

Environmental Injustice and Human Rights Abuse: The States, MNCs, and Repression of Minority Groups in the World System

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Abstract

The issues of global environmental injustice and human rights violations are the central focus of this article. Existing cross-national empirical data and case studies are utilized to assess and establish the patterns of transnational toxic wastes dumping, natural resource exploitation, and human rights transgression. The bases of global environmental injustice are explored. Theoretically, dependency/world system, internal colonialism perspectives, economic contingency, and transnational environmental justice frameworks are used to analyze transnational toxic waste dumping, land appropriation and natural resource exploitation adversely affecting indigenous minorities in underdeveloped societies. With a particular focus on selected cases, available evidence suggests that the poor, powerless indigenous minorities and many environmental and civil rights activists face the danger of environmental injustice and human rights abuse, especially in less developed nations. Significant correlations were found between social inequality, poverty, total external debts, demographic measures, health and solid wastes in the analysis of a cross-national data-set for developing nations. To foster global environmental justice, this study suggests that stronger international norms to protect human rights to a safe and sound environment are imperative; and it is argued that environmental injustice needs to be included as a component of human rights instruments. Other policy implications of the analyses are also discussed.

Keywords: *global environmental injustice, toxic waste dumping, environmental risks, human rights violations, indigenous minorities, inequality, environmental degradation, grass-roots environmental activism, world system*

Introduction

The issues of environmental injustice and human rights transgressions at the local, state, national, and transnational

levels have attracted social scientists' interest in recent years (Bullard 1990; Neff 1990; Nickel 1993; Nickel and Viola 1994; Adeola 1994; Weinberg 1998). The major attributes of the world capitalist system shifting environmental pollution and its negative impacts to poor communities both in the U.S. and Third World have been addressed by numerous scholars (Schnaiberg 1975; Buttel 1987; Bunker 1985; Clapp 1994; Stratton 1976; Moyers 1990; Bullard 1994; Adeola 2000a). The rights to a safe environment (RSE) have been emphasized as an essential component of fundamental human rights (Dias 1999; Thorne 1991; Nickel 1993; Neff 1990; Boyle and Anderson 1998). In most cases, environmental degradation leads to human rights transgressions and quite often, human rights abuse involves serious ecological disruptions.

In the U.S., the evolution and amalgamation of grass-roots civil rights and environmental justice movements have been especially instrumental in confronting the problems of inequitable distribution of environmental hazards and associated health effects caused by the activities of powerful corporations and the state. Strong environmental movements, the Not-in-My-Backyard (NIMBY) syndrome, and strong legislative responses to hazardous waste disposal, have drastically increased the costs of hazardous waste management, making the exports of industrial wastes quite attractive. As environmentalism and public opposition to waste siting increased in industrialized countries, cross-national trade in hazardous waste became a common practice in the 1970s and escalated between the 1980s and the 1990s (Clapp 1994). The problems associated with toxic waste imports have been a major concern in many Third World countries from the 1980s to the present. Toxic waste dumping represents one of several activities that involve serious human rights abuse, ecological disruptions, and environmental injustice. Other activities such as natural resource exploitation by the state and Multinational Corporations (MNCs), land acquisition, and large-scale economic development projects are rife with human rights abuse. Despite the prominence of these problems, there are several salient research questions yet to be resolved.

The specific questions addressed in this study are: (1) To what extent does hazardous waste dumping, diminution of habitats, appropriation of natural resources, and selective exposure of certain populations to environmental hazards constitute a violation of basic human rights? (2) Are environmental justice principles consistent or compatible with specific articles of Human Rights Declarations? (3) Is there substantial empirical evidence to support the claims of environmental injustice and ecologically-related human rights abuse locally and across nations? (4) What are the bases of global environmental injustice; i.e., who are the major actors in the global political economy contributing to environmental injustice and related human rights abuse? (5) Are there significant links between MNCs' activities and episodes of environmental injustice and human rights transgression in the Third World? (6) What kind of relationships exists between social inequity, world system variables, poverty, freedom, human rights, and environmental degradation? These salient questions will be addressed using existing empirical evidence and case studies.

This article focuses on environmental injustice and human rights violations associated with cross-national toxic waste dumping, natural resource exploitation, and the consequent degradation of the means of subsistence of indigenous people. The roles of the state and MNCs in suppressing the rights of communal groups to a safe and sound environment are examined. Furthermore, the alliance of states, elites, and MNCs in transnational hazardous waste schemes, natural resource exploitation, and suppression of minority rights are discussed. More specifically, the objectives of this study are: (1) To assess the general patterns and direction of flow of toxic wastes between the industrialized and less-industrialized nations involving environmental injustice; (2) To offer theoretical and empirical analyses of transnational environmental inequity, natural resource exploitation, and human rights repression; (3) To address how toxic waste dumping, natural resource exploitation, repression of indigenous minority groups, and other types of human rights abuse are connected to MNCs activities in underdeveloped societies; (4) To explain the linkage between environmental justice and human rights; and (5) To identify the bases of global environmental injustice and offer potential remedies.

