

Is Environmental Justice the Main Force for Local Sustainability?

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Alicia Arriaga

Department of Political Science and Sociology

Carlos III University, Madrid, Spain

arriaga.alicia@gmail.com

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Introduction

One of the tragedies of recent times is the uneven burden of negative environmental impacts endured by the less advantaged communities in our society. The different dimensions of this tragedy have been widely acknowledged by a broad range of research on what has become to be known as ‘environmental justice’. For some authors, such as Agyeman, Bullard and Evans (2003) the issue of environmental quality has more and more turn out to be unable to be separated to that of human equality. They argue that “[W]herever in the world environmental despoliation and degradation is happening, it is almost always linked to questions of social justice, equity, rights and people’s quality of life in its widest sense” (Agyeman, Bullard, and Evans, 2003: 1). These authors (2002: 78) suggest that the concept of environmental justice should become an integral feature of sustainability efforts because “[A] truly sustainable society is one where wider questions of social needs and welfare, and economic opportunity are integrally related to environmental limits imposed by supporting ecosystems”.

At the same time, a growing number of cities worldwide are addressing the future of urban areas in terms of the concept of sustainable development by adopting Local Agenda 21 principles. Many foremost environmental authors assert that attempts in the

local level are essential for achieving sustainability¹. Cities are characterized for having a significant proving position for both environmental justice and sustainability since the great majority of the environmental problems that are affecting the world nowadays are mainly originated and centered at the urban level – where these environmental problems are most severe, as well as in their industrial surroundings. Cities demand large amounts of resources and energy. Cities are also abundant originators of waste and consumers of natural resources. They also generate the majority of the greenhouse gases that are triggering global climate change. Nonetheless, most existing models, initiatives and agendas delivered for achieving urban sustainability, although they are well-intentioned, fail to address issues of social justice and equity.

This paper is the result of an ongoing Ph.D. investigation about the links of environmental justice and sustainability – the Just Sustainability Paradigm – within the Spanish urban context. It will firstly outline both the origins and the theoretical and conceptual backgrounds of the terms sustainable development and environmental justice. Secondly, it will briefly discuss the growing paradigm of ‘Just Sustainability’ developed by Prof. Agyeman. Finally, the paper will analyze issues of social justice and equity within the context of urban sustainability before drawing relevant conclusions.

Sustainable Development

There are numerous definitions of the term sustainable development. Nevertheless, sustainable development is most commonly defined – the ‘standard’ definition – as “development that meets the needs of the present without compromising the ability of future generations to meet their own needs” (WCED, 1987: 8) given by the World Commission on Environment and Development in its seminal work *Our Common Future*, also known as the Brundtland Report after the Chairman of the Commission

¹ In this paper the terms “sustainable development” and “sustainability” will be applied and discussed likewise. However, there are some authors such as O’Riordan (1988) who distinguishes sustainable development from sustainability because the former gives priority to development, while the latter is essentially about the environment. Nonetheless, for example, in Agenda Local 21 the concepts of sustainability and sustainable development are used interchangeably. Moreover, according to Jacobs (1995) sustainability has in fact a tendency to be used as an abbreviation of sustainable development. As stated above, for the purpose of this paper and since discussion about the interchangeability of the concepts is not crucial to this investigation, both terms will be used in identical way.

Gro Harlem Brundtland. This definition includes within it two key concepts: Firstly, “the concept of ‘needs’, in particular the essential needs of the world’s poor, to which overriding priority should be given” (WCED, 1987: 8). Poverty and the unequal distribution of resources are identified as major causes of environmental degradation: “A world in which poverty and inequity are endemic will always be prone to ecological and other crisis” (WCED, 1987: 44). Secondly, the idea of limitations, “not absolute limits but limitations imposed by the state of technology and social organization on environmental resources and by the ability of the biosphere to absorb the effects of human activities” (WCED, 1987: 8). This well-known definition is based, principally, on the concept of fairness between and within generations. Sustainable development is principally an equity, rather than an efficiency issue (Hanley *et al*, 2001). The Brundtland Report, consequently, situates social justice at the heart of sustainable development.

