

Review Article

Three Dimensions of Environmental Degradation: Conflict, Cooperation and Injustice

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Shlomi Dinar (ed.), *Beyond Resource Wars: Scarcity, Environmental Degradation, and International Cooperation*. Massachusetts: The MIT Press, 2011, 335 pp., pbk.

JoAnn Carmin and Julian Agyeman (eds.), *Environmental Inequalities Beyond Borders: Local Perspectives on Global Injustices*. Massachusetts: The MIT Press, 2011, 303 pp., pbk.

Harold Welzer, *Climate Wars: Why People Will Be Killed in the Twenty-First Century*. Cambridge: Polity Press, 2012, 222 pp., hbk.

Global environmental change has huge implications for natural environment. There has been a common understanding that the change has been brought about largely by anthropogenic factors which impacts both state and human securities. On the one hand, environmental impact is associated with conflict and, on the other hand, there has been a debate on linkage between environment and security. Initially, the environment and conflict syndrome dominated the discourse of environmental degradation. Historically, politically and analytically, the syndrome got unprecedented attention of scholars,¹ despite a wide variation in their arguments. However, after the end of the Cold War, the linkage between security and environment dominated the discourse of environmental degradation. The linkage got political and security disposition in the work of Robert D. Kaplan (1994) and then the idea was permeated among prominent political and military elites of the United States. Kaplan argued that foreign policy would be shaped by “[s]urgings populations, spreading disease, deforestation and soil erosion, water depletion, air pollution, and possibly rising sea levels” (1994). Thomas Homer-Dixon (1994) analysed environmental scarcity and its ‘cumulative social impact’ and argues that environmental scarcity gives rise to ‘sub-national violence’; and ‘sub-national violence’ influences ‘security interests’ of both developed and developing countries. According to Homer-Dixon (1994):

Environmental scarcity has insidious and cumulative social impacts, such as population movement, economic decline, and the weakening of states. These can contribute to diffuse and persistent sub-national violence. The rate and extent of such conflicts will increase as societies worsen. This sub-national violence will not be as conspicuous or dramatic as inter-state wars, but it will have serious repercussions for the security interests of both the developed and developing worlds.

However, the conflict or security discourse of environmental degradation propelled scholars such as Paul Diehl and Nils Petter Gleditsch to rethink the linkage from the perspective of environmental cooperation. Though cooperation dimension of environmental degradation can be traced to the peace studies theoryⁱⁱ, the book by Shlomi Dinar is a fitting and an apposite work to attenuate the fear and undue emphasis on environmental conflict and to reignite the debate on environmental cooperation. International institutions are major driving forces for transferring environmental conflict to environmental cooperation. However, JoAnn Carmin and Julian Agyeman in their text *Environmental Inequalities Beyond Borders: Local Perspectives on Global Justice* are emphatically critical of the effectiveness of international institutions as instruments for promoting and leveraging the idea and practice of environmental cooperation and environmental justice. Harold Welzer in his text *Climate War* is also leery of the role of international institutions and intentions of developed countries for promoting climate justice. Thus, the common element that interlinks the three texts is both the role of international institutions and developed countries for promoting environmental cooperation and environmental justice. However, whether the claim for promoting cooperation and justice is spurious or real has been empirically examined by the authors. Despite it, Welzer is more concerned about perils of climate change and its present and future implications for society, culture, and intra and inter-states relations. In addition, the paper underlines the conceptual understanding on the use of concepts such as environmental security, environmental conflict and climate security.

In *Beyond Resource Wars*, the authors are intended to argue that environmental degradation promotes cooperation rather than conflict. Their core argument has three dimensions. At the outset, accruing of environmental degradation and resource scarcity provides impulse for environmental cooperation, coordination, negotiation, and international agreements. More resource conflict means more cooperation. The authors in the book corroborate their arguments while analysing international and regional agreements on climate change (Mendelsohn p. 25), ozone depletion (DeSombre p. 52-53), biodiversity (Rosendal p. 64), sharing of international rivers (Dinar p. 169), fisheries (Barkin p. 141), oil (Fettweis p. 201) and mineral resources (Shields and Solar p. 239).

