" (*molamo wa lelwapa*) is common practice in many African cultures. The reference exemplifies a family-based blunt object, a knobkerrie to be specific, that has piercing power enough to penetrate the female reproductive organs and silence her. The *molamo wa lelwapa* is depicted, as a infiltratory weapon of discipline, on that is not necessarily for pleasure and vengeance. In this case, a woman may be raped continuously

by her husband or male partner where she is suspected to be unfaithful. The rape is metaphorically viewed as the conquest of unoccupied virgin land, and the sexual penetration is used to justify subjugation, expansion, and undermining of the local men. The female body and the land are believed to have a connection that is critical for the health of living beings (Saidero, 2017). Generations are produced through women's bodies (Cook, 2003).

DISCUSSION

This paper integrates multiple streams of thought, such as integrated person-in-environment perspective (ecological systems), ecofeminism to gain traction on understanding the effects of VAW and VAE. The importance of making these connections has implications for epistemological, conceptual, theoretical analysis and contribution. This paper maintains that VAW is a form of gendered power and control relations, used to maintain unequal relations between men and women.

Person-in-Environment Perspective (Ecological Systems)

Ecological/systems frameworks have their origins in the works of Gordon (1969) and Bartlett (1970) with the "goodnessof-fit model." Germain (1978) asserted, "People and their environments are viewed as interdependent, complementary parts of a whole in which person and environment are constantly changing and shaping the other" (p. 539). The ecological model to examine human development as nested within their interaction with the environment and the interaction between the two (Bronfenbrenner, 1974, 1977, 1979, 1995). The model states that individuals develop within "nested" levels of the environment or the ecology that interact with one another and shape attitudes, beliefs, and behaviours. A nested ecological model could advance the understanding of behaviours around climate change and VAW. The various systems are the individual (intrapersonal), microsystem (interpersonal), meso/exosystem (social networks/community), macrosystem (society), and chronosystem. Ecological models should be tailored to specific rather than general behaviours so that the potential risk and protective factors may be clearly articulated at each level. Finally, multi-level interventions should be most effective in changing behaviour at each level, depending on the potency of protective factors in suppressing the effects of risk (Sallis et al., 2008). The ecological model underscores the fact that in order to develop strategies for reducing or eliminating the risk of violence, it is critical to develop an understanding of the interplay of biological, psychological, social, cultural, economic, and political factors that exacerbate women's and girls' risk of exposure to violence as well as men's likelihood of perpetrating violence (Heise et al., 1999).

Understanding VAW and environmental degradation requires consideration of the ecological patterns, their risks and vulnerabilities. Women bear the adverse effects of climate change, but are also better placed to create a clean, healthy, and sustainable planet. These risk factors would make women vulnerable and prone to poor health outcomes due to climate change. Risk factors could influence some vulnerability, and protective factors protect populations from risk factors. Researchers have examined the degree to which hypothesized protective factors moderate the relationship between a risk factor and an outcome (Aiken & West, 1991; Jenson & Fraser, 2006; Small & Memmo, 2004). Protective factors reduce women's interpersonal and environmental challenges and build a network of protective or supportive factors that can help them cope with risks. We contend that built within the ecological settings lie various risk factors that may increase the likelihood of violence.

Existing ecological systems have relied on personal or "adaptive processes" as the cornerstone of functioning by looking at "environmental demands," while predominantly concentrating on individual "adaptation" (Fook, 1993; Gould, 1987; Kemp, 1994). Saleebey (1990) states that the essential focus of most ecological/system models is on how individuals adapt to environmental demands and that "the realities of power, conflict, oppression, and violence, so central to the survival of many groups, are given a curious and unreal patina by the adaptation perspective" (p. 11). A transpersonal understanding of one's identity with the natural environment, including the Earth, once known as the *anima mundi*, is absent from the discourse. Humans and nature cannot be separated because they are intertwined, independent, and mutually reinforcing (Besthorn, 1997; Besthorn & Tegtmeier, 1999).

Ecofeminist Approaches

The intersection of feminist theory and environmental protection is one topical issue that has gained traction, notable being the theoretical contribution of Wangari Maathai, a Kenyan scientist, feminist, and ecological and political activist and winner of the Nobel Peace Prize in 2004 (Maathai, 2006). This paper reflects on her contribution from a philosophical perspective and focuses particularly on the system of ethical values which Maathai developed in her practical work for environmental protection and poverty reduction in the rural areas of Kenya, as well as in the concept of ecofeminism.