At the same time, “at a minimum, sustainable development must not endanger the natural systems that support life on Earth: the atmosphere, the waters, the soils, and the living beings” (WCED, 1987: 45). Hence, sustainable development not only should meet the basic needs of all the humankind and lead to satisfy their aspirations for a better life but also maintain the natural life-support systems on Earth. Consequently, it seems that the Brundtland Report identifies that the challenge that sustainable development has to cope with is to integrate economic, ecological, social and ethical aspects into a coherent view of the world in which both current and future generations, can maintain indefinitely.

The Equity Principle of Sustainable Development

Social justice, alongside environmental conservation, are two of the fundamental principles laid out in the sustainable development concept. Equity is a central ethical principle of sustainable development, particularly the social dimension of sustainable development. According to Moffatt *et al* (2001: 5) “[E]quity is based on the ethically sound notion of a fair division of access to global resources”. Equity principles regarding development efforts, mainly concentrate on its distributional consequences which have been always affected fundamentally those who suffer from social exclusion (Gow, 1992). Equity is also a fundamental aspect of environmental policy – any

consideration that governments carry out to alleviate environmental degradation is always measured by its distributional implications (Carter, 2007). Therefore, as equity and fairness principles must be relevant to both procedural issues – how decisions are made – and consequential issues – the outcome of those decisions.

This “egalitarian” conception of sustainable development was which motivated the Brundtland Report (Jacobs, 1999: 32). The Brundtland Report’s (WCED, 1987: 8) definition which has become very influential throughout the decades, informs us of the fact that sustainability is about an obligation to both present generations – “development that meets the needs of the present” – and future generations – “without compromising the ability of future generations to meet their own needs”. Therefore, it is essentially about intra-generational and inter-generational distribution of resources:

But physical sustainability cannot be secured unless development policies pay attention to such considerations as changes in access to resources and in the distribution of costs and benefits. Even the narrow notion of physical sustainability implies a concern for social equity between generations, a concern that must logically be extended to equity with each generation. WCED (1987: 43).

However, the literature on sustainable development has dedicated mostly all the attention to the concept of inter-generational equity, as a result of the widespread concern about the fact that world’s resources are finite and thus eventually will run out, leaving future generations to face lower standards of living. On the other hand, the concept of intra-generational equity, although the analysis of equity within any given society is an issue already developed at an early stage (Beckerman, 1999) and well recognized in economic theory (Stymne and Jackson, 2000), has received little attention in the literature devoted to sustainable development. What is more, some authors agree on the fact that the definition of sustainable development most frequently referenced – quoted above - does not openly refer to intra-generational equity (Agyeman, 2005).

The Brundtland Report acknowledges that “[...] inequality is the planet’s main ‘environmental’ problem” (WCED, 1987: 6). This idea is also supported by some authors such as Boyce (1994) who claims that inequality is the cause of environmental degradation and hence, equity would not only be important as end in itself, but also as a

means to environmental protection. Therefore, in order to achieve a more environmental sustainability, policies must focus upon greater social equality. Moreover, the Brundtland Report also concludes by asserting the impossibility of attaining sustainable development as long as poverty and social injustices remain (WCED, 1987); and therefore, recognizing social injustice as the origin of the world's current unsustainability.

Environmental injustices are real in all kind of societies. There are some communities – generally minority and low income – that bear the burden of environmental hazards and risks more disproportionately than other collectives which can afford to fight against those injustices. It is obvious to say that more wealthy communities are much more flexible than poorer ones as well as they are more able to structure their individual environments in order to fulfill their living standards. For instance, they have the possibility to make choices about the location of their residence – generally they tend to afford to buy more expensive houses in neighborhoods where environmental degradation is not extensive. These affluent communities possess the financial resources, education, and political structures and power which are necessary in order to oppose to the location of certain waste facilities. Similarly, more affluent communities can be more selective in their choice of occupation whereas poorer communities are more likely to work in highly undesirable industries which are generally located in risky settings and therefore overexposing their employees to higher health risks as for instance, chemical and mining industries.