Secondly, environmental degradation cannot be linked up with military security because any future military conflict related to resource scarcity is not indisputable (p. 8). Shlomi Dinar cites the argument of Daniel H. Deudney while arguing for the unlikely military dispute over natural resources (p. 9). In this way, the author disassociates the linkage between environmental degradation and national security.ⁱⁱⁱ Thirdly, authors like Elizabeth R. DeSombre (p. 44, 46) flesh out that environmental cooperation is very critical because developing countries are stuck with their demand for economic development and this gives them ample leeway to bargain at various international environmental agreements. Historically, developed countries are responsible for the present environmental degradation and shaping their own discourse of development and, at the same time, trying to bring developing countries to the negotiation table. Robert Mendelsohn (p. 39) argues that bringing developing countries to the negotiation table can be possible by: firstly, rendering incentives to developing countries in the form of creation of fund like the Montreal Protocol Multilateral Fund as argued by DeSombre (p. 52); secondly, drawing up a well-crafted treaty for sharing benefits; and thirdly, shaping up a long-lasting treaty.

The cooperative dimension of the authors and their arguments for justifying their stand is not a new development. Their arguments are beneficial for the advancement of the field which is set up by peace research studies. However, the first limitation of their argument is that the authors have failed to draw the line between environmental conflict and environmental security. These terms are discrete, but inseparable. Dinar cites the arguments of both Deudney (p. 9) and Diehl and Gleditsch (p. 289) while looking at the environmental cooperation. Daniel H. Deudney^{iv} argues for environmental conflict and is quite emphatic against the use of environmental security and Diehl and Gleditsch (2001) use both environmental conflict and environmental security interchangeably without defining and drawing the line between the two. In the words of Diehl and Gleditsch (2001: 4): "...establishing if, when, and under what conditions environmental factors are associated with conflict would be a big step forward, but the environmental security field remains handicapped in its theoretical focus on only one side of the conflict-cooperation coin".

However, environmental conflict is primarily state-military dominated discourse and conflict-driven; and environmental security is both state and individual dominated discourse and is primarily concerned with human security (Detraz and Betsill 2009). The interchangeable use of environmental security with environmental conflict (as Diehl and Gleditsch did), disassociation of environmental conflict from environmental security^v (as Deudney did), and taking into account both the views interchangeably (as Dinar did) show a narrow conceptual understanding of the terms and their implications. Thus, the differences between environmental conflict and environmental security shall be

conceptually defined and clarified. In addition, authors favour creation of funds for transfer of money (DeSombre p. 52) and technology (Rosendal p. 65) from developed countries for speedy implementation of environmental programmes and reduction of emissions of green house gases of developing countries. However, they ignore issues such as source and availability of funds, operational criteria and issue of transparency. This is the second limitation of their argument. The 2009 'Copenhagen Accord' was mired by these issues. At the same time, developed countries fail to fulfill their commitment for funding environmental programmes. The third limitation is that the authors failed to develop a theory based on cooperation. Environmental cooperation based on any theoretical explanation can give a particular perspective for understanding environmental degradation. Though scholars use international agreements as means of environmental cooperation, it shows their proclivity for regime formation or neo-liberal institutionalist theory of environment. However, they have failed to convince the readers whether they are in favour of regime or neoliberal institutionalist theory. Despite these limitations the work is very much commendable as it reignites the debate on environmental cooperation. This can remove the fears of Diehl and Gleditsch which they raised in the early 2000s and can render a new dimension to environmental scholars to rethink environmental degradation as an opportunity for environmental cooperation.

In *Environmental Inequalities Beyond Borders*, nature of global environmental injustice is pre-eminently analysed where environmental inequalities are the outcome of dominating views and values of particular groups. In addition, global environmental inequalities also intertwine with the rise of global economic, social and political institutions. There are three instruments through which environmental injustice prevails: international institutions or international agreements, multi-national companies (MNCs) and the discourse of development which is shaped by developed countries. Firstly, Agyeman and Carmin (p. 1) observe that despite the 1989 Basel Convention on the Trans-boundary Movement of Hazardous Wastes and the European Union's (EU) 2002 Restrictions on Hazardous Substances, European countries have been disposing unused and useless technology to developing countries like Ghana. Alison H. Alkon (p. 188-89) argues that international institutions like International Monetary Fund (IMF) and World Bank (WB) formulate policies against the interest of developing countries and how permeation of Green Revolution practice as a part of the Structural Adjustment Programme (SAP) ignores the local social and political contexts of small farmers. Alkon (p. 189) underlines the fact that the Mexican government was forced to terminate its facilities for their farmers and the government encouraged farmers for export of crops instead of food self-sufficiency. Saskia Vermeylen and Gordon Walker (105-7) underscore the Convention on Biological Diversity (CBD) and the way of benefit sharing agreement between government and people that resulted into two consequences: firstly, the traditional plant *Hoodia* was patented by the

South Africa government without the consent of the San community; secondly, it also engendered injustice within the San community and manufactured divergent and disparate groups: notions of “elite” San and “ordinary” San, particularly in Namibia (p. 114, p. 116).^{vi} The argument is that international agreements and international institutions increase environmental inequality and injustice. Institutions undervalue rightful rights of traditional community. It is also observed that some developing countries go along with the development discourse shaped by developed countries and are engaged in the same exploitative strategy within developing countries. According to Vermeulen and Walker (p. 111):

While the CBD creates the obligation to respect, preserve and maintain traditional knowledge, innovations, and practices, and promote their wider use with the approval of indigenous and local communities, it does not describe how this is to be achieved. Fair and equitable remain undefined in the CBD.