Hudson-Weems (1993) opted for the term "Africana Womanism," which is grounded in the African culture and "necessarily focuses on the unique experiences, needs and desires of Africana women" (p. 6). African women are concerned with surviving famine, hunger, drought, disease, and war, which oftentimes are an offshoot of climate change and environmental degradation. Ecofeminism grew out of various fields of feminist inquiry and activism and draws from ecology, feminism, and socialist (Gaard, 1993). Ecofeminism converges the ecology and feminism (Birkeland, 1993; Mies & Shiva, 2014; Ruether, 1992; Saidero, 2017; Shiva, 1998; Vakoch, 2012). Ecofeminism presuppositions social transformation, survival, and justice, calling for reassessment and reconstructing of values and relations for equality, cultural diversity, and nonviolence (Birkeland, 1993).

Ecofeminists explain the connection women's oppression and the violence against Mother Earth experience are intertwined (Sultana, 2014). Bee et al. (2015) argue for a challenge of masculine technical and expert knowledge about climate change and the tendency to reinforce gendered polarities and Global North and South divides that "portray women as vulnerable." Shiva (1998) illustrates that the exclusion of women in participating in development results from the transformation of nature into raw materials, and the destructive attitudes that have normalized violence against women's bodies and against the land. Similarities have been drawn between the way society treats the environment, the animals, or the resources and the way women are treated. Firstly, ecofeminism calls for eradication of power-based relationships and having relationships based on reciprocity and mutuality as we strive for survival and justice. The second one is social transformation - intellectual transformation. Ecofeminism urges non-dualistic and non-hierarchical forms of thought as these negatively associate women with nature, hence validating devaluation and domination (Howell, 1997). Third, ecofeminism calls for reforming nature to transform human relationships with nature. The argument is that nature should not be viewed as a commodity and an object, but should be respected (Birkeland, 1993). Since ecofeminism focuses on the ecology, it encourages that there should be interconnectedness and interdependence between woman and nature. Lastly, ecofeminism argues that what ecology teaches about nature is equally relevant to humans. There is a need to understand human diversity and avoid domination and exploitation of humans, which can be a threat to human and ecological survival and justice (Howell, 1997).

Ecofeminism explores both the connection of women and nature and domination of one over the other. It argues that the ideology that permits oppression from gender, class, race, sexuality, and physical abilities is same as the one that endorses the oppression of nature (Gaard, 1993). In her article, Is female to male as nature is to culture?, Ortner (1974) argues that when women are closer to nature, they are then subjected to subordination. Ecofeminism contends that there are parallels between the treatment of women and that of nature, and they both serve instrumental roles and are valued for their worth to others (Plumwood, 1986). Ecofeminism, therefore, links women and the earth through the experience of patriarchal oppression. Ecofeminism calls for an understanding of oppression of women and nature, and both dominations must be eradicated to do away with systems that subordinate women and nature (Birkeland, 1993; Ruether, 1992). Ecofeminism describes the framework that allows these forms of oppression as patriarchy (Gaard, 1993). The premise of ecofeminism is to end all forms of oppression (Adam, 1991). Ecofeminists have alluded to the negative implications of feminization of nature. Ecofeminism suggests a historical connection between women and nature and compares the exploitation of women with that of nature or the environment.

CONCLUSION

Emerging issues in VAW and VAE suggests that women and the Earth have always shared a unique and complex association worth investigating. The relationship between the female body and the land is sacred for the well-being of all living beings. The unique knowledge held by women should be respected and effectively utilized in responding to and managing climate and disaster risks. On one hand, the paper expounded that ecofeminism seeks to heal this dulling of our sentient capacities by reweaving the inherent interconnectedness in all of the universe through a revitalization of each person's direct, lived, and sensual experience with the complex whole of nature. On the other hand, the ecological theory has done an excellent job defining the external environment as familial, built, organizational, and social dimensions. All these point to the significance that individuals should not view nature as Other, unlike something upon which they must depend, but rather as something to be managed, controlled, or adapted.