Poverty and inequality emerge as being part of the cause to environmental unsustainability, and conversely, poverty alleviation and greater social equality and justice appear to contribute to the achievement of sustainable development. Therefore, sustainable development must address these social injustices in order to achieve its core principles laid out in the Brundtland Report. Addressing these issues, sustainable development, as mentioned above, must solve the problem of equity both between current and future generations: intra-generational equity and inter-generational equity. There is also a relationship between poverty and the suffering of negative environmental effects, or else between social justice and sustainability, being the implication that poor people usually endure poor environments. These concerns have made possible the development of what has been named the 'environmental justice movement'.

Environmental Justice

The alliance of environmentalism and the principle of justice is a reasonably recent phenomenon. The fundamental argument of the environmental justice concept is that communities with high concentrations of racial or ethnic minorities or low-income families are over-exposed to an array of environmental negative hazards and risks. Likewise, these groups are also denied their share of those positive implications resulting from environmental regulation and policy. Therefore, environmental justice seeks not only to assure that every community have equal protection from environmental risks, regarding health issues and quality of life standards; but also that communities have the right to live in an environment that is safe, despite their race or income.

Environmental justice has been essentially a United States based movement. The majority of authors approach the broad environmental justice movement using dual origins – antitoxic in working-class communities and the people of color environmental justice movement. During the past two decades, the environmental justice notion has increasingly appeared as a major element of the environmental discourse. The concept of environmental justice emerged in the United States through grassroots activism in the Civil Rights movement and was the result of the “struggle of low-class, often black communities against the incinerators and toxic waste dumps that, by accident and frequently by design, come to be sited near them (and away from affluent neighborhoods)” (Guha and Martinez-Alier, 1997: 19). Environmental justice organizations have attempted since then to extend the prevailing conventional environmental discourse based around environmental stewardship to incorporate social justice and equity considerations (Agyeman, 2007).

Beginning in the early 1970s, a literature that provided evidence about the existence of environmental inequalities in the United States was developed. These early findings were later extended and complemented by three landmark studies that broadened the understanding of what environmental justice represents; as well as provided empirical support for environmental justice claims. Consequently, their influence on policy decision-making was developed and the environmental justice movement achieved national interest.

The first study focused on the location of hazardous waste sites was that conducted by the U.S. General Accounting Office in 1983. The aim of this study was “to determine the correlation between the location of hazardous waste landfills and the racial and economic status of surrounding communities” (U.S. GAO, 1983: 2). This study reported that 75 per cent of the hazardous waste landfills studied in eight Southern states of the United States were located in primarily African American communities. This research was followed by The United Church of Christ Commission for Racial Justice’s crucial study titled *Toxic Waste and Race in the United States: A National Report on the Racial and Socio-Economic Characteristics of Communities with Hazardous Waste Sites* (1987) which was the first study, at a national level, to investigate the existing relationship between waste facility sites and demographic characteristics. It found that the most significant reason for the location of these waste sites was race being almost 40 per cent of the United States landfills also situated near African American neighborhoods (Commission for Racial Justice, 1987). Moreover, this study argued that African Americans were two to three times more likely to live near a hazardous location (Commission for Racial Justice, 1987). The third landmark study about the interrelation between the location of environmental hazardous sites and social inequality in the United States was that of Bullard (1983) who documented that 21 out of 25 of Houston’s waste facilities were placed in African American neighborhoods. These findings were later confirmed, ratified and extensive expanded by a variety of studies in the last decades (see for example: Mohai and Bryant, 1992a, 1992b; Mohai, 1990).