Secondly, MNCs are primarily responsible for the present environmental degradation in developing countries. Both Max Stephenson and Lisa A. Schweitzer (p. 55), and Saleem H. Ali and Mary A. Ackley (p. 76-77) lacerate the parlous activities of MNCs in Niger Delta and Fiji respectively. Thirdly, Tammy L. Lewis (p. 90) pins down that developed countries shape the environmental agenda in the South using both international institutions and infusing funds or environmental aid. Developed countries give environmental aid to selective rich bio-diversity country so that they can get optimum gain from resource-rich developing countries. Stephenson and Schweitzer (p. 47) analyse that rules are framed and reframed by developed countries to suit their interest.

Global environmental injustice has resulted into disproportionate share of environmental burden (p.3), derecognition and dearth of voice of local people in the decision-making process (p. 5) and creation of dependence-domination syndrome (p. 20). However, environmental injustice prevails not only across states or between global North-South but within a state or in developing countries. Patricia Widener (160, 162) argues that China’s technological strides and failure of reducing green house gases has created environmental inequality within global South. Alkon (p. 187) mentions how the United States federal policies were structured by racial and economic inequalities that compromised the food sovereignty of African-American community.

Global environmental injustice is the thrust of the book and authors have strongly argued for the minimisation and elimination of the injustice. Authors argue that this can be possible through demand for greater transparency and accountability in the use of public funds (p. 63), social movement and

disruption of existing social relations (p. 263-64) and creation of democratic and legal mechanisms (p. 271).

Authors in the book argue about the growing environmental injustice both at the national and international levels. Arguments are empirically sound and analytically well delineated. However, not a single author put the environmental injustice within a particular theoretical framework. For the sake of the argument it can be rightly mentioned that there are two approaches for securing justice: firstly, 'transcendental institutionalism' or 'arrangement-focused approach' of justice; and secondly, 'realization-focused' justice. The former approach underlines formation of just institutions or 'certain organizational arrangements' for securing perfect justice and the latter emphasizes both institutional and non-institutional features (Sen 2009: 5-6). According to Amartya Sen (2009: 6, 10):

The nature of the society that would result from any given set of institutions must, of course, depend also on non-institutional features, such as actual behaviours of people and their social interactions...The question to ask in this context is whether the analysis of justice must be so confined to getting the basic institutions and general rules right? Should we not also have to examine what emerges in the society, including the kind of lives what people can actually lead, given the institutions and rules, but also other influences, including actual behaviour, that would inescapably affect human lives?.

Though the authors are unable to explain their argument without taking into account to any theory of justice, but their arguments can be framed within the 'realization-focused' approach of justice. How? On the one hand, Carmin and Agyeman argue for the setting up of democratic institutions and legal mechanisms and, on the other hand, David N. Pellow avers on social movement and disruption of existing social relations, and articulation of 'socially just institutions' (p. 248). It is not only institutions, but social interaction in the forms of race, gender, class and other inequalities that are the roots of environmental injustice (p. 247). Thus, it is important to emphasize the institutional and non-institutional aspects of environmental injustice.

Over and above, Pellow argues for social movement as a means of minimising environmental injustice. However, he fails to explain diversified nature and intentions of social movement in different political systems. In industrialised countries, social movement mulls over 'value-shift' in society (which is explained both in post-materialist and post-industrialisation perspectives) and in East European countries green movement, emerged as a political movement, transmitted into market economy and subsequently the green movement became faltered (Doyle and McEachern 1998: 59, 74).

However, recently, the discourse of environmental degradation, environmental security and environmental social movements has been subsumed under the discourse of climate change. The discourse of climate change has been metamorphosed into 'climate crisis' (Human Development Report 2007/08: 1) or 'climate security' (Beckett 2007; Human Development Report 2007/08: 58) as it is considered as an extraordinary challenge or a 'fierce urgency' (Human Development Report 2007/08: 1) which exacts extraordinary response.