Most of the literature on climate change has been predominantly focusing on the experiences of women, and the environmental shifts, largely driven by climate change defenders, non-governmental organizations, and interventions that operate in places affected by climate change. We have expounded on how violence risks are exacerbated by different types of climate hazards. Future efforts should go into preparedness work, the development of early warning systems for both climate change hazards and gender-based violence, anticipatory action, and forecast-based financing. There is a need for a coordination and collaboration on climate change and violence prevention, risk mitigation, and response that integrates the natural and social environments, adopts ecofeminism approaches, and consolidates approaches in the intervention.

CONFLICT OF INTEREST DISCLOSURES

The authors have no conflicts of interest to declare.

AUTHOR AFFILIATIONS

*University of Botswana, Department of Social Work, Gaborone, Botswana, Southern Africa; [†]Candler School of Theology, Emory University, USA.

REFERENCES

- Adam, C. J. (1991). Ecofeminism and the eating of animals. *Hypatia*, 6(1), 125–145. https://doi.org/10.1111/j.1527-2001.1991. tb00213.x
- Aiken, L. S., & West, S. G. (1991). Multiple regression: Testing and interpreting interactions. Sage Publications, Inc.
- Akpalu, W., Muchapondwa, E., & Zikhali, P., (2009). Can the restrictive harvest period policy conserve mopane phane/mashonjas in Southern Africa? A bio-economic modelling approach. *Environment and Development Economics* (Working Paper No. 65), 1–11.
- Alston, M. (2013). Environmental social work: Accounting for gender in climate disasters. Australian Social Work, 66(2), 218–233. https:// doi.org/10.1080/0312407X.2012.738366
- Anderson, J., & C. Bausch. (2006). Climate change and natural disasters: Scientific evidence of a possible relation between recent natural disasters and climate change. Policy Brief for the EP Environment Committee (IP/A/ ENVI/FWC/2005–35) brief number 02a/2006. Institute for European Environmental Policy.
- Arora-Jonsson, S. (2011). Virtue and vulnerability: Discourses on women, gender and climate change. *Global Environmental Change*, *21*(2), 744--751. https://doi.org/10.1016/j.gloenvcha.2011.01.005
- Arora-Jonsson, S. (2014). Forty years of gender research and environmental policy: Where do we stand? Women's Studies International Forum, 47(B), 295–308. https://doi.org/10.1016/j.wsif.2014.02.009
- Asiki, G., Mpendo, J., Abaasa, A., Agaba, C., Nanvubya, A., Nielsen, L., & Kamali, A. (2011). HIV and syphilis prevalence and associated risk factors among fishing communities of Lake Victoria, Uganda. *Sexually Transmitted Infections*, 87(6), 511–515. https://doi.org/10.1136/ sti.2010.046805
- Banjo, A. D., Lawal, O. A., & Songonuga, E. A. (2006). The nutritional value of fourteen species of edible insects in southwestern Nigeria. *African Journal of Biotechnology*, 5(3), 298–301. https://doi. org/10.5897/AJB05.250
- Barry, S. (2015). The term "Mother Nature" reinforces the idea that both women and nature should be subjugated. Space Stereotypes. https://

qz.com/562833/the-term-mother-nature-reinforces-the-idea-that-bothwomen-and-nature-should-be-subjugated