Nonetheless, some research in the 1990s questioned and challenged these previous studies’ evidence about the fact that the location of hazardous waste facilities was a consequence of racism and classism. For instance, Prof. Been’s analysis of environmental racism in the Houston area – expanding upon Robert Bullard’s 1983 seminal work – found that at the time the waste landfills were built, almost 60 per cent of the facilities were located in communities with higher concentrations of whites than Houston as one. According to Been (1994), these findings indicated that the dynamics of the housing market played an important role in creating environmental injustice, instead of environmental discrimination or racism. Been (1994) explains this situation by arguing that once a waste facility is located in a certain area, its surroundings become less attractive, and property values decrease. On the one hand, this situation leads to low-income communities – who also tend to be minorities – to move in, in what Been

(1994: 1385) refers as minorities “come to the nuisance” or to move to those neighborhoods where it is possible to find the cheapest available housing. On the other hand, it results in more affluent neighbors to leave the area. The end result is obvious: the area where the waste facility has been located becomes poorer than it was before the siting.

In a more actual period of time, it is worth to highlight the instance of Hurricane Katrina which hit New Orleans’ shore on August 2005 and whether class and race were important factors in the human and institutional responses to the disaster (Agyeman, 2007; Elliott and Pais, 2006). Katrina’s aftermath shows importance of environmental justice studies since the framework of environmental justice could be a valuable tool to determine and understand the environmental, social and racial consequences, present and future, of Hurricane Katrina (Sze, 2006).

Environmental justice is a challenged and problematic concept since it brings together environmental, social, political and economic factors. Therefore, it is difficult to try to define the concept since it allows for many different definitions. Rhodes identifies an unofficial definition of environmental justice given by the United States Environmental Protection Agency’s Environmental Justice Office:

Environmental Justice: The fair treatment of all races, cultures, incomes, and education levels with respect to the development, implementation, and enforcement of environmental laws, regulations, and policies. Fair treatment implies that no population of people should be forced to shoulder a disproportionate share of the negative environmental impacts of pollution or environmental hazards *or be denied a proportionate share of the positive benefits of environmental regulation or program*² due to lack of political or economic strength. U. S. Environmental Protection Agency’s Environmental Justice Office (quoted in Rhodes, 2003: 19).

This definition shows that the environmental justice concept is reactive to environmental ‘bads’ (Agyeman, 2007) (“no population of people should be forced to shoulder a disproportionate share of the negative environmental impacts of pollution or

² The phrase emphasized was added by Rhodes (2003: 19).

environmental hazards”). Agyeman (2007) also identifies as significant, the fact that a definition of environmental justice should be proactive to environmental ‘goods’ such as sustainable communities and higher quality of life. The concept of environmental justice has also been used to manage issues of both distributive (“fair treatment”) and procedural (“no population should be denied a proportionate share of the positive benefits of environmental regulation or program due to lack of political [...] strength”) nature (Agyeman, 2007). It is also obvious that an explanation of the environmental justice concept can be founded on both deontological and consequentialist reasoning (Ikeme, 2003). In order to do so, and according to Baden and Coursey (2002: quoted in Ikeme, 2003) a definition of environmental justice must recognize the distinction between injustice in outcome (ex post) and injustice in intent (ex ante). Injustice in outcome (ex post) has a consequentialist basis since it focuses on the consequences of action; on the contrary, injustice in intent (ex ante) shows a focus on the ethics of the action rather than on the consequences and therefore, it is based on deontological analysis (Ikeme, 2003). Moreover, the concept of environmental justice is anthropocentric in its orientation since it sets people at the heart of the interrelationships between the social, economic, political and ecological dimensions, rather than the biophysical environment (McDonald, 2002; quoted in Patel, 2006). One of the main strengths of the environmental justice movement is the fact that means to transfer the interest from the environment to give more weight to people, in particular to communities. However, some authors have accused the environmental movement of being too anthropocentric. According to Agyeman (2005: 95) this “anthropocentrism is a reaction against decades of environmental activism focused on nature while neighborhoods of color and low income were disinvested, redlined, and saturation patrolled by the police”.