The climate change discourse took a dramatic shift when the Security Council (SC) of the United Nations (UN) held its first-ever debate on impact of climate change on international peace and security on April 17, 2007. However, this debate formed two opposing groups: one group, particularly developed countries such as the United Kingdom, France, Germany etc, considers climate change as a security issue and, another group, particularly India, China, Pakistan, opposes the security dimension of climate change. In such a situation, the book *Climate Wars* by Welzer will certainly further the debate on security and non-security tenets of climate change.

The book *Climate Wars* was originally published in German in 2008. However, its translation in the English language by Patrick Camiller in 2012 has certainly helped the intensity of the discourse of climate change security. At the outset, Welzer argues that climate change is an urgent issue and a social problem as it affects human beings (p. 32). Climate change and violence cannot be drifted apart (p. 5). The ruthless and relentless consumption of natural resources by industrialised and emerging economies are the harbinger of present climate catastrophe. This results into unequal consequences and distribution of climate change impact and the asymmetric capacity of contending with the problem (p. 82, 115). This raises the issue of justice at the national as well as international levels. Unprecedented and unequal consumption of natural resources has denied justice to and caused diminution of human culture of poor and underprivileged people (p. 56). However, the author is virtually convinced that climate war is a reality and the direct link between climate change (p. 168) and violence is palpable in Darfur conflict (p. 5, 104). According to the author: "We shall see not only mass migration but also *violent solutions to refugee problems*, not only tensions over water or mining rights but also *resource wars*, not only religious conflicts but also *wars of belief*" (p. 6).

The climate war thesis of the author is invariably interlinked with national security of a country. Climate change impact will force countries for taking measures for mitigation and adaptation. However, adaptive measures can have implications for interstate relations. For example, building of dams by upstream countries can beget tensions between upstream and downstream countries (p. 80).

Climate change conflict and national security are intimately intertwined with military security (p. 66). Climate change catastrophe affects functions and performance of military build-up and its operation. The rise of sea level can affect military bases which are set up in the low-lying areas or islands. At the same time, climate change challenges bring the linkage between environment and military organisation. Involvement of military or army militarises environment and the glaring instances are United State's wars against Vietnam, Iraq and Afghanistan. There is also increased intervention of government supported troops and militias in the case of Darfur conflict. Thus, the objective of development and climate change policy must be comprehended from the perspective of 'preventive security' (p.11).

The author also questions the utility of international agreements on climate change. He argues that agreements are only self-imposed obligation on the part of countries; there is no sanction against countries for violation of international agreements (p. 167). The objective must be to get away from the as usual mindset and to think beyond it. It requires redefinition of climate change as a cultural issue and greater participation of people in the decision-making process (p. 177). It exacts formation of 'third modernity'^{vii} based on vision for good society (p. 178).

The nature of climate change and its repercussion, as argued by the author, is more intense. War, conflict, security and violence are the inherent characteristics of his climate change discussions. He is out rightly convinced that climate war is a reality. This is an exaggerated notion of his analysis. His argument for climate war lacks analytical explanation and the author forcefully tries to put the climate war thesis in order to convince readers. In addition, his argument lacks theoretical argument and conceptual analysis. Theoretically, the author fails to claim his climate war thesis without looking into any theory of International Relations or social sciences. For instance, the argument for climate war or climate security can be framed within the securitisation or social constructivist theory.^{viii} It means whether the climate war is the outcome of 'speech act' of political leaders or shared understanding of people at the international levels. Author also used different concepts loosely. Author relates climate change with war, security, violence and used these concepts interchangeably. Thus, the arguments of the author lack theoretical explanation and are replete with conceptual weaknesses. Sometimes the author argues that climate change is a social and cultural issue and sometimes considers it as a security issue.

The effect and intensity of environmental degradation has generated a debate on different dimensions of environment. Some scholars argue that environmental degradation causes conflict and some observe that it promotes cooperation. However, climate discourse has added a new dimension to environmental degradation and the climate discourse, as espoused by Welzer, is

more prone to security issue. However, the three above mentioned books are unique in their analysis and observation. Shlomi Dinar refutes the environmental conflict approach of environmental degradation and emphasizes more on environmental cooperation. However, Carmin and Agyeman set out environmental injustice at the national and international levels. Dinar observes the utility of international agreements for enhancing environmental cooperation, but Carmin and Agyeman and Welzer vehemently criticise international agreements as these are instruments for fomenting global environmental injustice. Welzer blames both developed and emerging developing countries for the present climate injustice, conflict and violence.