- Bartlett, H. M. (1970). *The common base of social work practice*. Washington, DC: National Association of Social Workers.
- Bee, B. A., Rice, J., & Trauger, A. (2015). A feminist approach to climate change governance: Every day and intimate politics. *Geography Compass*, 9(6), 339–350. https://doi.org/10.1111/gec3.12218
- Béné, C., & Merten, S. (2008). Women and fish-for-sex: Transactional sex, HIV/AIDS and gender in African fisheries. World Development, 36(5), 875–899. https://doi.org/10.1016/j.worlddev.2007.05.010
- Berry, T. (1988). The dream of the Earth. San Francisco: Sierra Club Books.
- Bervian, G., da Costa, M. C., da Silva, E. B., Arboit, J., & Honnef, F. (2019). Violence against rural women: Conceptions of professionals in the intersectoral network of care. *Enfermería Global*, 18(2), 168–179. https://doi.org/10.6018/eglobal.18.2.324811
- Besthorn, F. H. (1997). Reconceptualizing social work's person-inenvironment perspective: Explorations in radical environmental thought [Unpublished doctoral dissertation]. University of Kansas, Lawrence, KS.
- Besthorn, F. H., & Tegtmeier, D. (1999). Opinions/perspectives/beliefs: Nature as professional resource—A new ecological approach to helping. *Kansas Chapter of NASW News*, 24(2), 15.
- Birkeland, J. (1993). Ecofeminism: Linking theory and practice. In G. Gaard (Ed.), *Ecofeminism: Women, animals, nature*. Philadelphia: Temple University Press, USA.
- Blaikie, P., Cannon, T., Davis, I., & Wisner, B. (1994). At risk: Natural hazards, people's vulnerability, and disasters. London: Routledge.
- Breines, W., & Gordon, L. (1983). The new scholarship on family violence. Signs: Journal of Women in Culture and Society, 8(3), 490–531. https://doi.org/10.1086/493987
- Bronfenbrenner, U. (1974). Developmental research, public policy, and the ecology of childhood. *Child Development*, 45 (1), 1–5. https:// doi.org/10.2307/1127743
- Bronfenbrenner, U. (1977). Toward an experimental ecology of human development. *American Psychologist, 32* (7), 513. https://doi.org/10.1037/0003-066X.32.7.513
- Bronfenbrenner, U. (1979). The ecology of human development: Experiments by nature and design. Cambridge, Massachusetts, and London, England: Harvard University Press.
- Bronfenbrenner, U. (1995). Developmental ecology through space and time: A future perspective. In P. Moen, G. H. Elder, Jr., & K. Lüscher (Eds.), Examining lives in context: Perspectives on the ecology of human development (pp. 619–647). American Psychological Association. https://doi.org/10.1037/10176-018
- Brownmiller, S. (1975). Against our will: Men, women and rape. New York: Fawcett Columbine.
- Bulkeley, H., & Kern, K. (2006). Local government and the governing of climate change in Germany and the UK. Urban Studies, 43(12), 2237–2259. https://doi.org/10.1080/00420980600936
- Castañeda, C. I., Sabater, L., Owren, C., & Boyer, E. A. (2020). Genderbased violence and environment linkages: The violence of inequality. Gland, Switzerland: IUCN. https://portals.iucn.org/library/sites/ library/files/documents/2020-002-En.pdf
- Chavunduka, D. M. (1975). Insects as a source of protein to the Africa. The Rhodesia Science News, 9, 217–220.
- Chinsinga, B., & Chasukwa, M. (2018). Narratives, climate change and agricultural policy processes in Malawi. Africa Review, 10(2), 140–156.
- Conroy, A. A. (2014). Gender, power, and intimate partner violence: A study on couples from rural Malawi. *Journal of Interpersonal Violence*, 29(5), 866–888. https://doi.org/10.1177/0886260513505907