The environmental justice discourse expanded from the traditional environmental discourse based on environmental preservation and conservation, and pollution control by incorporating concerns of social justice and equity and therefore, “redefining the term ‘environment’ so that the dominant wilderness, greening and natural resource focus now includes: urban disinvestment, racism, homes, jobs, neighborhoods and communities” (Agyeman, 2007: 172). Taylor (2000: 42) claims that the environmental justice paradigm is “the first paradigm to link environment and race, class, gender, and social justice concerns in an explicit framework”. Moreover, environmental justice

highlights that social justice and environmental issues are unable to be separated, both conceptually and politically (Grass, 1995). Environmental justice, therefore, brings a new dimension to the classical mainstream environmentalism perspective present in most of the current environmental agendas, measures, initiatives and programs.

The Relationship between Environmental Justice and Sustainable Development

As noted above, the concept of sustainable development emerged after the publication of the Brundtland Report in 1987 and, more significantly, after the Earth Summit held at Rio in 1992 where it was placed more emphasis in the importance of social equity concerns within the sustainable development definitions. Agyeman and Evans (2004) highlight the fact that the environmental justice discourse outside the United States have recently started to advance in the direction of sustainability. At the same time, the sustainability discourse is progressively deviating from its previous ‘environmental sustainability’ origins towards what it has been called ‘just sustainability’ – a discourse based around the linked notions of environmental justice and sustainability (Agyeman and Evans, 2004; 155) and which challenges “the current, dominant, stewardship-focused orientation of sustainability” (Agyeman, 2005: 5). Truly, Agyeman *et al* definition of sustainability highlights issues of social justice and equity while sustaining concerns about the significance of the environment. The author states:

the need to ensure a better quality of life for all, now and into the future, in a just and equitable manner, whilst living within the limits of supporting ecosystems.

Agyeman, Bullard and Evans (2003: 5).

Increasingly, authors are endorsing this shift from environmental sustainability to ‘just sustainability’. Agyeman *et al* (2002: 157) support some of their fundamental arguments by noting that “a truly sustainable society is one where wider questions of social needs and welfare, and economic opportunity are integrally connected to environmental concerns”. Similarly, Walker and Bulkeley (2006: 657) also state that “[...] pursuing environmental justice is manifestly encompassed within, if not central to,

the broader framing of sustainable development”. Elkin *et al* claim the importance of social justice and equity within sustainability by claiming that:

Sustainable development involves more than environmental conservation; it embraces the need for equity. Both intra-generational equity providing for the needs of the least advantaged in society, and inter-generational equity, ensuring a fair treatment of future generations, need to be considered. Elkin *et al* (1991: 203).

The highly importance that the mainstream environmental movement gives to environmental preservation and conservation leads to an atomistic analysis of the situation which lacks social and political elements. As Pellow argues, environmental issues are approached through a single-focused ecological lens and therefore their analysis is segregated from their ampler social insights:

Social inequality by race, class, gender, citizenship, and nation (among other categories of difference) is the primary driver of our ecological crises. So if we approach environmental inequalities through a purely ecological lens, not only do we ignore the social basis of these problems, we implicitly accept the “techno-fix” orientation that much of the mainstream environmental movement has embraced for the past four decades. Pellow (2009: 3-4, emphasis in the original)

Therefore, there is an increasing necessity to incorporate issues of social justice and equity within the sustainable development discourses and debates. Otherwise, there would not be a real opportunity to produce an actual transformation of the future into one where the principles of sustainable development prevail.

Social Justice and Urban Sustainability

Urban areas are an oxymoron of advantages and disadvantages towards the achievement of sustainable development. On the one hand, the great majority of the environmental problems that are affecting the world nowadays have their origin in cities and in their industrial surroundings as they demand large amounts of resources and energy. Cities

are abundant originators of waste and consumers of natural resources; they also generate the majority of the greenhouse gases that are triggering global climate change³. Moreover, the greater part of the world's population live in urban areas. Cities are also the central node of the main production, distribution and consumption networks of humankind (Prats, 2008). On the other hand, urban areas and their citizens constitute the central point of information, innovation, coexistence as well as the diffusion of social values (Prats, 2008); at the same time, cities count with the managerial resources and the social proximity, in addition to the capabilities to transform the reality of our society; and therefore, cities must put these capabilities to serve sustainability and set the bases for the changes that the new challenges demand (Prats, 2008).