Dinar's book is an important work in the field of environmental literature which will give more impetus to environmental and International Relation scholars to work more on environmental cooperation rather than environmental conflict and environmental security. Carmin and Agyeman's work will certainly help to rethink the utility of extant international institutions for promoting global environmental justice. Welzer's book will further the debate on whether climate change is a security or non-security issue and what is its implications for shaping the nature of understanding on climate change between developed and developing countries and its implications for society, culture, nature of civil war and inter-state relations. The three dimensions of environmental degradation-conflict/security-cooperation-injustice- are invariably interlinked. However, whether global environmental injustice is a result of environmental conflict or environmental cooperation or both is still a debatable issue among scholars. The crux is how to minimise and eliminate environmental injustice and what shall be the priority and objectives of international institutions for managing environmental conflict and promoting environmental cooperation or climate security. Nevertheless, before looking into the environmental justice, it is worthwhile to distinguish between environmental conflict and environmental security. Environmental conflict is primarily understood in terms of scarcity and it is military- centric and vouch for the role and security of state (Detraz and Betsill 2009: 306). In order to promote national and global environmental justice, discourse and practice of environmental security is more beneficial because it is concerned with 'human welfare' or human security, the role of both state and non-state actors (Detraz and Betsill 2009: 308). Even the discourse of climate security or climate-related conflict has been historically associated with environmental security (Detraz and Betsill 2009: 304, 310). Looking into the Security Council debate on climate change, Nicole Detraz and Michele M. Betsill (2009: 311) argues that eighty per cent of all the speakers linked climate change concerns which are consistent with environmental security discourse.

Analysing the arguments of the authors of three books, it can be said that the sincerity, integrity and effectiveness of international institutions for promoting environmental cooperation have been questioned. In addition, the

article argued for conceptual clarity on concepts like environmental conflict, environmental security and climate security. It is the onus of academic scholars to remove the conceptual misgivings. It can only help to engender environmental justice and minimise environmental conflict.

End Notes

- ⁱ See Bachler (1995); Homer-Dixon (1991); Homer-Dixon (1994); Peluso and Watts (2001); Swain (1996)
- ⁱⁱ Conca prefers ‘environmental peacemaking’ as an alternative or a counter-productive to the environmental security debate. See Levy (2011)
- ⁱⁱⁱ The main scholar of the argument is M. A. Levy. Levy dissects that the nexus between environment (or/and climate change) and security argument as espoused by Mathew, Myers and Renner is a ‘rhetorical flourish’ to gain public support for environment. This approach is indefensible and inadequate. But Levy reluctantly admits the issues of climate change and ozone depletion, rather than other environmental problems, as the national security issue and it requires a ‘grand strategy’ the way the Soviet Union was contained. This policy of containment of climate change impasse demands for and hinges on defence policy, than environmental policy. At the same time, he concedes that this linkage engenders ‘risks but not benefits’. See Levy (1995). However, the linkage of environmental degradation with military and national security has been widely accepted by a number of scholars. See Diamond (2005); Matthew (1999); Stern (2005); Wirth (1989)
- ^{iv} Deudney argues that linking of environment with national security certainly prevents global cooperation to deal with environmental problems. According to Deudney (1990), “thinking of national security as an environmental problem risks undercutting both the globalists and common fate understanding of the situation and the sense of world community that may be necessary to solve the problem”. See Deudney (1999).
- ^v Deudney argues that environmental security rather than environmental conflict is state-military discourse and he, thus, prefers environmental conflict.
- ^{vi} The intra-community violence argument has been corroborated by the empirical works of Nandini Sundar and Bela Bhatia. While looking at the Government of India’s policy on Joint Forest Management (JFM), Sundar (2001) argues that local people are used as participants for the execution of government plans without benefiting people. She fleshes out that the policies of the post-colonial state lead to resistance of the village people against state and then their own community, and state internalises the violence both structurally and ideologically. Bhatia (1997) in his study finds that the households of Antras village of Gujarat in India were the part of Narmada Bachao Andolan (NBA) and when the question of displacement came few people agreed to go and, at the same time, they wanted to cut trees as the wood was needed for fuel at the new sites. However, those were willing to stay opposed

such move led to a physical fight. State policies force people to fight among themselves.

- vii Welzer divided modernity into three kinds: the first one is based on past developments, the second one is present climate change development and the third one is formation of a good society in the future.
- viii Climate change as a security issue has been framed within the securitisation theory. See Brauch (2008); Sahu (2011); The social constructivist nature of climate change has been well delineated by Denise Garcia. See Garcia (2010); Pettenger (2007)

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