- Cook, K. (2003, December 23). Cook: Women are the first environment. Indian Country Today. https://ictnews.org/archive/cook-women-arethe-first-environment
- Ćorić, D. (2014). About ecofeminism (as a part of environmental ethics) (English). Proceedings of Novi Sad Faculty of Law, 47, 293–307.
- Dankelman, I., & Davidson, J. (2008). Women and the environment in the Third World. Alliance for the future. Routledge.
- Dankelman, I., & Jansen, W. (2010). Gender, environment, and climate change: Understanding the linkages. In I. Dankelman (Ed.), Gender and climate change: An introduction. London, United Kingdom: Earthscan.
- Das, V. (2006). Life and words: Violence and the descent into the ordinary. Berkeley, Los Angeles, London: University of California.
- Deer, S. (2004). Towards an indigenous jurisprudence of rape. Kansas Journal of Law and Public Policy Policy, 121, 120–154.
- Deer, S. (2009). Decolonizing rape law: A native feminist synthesis of safety and sovereignty. Wicazo SA Review, 24, 149–167.
- Denchak, M. (2017, February 23). Global climate change: What you need to know. https://www.nrdc.org/stories/global-climate-changewhat-you-need-know
- Denton, F. (2002). Climate change vulnerability, impacts, and adaptation: Why does gender matter? *Journal of Gender & Development*, 10(2), 10 10–20. https://doi.org/doi 10.1080/13552070215903
- Devereux, S. (1999). Making less last longer: Informal safety nets in Malawi. Malawi: Institute of Development Studies.
- Eisler, R. (1987). The chalice and the blade: Our history, our future. San Francisco: HarperCollins.
- Ellsberg, M., Jansen, H. A., Heise, L., Watts, C. H., Garcia-Moreno, C., & WHO Multi-country Study on Women's Health and Domestic Violence against Women Study Team (2008). Intimate partner violence and women's physical and mental health in the WHO multicountry study on women's health and domestic violence: An observational study. *Lancet (London, England)*, 371(9619), 1165–1172. https://doi.org/10.1016/S0140-6736(08)60522-X
- Epstein, A., Bendavid, E., Nash, D., Charlebois, E. D., & Weiser, S. D. (2020). Drought and intimate partner violence towards women in 19 countries in sub-Saharan Africa during 2011-2018: A populationbased study. *PLoS Medicine*, 17(3), e1003064. https://doi. org/10.1371/journal.pmed.1003064
- Fairbanks, S. J. (2010). Environmental goodness and the challenge of American culture. Ethics and the Environment, 15(2), 79–102. https:// doi.org/10.2979/ete.2010.15.2.79
- Flannery, T. (2009). Now or never: Why we must act now to end climate change and create a sustainable future. Open Road+ Grove/Atlantic. New York: Atlantic Monthly Press.
- Fook, J. (1993). Radical casework: A theory of practice. St. Leonards, NSW, Australia: Allen & Unwin.
- Gaard, G. (1993). Ecofeminism (Vol. 21). Temple University Press.
- Germain, C. B. (1978). General-systems theory and ecopsychology: An ecological perspective. *Social Service Review*, *52*(4), 535–550.
- Gifford, R. (2008). Psychology's essential role in alleviating the impacts of climate change. *Canadian Psychology/Psychologie Canadienne*, 49(4), 273–280. https://doi.org/10.1037/a0013234
- Gordon, W. E. (1969). Basic constructs for an integrative and generative conception of social work. In G. Hearn (Ed.), *The general systems approach: Contributions towards an holistic conception of social work.* New York: Council on Social Work Education.
- Gould, K. H. (1987). Life model versus conflict model: A feminist perspective. Social Work, 32(4), 346–352. https://www.un.org/womenwatch/feature/climate_change/downloads/Women_and_Climate_Change_Factsheet.pdf

- Heise, L., Ellsberg, M. and Gottemoeller, M. (1999). *Ending violence against women*. Population Reports, Series L, No. 11. http://www.vawnet.org/assoc_files_vawnet/populationreports.pdf
- Howell, N.R. (1997), Ecofeminism: What one needs to know. *Zygon®*, 32, 231–241. https://doi.org/10.1111/0591-2385.861997085
- Hudson-Weems, C. (1993). Africana womanism: Reclaiming ourselves. Troy, MI: Bedford.
- Illgner, S. L., & Nel, E. (2000). The geography of edible insects in sub-Saharan Africa: A study of the Mopane mopane caterpillar. The Geography Journal, 166(4), 336–351. https://doi. org/10.1111/j.1475-4959.2000.tb00035.x
- International Federation of Red Cross and Red Crescent Societies (IFRC). (2015).*Unseen, unheard: Genderbased violence in disasters.* https:// www.ifrc.org/document/unseen-unheard-gender-based-violencedisasters
- IPCC. (2007). Climate change 2007: Synthesis report. Summary for policymakers. Cambridge, UK: Cambridge University Press.
- Jenson, J. M., & Fraser, M.W. (2006). Social policy for children and families: A risk and resilience perspective. Thousand Oaks, CA: Sage Publications.
- Kakota, T., Nyariki, D., Mkwambisi, D., & Kogi-Makau, W. (2011). Gender vulnerability to climate variability and household food insecurity. *Climate and Development*, 3(4), 298–309. https://doi.org/10.10 80/17565529.2011.627419
- Kemp, S. P., (1994). Social work and systems of knowledge: The concept of environment in social casework theory, 1900–1983 [Unpublished doctoral dissertation]. Columbia University, New York.
- Kgathi, D. L. (1992). Household response to fuelwood scarcity: Implications for energy policy [Unpublished PhD thesis]. University of East Anglia, Norwich, UK.
- Kgathi, D. L., & Mlotshwa, C. V. (1997). Fuelwood procurement, consumption, and substitution in selected areas of Botswana. In D. L. Kgathi, D. O. Hall, A. Hategeka, & M. B. M. Sekhwela (Eds.), *Biomass* energy policy in Africa. London: ZED Books.
- Kgathi, D. L., & Motsholapheko, M. (2002). Sustainability of basketmaking resources in Ngamiland District. [Unpublished report]. Harry Oppenheimer Okavango Research Centre (HOORC), University of Botswana, Maun, Botswana.
- Lant, C., Baggio, J., Konar, M., Mejia, A., Ruddell, B., Rushforth, R., & Troy, T. J. (2019). The US food–energy–water system: A blueprint to fill the mesoscale gap for science and decision-making. *Ambio*, 48(3), 251–263. https://doi.org/10.1007/s13280-018-1077-0
- Le Masson, V., Lim, S., Budimir, M., Podboj, J. S. (2016). Disasters and violence against women and girls: Can disasters shake social norms and power relations? Overseas Development Institute. https://odi. org/en/publications/disasters-and-violence-against-women-and-girlscan-disasters-shake-social-norms-and-power-relations/
- Lindsey, R., & LuAnn, D. (2020). Climate change: Global temperature. National Oceanic and Atmospheric Administration. https://www. climate.gov/news-features/understanding-climate/climate-changeglobal-temperature
- Maathai, W. (2006). The green belt movement: Sharing the approach and the experience. New York: Lantern Books.
- MacGregor, S. (2010). 'Gender and climate change': From impacts to discourses. Journal of the Indian Ocean Region, 6(2), 223–238. https://doi.org/10.1080/19480881.2010.536669