A growing number of cities worldwide are addressing the future of urban areas in terms of the concept of sustainable development by adopting Local Agenda 21 principles laid out at the 1992 Earth Summit in Rio de Janeiro as the principal means of implementing programs of sustainable development at the local level. Some of the leading thinkers claim that local efforts are crucial to sustainability. Prugh *et al* argue that:

[D]espite appearances, [sustainability] is not primarily global. To be sure, the world's the stage; a sustainable community or nation surrounded by unsustainable neighbors is a brave failure ... but we believe communities are the primary locus of responsibility for creating a sustainable world. The admonition to 'think globally, act locally' retains its wisdom despite years of bumper-sticker over-exposure.
Prugh *et al* (2000)

As noted above, for many advocates of sustainability, social justice and equity should become an integral part of the efforts for achieving sustainable development. Obviously, the centrality of social justice and equity has also been acknowledged and highlighted along the potential for the sustainable city. This view has been reflected in several European policy documents such as the *Conference on European Sustainable Cities and Towns* held in Aalborg in May 1994 recognized that urban sustainability can only be reached through social justice, sustainable economies and environmental sustainability

³ It should not be forgotten that environmental damage is also consequence of rural industries and agriculture.

which shows that “[S]ocial equity is finally agreed upon as being a pre-condition for achieving sustainability” (Mega, 1996: 139). Also, Mega (1996: 137) elaborates further by stating that “[S]ocial justice becomes of major importance for cities willing to preserve their integrity, to absorb social shock waves and to assure their future attraction for people and capital”.

Certainly, it appears that the achievement of a more sustainable future for our planet is held in the cities: in order to confront the numerous environmental challenges the planet is facing today, it is required an operational agenda where cities are the vital element. However, most existing programs for achieving urban sustainability do not address issues of social justice and equity as important for the achievement of environmental sustainability.

For instance, in a study carried out by Portney (2000) about why some cities take sustainability seriously and other do not; the author states that equity considerations are not generally addressed in many cities which claim to be pursuing the achievement of a more sustainable future. Likewise, in cities where issues of equity are incorporated into their sustainability initiatives, “it is not altogether clear why equity and sustainability are sometimes linked” (Portney, 2000: 159) or “have done so in only a superficial way” (Portney, 2000: 175). Portney (2000) also argues that the equity indicators utilized by these cities are simple and incomplete measures (income inequality, differential health of at risk populations) since they do not describe the fundamental nature of environmental and social justice: that is, indicators which measure differential exposures to environmental contamination.

Similarly, Warner (2002) investigated whether environmental justice was being incorporated into sustainability initiatives in 33 of the largest cities of the US. Warner (2002) found that only a few of the cities where the research was undertaken had addressed environmental justice as a dimension of sustainability, and more significantly, the author concluded that these efforts were “fragmented, if not purely symbolic” (Warner, 2002: 43). Warner (2002) concludes by noting that only one of the sustainability agendas which were subject to the research incorporated environmental justice into indicators that were able to be quantified.

Therefore, social justice and equity have been included in sustainable development initiatives at a local level only in a rhetoric way; practice in environmental justice has not so far reached more generally.

Conclusion

As we have seen in this paper, the alliance between the environment and the principle of justice is a fairly recent phenomenon. More original is the purpose of cooperation between the concepts of environmental justice and sustainable development. Although both concepts are greatly challenged, they have also a large potential to effect permanent change from local to global level in the public policy sphere. The concepts of environmental justice and sustainable development share many principles and concerns. Fundamental to both concepts are issues regarding the distribution of costs and benefits between current generations as well as the improvement of communities' quality of life independently of their socioeconomic and ethnic characteristics.

Notions of social justice and equity are fundamental principles of the Brundtland Report which acknowledges their essentiality in the progress towards the achievement of sustainable development. Therefore, pursuing environmental justice is also crucial to the broad frame of sustainable development. Nonetheless, it is clear that traditional approaches from the mainstream environmental movement to tackle environmental degradation, as well as models and initiatives of sustainable development, are hardly ever taking on board the problem of social injustices and inequalities and therefore recognizing an indifference to any responsibility to justice. Hitherto, debates about environmental justice and sustainable development have been developed in parallel ways, mainly due to that they have emerged from different contexts, both political and geographical.