- Maracle, L. (2015). Memory serves. Edmonton, AB: NeWest Press.
- Mason, C., & Magnet, S. (2012). Surveillance studies and violence against women. Surveillance and Society, 10(2), 105–118. https:// doi.org/10.24908/ss.v10i2.4094

Maracle, L. (2002). Lecture. https://www.youtube.com/watch?v=VdxJYhbTvYw

- Mies, M., & Shiva, V. (Eds.). (2014). *Ecofeminism* (2nd ed.). London: Zed Books.
- National Crime Research Centre. (2014). Gender based violence in Kenya. Nairobi, Kenya. https://crimeresearch.go.ke/wp-content/ uploads/2018/02/wwwroot_publications_Gender-Based-Violencein-Kenya.pdf
- Onwutuebe, C. J. (2019). Patriarchy and women vulnerability to adverse climate change in Nigeria. *Sage Open, 9*(1), 1–7. https://doi. org/10.1177/2158244019825914
- Ortner, S. (1974). Is female to male as nature is to culture? In M. Z. Rosaldo & L. Lamphere (Eds.), *Woman culture and society* (pp. 67–88). Stanford, CA: Stanford University Press.
- Plant, J., (Ed.). (1989). *Healing the wounds: The promise of ecofeminism*. Philadelphia: New Society Publishers.
- Plumwood, V. (1986). Ecofeminism: An overview and discussion of positions and arguments. Australasian Journal of Philosophy, 64(suppl. 1), 120–138. https://doi.org/10.1080/00048402. 1986.9755430
- Rao, N., Elaine, T., Lawson, W., Raditloaneng, D., & Margaret, N. (2019). Gendered vulnerabilities to climate change: Insights from the semi-arid regions of Africa and Asia. *Journal of Climate and Development*, 11(1), 14–26. https://doi.org/10.1080/17565529 .2017.1372266
- Renzetti, C. M., Edleson, J. L., & Bergen, R. K. (Eds.). (2001). Sourcebook on violence against women. Thousand Oaks, CA: Sage.
- Röhr, U. (2007). Gender, climate change and adaptation: Introduction to gender dimensions. https://citeseerx.ist.psu.edu/document?rep id=rep1&type=pdf&doi=3f8716e0de27fce264b9d966ae214fb 48140f861
- Ruether, R. (1992). Gaia and god: An ecofeminist theology of earth's healing. San Francisco: Harper.
- Rustad, S. A., Ostby, G., & Nordas, R. (2016). Artisanal mining, conflict, and sexual violence in Eastern DRC. *Extractive Industries and Soci*ety, 3(2), 475–484. https://doi.org/10.1016/j.exis.2016.01.010
- Saidero, D. (2017). Violence against the earth is violence against women: The rape theme in women's eco-narratives. *Le Simplegadi, (17),* 263–273. https://doi.org/10.17456/SIMPLE-72
- Saleebey, Dennis. (1990) Philosophical disputes in social work: Social justice denied. *The Journal of Sociology & Social Welfare, 17*(2), 4. https://doi.org/10.15453/0191-5096.1937
- Sallis, J. F., Owen, N., & Fisher, E. B. (2008). Ecological models of health behavior. In K. Glanz, B. K. Rimer, & K. Viswanath (Eds.), *Health* behavior and health education: Theory, research, and practice (4th ed., pp. 465–485). Jossey-Bass.
- Sen, G., & Östlin, P. (2008). Gender inequity in health: Why it exists and how we can change it. *Global Public Health*, 3(Suppl 1), 1–12. https://doi.org/10.1080/17441690801900795
- Sharkey, S. (1994). Ireland and the iconography of rape: Colonization, constraint and gender. London, UK: University of North London Press.
- Shiva, V. (1998). Staying alive: Women, ecology, and development. New Delhi: Kali for Women.

- Small, S., & Memmo, M. (2004). Contemporary models of youth development and problem prevention: Toward an integration of terms, concepts, and models. *Family Relations: An Interdisciplinary Journal of Applied Family Studies, 53*(1), 3–11. https://doi.org/10.1111/j.1741-3729.2004.00002.x
- Sommer, M., Ferron, S., Cavill, S., & House, S. (2015). Violence, gender and WASH: Spurring action on a complex, under-documented and sensitive topic. *Environment & Urbanization*, 27(1), 105–116. https:// doi.org/10.1177/0956247814564528
- Sultana, F. (2014). Gendering climate change: Geographical insights. The Professional Geographer, 66(3), 372–381. https://doi.org/10.108 0/00330124.2013.821730
- Tacey, D. (2009a). Edge of the sacred: Jung, psyche, earth. Einsiedeln, Switzerland: Daimon.
- Tacey, D. (2009b). Environmental spirituality. International Journal of New Perspectives in Christianity, 1(1), 17–21.
- Terry, G. (2009). No climate justice without gender justice: An overview of the issues. *Gender & Development*, 17(1), 5–18. https://doi. org/10.1080/13552070802696839
- UN Women. (2009). Women, gender equality and climate change. UN Women.
- UN Women. (2018). Turning promises into action. Gender equality in the 2030. UN Women.
- United Nations Environment Programme. (2020). Global Climate Litigation Report 2020 Status Review. Global Climate Litigation Report: 2020 Status Review. Nairobi. Kenya.
- United Nations Framework Convention on Climate Change (UNFCCC). (2022). Status of ratification of the convention. Accessed January 21, 2024, from, https://unfccc.int/process-and-meetings/theconvention/status-of-ratification-of-the-convention
- United Nations Intergovernmental Panel on Climate Change (IPCC). (2007). First assessment report overview and policymaker summaries. Accessed January 21, 2024, from https://www.ipcc.ch/report/ climate-change-the-ipcc-1990-and-1992-assessments/
- Vakoch, D. A. (Ed.). (2012). Feminist ecocriticism: Environment, women, and literature. Lanham, (MD): Lexington Books.
- Wan, M., Colfer, C. J., & Powell, B. (2011). Forests, women and health: Opportunities and challenges for conservation. *International Forestry Review*, 13(3), 369–387.
- World Health Organization. (2013a). Global and regional estimates of gender-based violence: Prevalence and health effects of intimate partner violence and non-partner sexual violence. Geneva, Switzerland: World Health Organization.
- World Health Organization. (2013b). Violence against women: Intimate partner and sexual violence against women. Geneva: WHO.
- World Health Organization. (2018). Global fact sheet violence against women-Prevalence estimates, 2018. World Health Organization.
- WHO. (2018). Global fact sheet violence against women—Prevalence estimates, 2018.
- Yllo, K. A. (1993). Through a feminist lens: Gender, power and violence. In R. J. Gelles & D. R. Loseke (Eds.), *Current controversies on family violence* (pp. 47–62). Newbury Park, CA: Sage.