Hence, is environmental justice the main force for local sustainability? Environmental justice may well be the name of the alternative to the mainstream concept of sustainable development. It is, in any case, as Taylor (2000) argues the first framework that brings together the environment and issues of social justice and equity explicitly.

References

- AGYEMAN, J. (2005) *Environmental Justice and Sustainable Communities*. New York University Press: New York.
- AGYEMAN, J. (2007) *Environmental Justice and Sustainability*. In: ATKINSON, M., DIETZ, S. and NEUMAYER, E. (Eds.) (2007) *Handbook of Sustainable Development*. Edward Elgar: Cheltenham.
- AGYEMAN, J. and EVANS, B. (2004) 'Just sustainability': the emerging discourse of environmental justice in Britain? *The Geographical Journal* Vol. 170(2): 155-164.
- AGYEMAN, J., BULLARD, R. D. and EVANS, B. (2003) *Introduction: Joined-up Thinking: Bringing Together Sustainability, Environmental Justice and Equity*. In: AGYEMAN, J., BULLARD, R. D. and EVANS, B. (Eds.) (2003) *Just Sustainabilities. Development in an Unequal World*, London: Earthscan.
- AGYEMAN, J., BULLARD, R.D. and EVANS, B. (2002) Exploring the Nexus: Bringing Together Sustainability, Environmental Justice and Equity. *Space and Polity* Vol. 6(1): 77-90.
- BADEN, B.M. and COURSEY, D.L. (2002) The locality of waste sites within the city of Chicago: a demographic, social, and economic analysis. *Resource and Energy Economics* Vol. 24: 53-93.
- BECKERMAN, W. (1999) *Sustainable Development and Our Obligations to Future Generations*. In: DOBSON, A. (1999) *Fairness and Futurity: Essays on Environmental Sustainability and Social Justice*. Oxford: Oxford University Press.
- BEEN, V. (1994) Locally Undesirable Land Uses in Minority Neighborhoods: Disproportionate Siting or Market Dynamics? *Yale Law Review* Vol. 103: 1383-1422.
- BOYCE, J. K. (1994) Inequality as a Cause of Environmental Degradation. *Ecological Economics* Vol. 11: 169-178.
- BULLARD, R. D. (1983) Solid Waste Sites and the Houston Black Community. *Sociological Inquiry* Vol. 53(Spring): 273-288
- CARTER, N. (2007) *The Politics of the Environment: Ideas, Activism, Policy*. Cambridge University
- ELKIN, T., MCLAREN, D. and HILLMAN, M. (1991) *Reviving the City: Towards Sustainable Urban Development*. London: Friends of the Earth.
- ELLIOTT, R. J. and PAIS, J. (2006) Race, class, and Hurricane Katrina: Social differences in human responses to disaster. *Social Science Research* Vol. 35(2): 295-321.
- GOW, D. (1992) Poverty and Natural Resources: Principles for Environmental Management and Sustainable Development. *Environmental Impact Assessment Review* Vol. 12(1-2): 49-65.
- GRASS, R. (1995), Environmental Education and Environmental Justice: A Three Circles Perspective, *Pathways to outdoor Communication* Vol. 5(1): 9-13.
- GUHA, R. and MARTINEZ-ALIER, J. (1997) *Varieties of Environmentalism. Essays North and South*. Earthscan: London.
- HANLEY, N, SHOGREN, J.F. and WHITE, B. (2001) *Introduction to Environmental Economics*. Oxford and New York: Oxford University Press.
- IKEME, J. (2003) Equity, environmental justice and sustainability: incomplete approaches in climate change politics. *Global Environmental Change* Vol. 13: 195-206.
- JACOBS, M. (1995) Reflections on the Discourse and Politics of Sustainable Development: Part I - Faultlines of Contestation and the Radical Model (Lancaster, Centre for the Study of Environmental Change, University of Lancaster).
- JACOBS, M. (1999) *Sustainable Development as a Contested Concept*. In: DOBSON, A. (1999) *Fairness and Futurity: Essays on Environmental Sustainability and Social Justice*. Oxford University Press: Oxford.
- MCDONALD, D. A. (Ed.) (2002) *Environmental Justice in South Africa*. University of Cape Town Press, Cape Town.
- MEGA, V. (1996) Our city, our future: towards sustainable development in European cities. *Environment and Urbanization* Vol. 8(1): 133-154.
- MOFFATT, I, HANLEY, N. and WILSON, M.D. (2001) *Measuring and Modelling Sustainable Development*. New York and London: Parthenon Publishing.
- MOHAI, P. (1990) Black Environmentalism. *Social Science Quarterly* Vol. 71(4): 744-765.

- MOHAI, P., and BRYANT, B. (1992a) Race, Poverty and the Environment. *EPA Journal Vol. 18(1): 6-9*.
- MOHAI, P., and BRYANT, B. (1992b) *Environmental Racism: Reviewing the Evidence*. In: MOHAI, P., and BRYANT, B. (Eds.) *Race and the Incidence of Environmental Hazards: A Time for Discourse*. Boulder, CO: Westview Press.
- O'RIORDAN, T. (1988) *The Politics of Sustainability*. In: TURNER; R. K. (Ed.) (1988) *Sustainable Environmental Management: Principles and Practice*. London: Belhaven.
- PATEL, Z. (2006) Of questionable value: The role of practitioners in building sustainable cities. *Geoforum Vol. 37: 682-694*.
- PELLOW, D. N. (2009) "We Didn't Get the First 500 Years Right, So Let's Work on the Next 500 Years": A Call for Transformative Analysis and Action. *Environmental Justice Vol. 2(1): 3-6*.
- PORTNEY, K. E. (2003) *Taking Sustainable Cities Seriously*. Cambridge, MA: MIT Press.
- PRATS, F. (2008) Energía/Clima y Ciudades en España ¿Cambio Climático o Cambio Global? *Ambienta Vol. 74(February): 16-20*.
- PRUGH, T., CONSTANZA, R., and DALY, H. (2000) *The Local Politics of Global Sustainability*. Washington, D C: Island Press.
- RHODES, E. L. (2003) *Environmental Justice in America. A New Paradigm*. Indiana University Press: Bloomington & Indianapolis.
- STYMNE, S. and JACKSON, T. (2000) Intra-generational equity and sustainable welfare: a time series analysis for the UK and Sweden. *Ecological Economics Vol. 33: 219-236*.
- SZE, J. (2006) *Toxic Soup Redux: Why Environmental Racism and Environmental Justice Matter after Katrina*. Available online at: <http://understandingkatrina.ssrc.org/Sze/> [Accessed 27th January 2009].
- TAYLOR, D. (2000) The Rise of the Environmental Justice Paradigm: Injustice Framing and the Social Construction of Environmental Discourses. *American Behavioral Scientists Vol. 43: 508-580*.
- UNITED CHURCH OF CHRIST COMMISSION FOR RACIAL JUSTICE (1987) *Toxic Wastes and Race in the United States*. New York: United Church of Christ Commission for Racial Justice.
- USGAO (GENERAL ACCOUNTING OFFICE) (1983) *Siting of Hazardous Waste Landfills and their Correlation with Racial and Economic Status of Surrounding Communities*. Washington, DC: GPO.
- WALKER, G. and BULKELEY, H. (2006) Geographies of Environmental Justice (Editorial). *Geoforum Vol. 37: 655-659*.
- WARNER, K. (2002) Linking Local Sustainability Initiatives with Environmental Justice. *Local Environment Vol. 7(1): 35-47*.
- WORLD COMMISSION ON ENVIRONMENT AND DEVELOPMENT (WCED) (1987) *Our Common Future*. Oxford and New York: Oxford University Press.