Following the introduction, the article proceeds in four major components. In the first segment, the conceptual issues of environmental injustice and human rights violations are discussed. The second part offers theoretical and empirical explications of the variation in the North to South traffic of hazardous wastes as a major transnational environmental injustice issue. Also, theoretical discourse concerning the influence of stratification systems on environmental injustice and human rights transgressions at the local and cross-nation-

al levels is presented. In the third part, selected cases of environmental injustice are presented to illustrate how human rights violations and environmental injustice are closely related. The strategies for achieving global environmental justice and the need for international codification of norms pertaining to the rights of all people to clean air, water, and a safe and sound environment capable of sustaining life are offered in the concluding section. The policy and theoretical implications are also discussed.

Background

Environmental injustice and human rights transgressions are inextricably intertwined.² For example, a strong positive relationship between environmental degradation and human rights violations has been noted in the literature suggesting the presence of human rights abuse in most cases of environmental degradation (Dias 1999; Johnston 1994). Seizure of communal lands, displacement of indigenous communities, natural resource exploitation, and toxic waste dumping connote environmental injustice and human rights abuse. In recent years, assaults on the environment and human rights have escalated to an unprecedented level in human history (see Amnesty International 1995; Donnelly 1998; Howard 1995). Over the past two decades, the world has witnessed a large number of cases involving ecological and human rights problems ranging from the military government extermination of indigenous population in Irian Jaya, Indonesia, to ecological assaults and human rights violations in Africa, the Balkans, Latin America, Malaysia, and the Philippines, which all suggest the need to frame environmental rights as a significant component of human rights issues.

Among the recent cases of environmental injustice and human rights violations in the Third World are: the murder of Wilson Pinheiro and Francisco "Chico" Mendes in the Amazon rain forest, the massacre of Father Nery Lito Satur and several others in the Philippines, and the public hanging of Ken Saro-Wiwa and eight other members of the Movement for the Survival of the Ogoni People (MOSOP) in November 1995 in Nigeria. The subsequent detention, torture, and repression of other members of MOSOP are among the most compelling cases of environmental and civil rights transgression in developing nations monitored by Human Rights Watch (HRW 1999), Natural Resources Defense Council (NRDC 1992), Amnesty International, and other Non-Governmental Organizations (NGOs). There have been several other cases of government agents especially in the Third World, adopting a policy of systematic genocide against members of minority groups in order to appropriate their lands and natural resources. The subjugation of indigenous minority groups extends to the subjugation of nature and the

consequent ecological degradation. Minority status, lower socioeconomic status, powerlessness, and other conditions of marginalization constitute the major factors influencing the extent of environmental injustice and human rights repression (Adeola 1994, 2000b; Bullard 1990; Morrison 1976; Glazer and Glazer 1998).

In their analyses of resource induced conflicts, Gurr (1993), Homer-Dixon (1994), and Renner (1996) each points out that government uses of absolute power in post-colonial and post-revolutionary states involved policies directed at communal groups' assimilation, repression of their independence, and usurpation of their resources, which often result in violent conflict. The minority groups and indigenous peoples throughout the world face significant risks (see Gormley 1976; Obibi 1995; Sachs 1996). Indigenous populations, ethnoclasses and other minorities, and their rights to land, natural resources, clean air, good health, and environmental protection are viewed by the dominant group as expendable for the sake of national security, national unity, and economic development (see Johnston 1994, 11; Stavenhagen 1996; Lane and Rickson 1997). The global trends of industrialization, economic expansion, and globalization resting on increased exploitation of natural resources, have mostly been at the expense of communal groups. Their natural resources and physical labor are being incorporated into the national and international webs of economic activities (Gurr 1993; Bunker 1985).

An examination of a wide range of regions from the Amazon Basin to northern Saskatchewan, to tropical rain forests of the Amazon, to the remote state of Borneo in Malaysia, to sub-Saharan Africa and Southeast Asia, reveals that the exploitation of natural resources, including energy production, timber harvesting, mineral extraction, oil exploration, hydro-electric and other mega-industrial projects by MNCs and host governments, has caused significant damages. These damages include dislocation and decimation of numerous indigenous communities and their entire ways of life (Gedicks 1993, 13; Stavenhagen 1996). In many developing countries, indigenous peoples and other vulnerable and impoverished communities, including subsistence peasants, fishing communities, hunters and gatherers, and nomadic groups are generally the victims of environmental degradation mostly caused by resource extractive operations of MNCs in the name of global development. As indicated by Renner (1996, 55),

Their capacity to resist and defend their interests is extremely weak. These groups not only depend on marginal lands for subsistence, but they are also socially, economically, and politically disenfranchised. They are often too powerless to struggle for

the preservation of natural systems upon which their livelihood and survival rest.

Currently, a significant number of indigenous groups in North America (Native Americans), Australia, Papua New Guinea, Indonesia, Brazilian Amazon, Malaysia, and Niger Delta of Nigeria are facing a serious threat of massive environmental degradation by resource extraction operations of MNCs supported by national governments. Recently, social scientists have discussed how authoritarian governments, dictatorships, human rights violations, and other variants of despotism endemic in the Third World have obstructed the growth and proliferation of grassroots environmental justice movements in the region (see Adeola 1998; Alario 1992).

As stated in a recent article by Adeola (2000a, 689), human rights violations, environmental inequity, and ecological imperialism cut across national boundaries. The fact that resource exploitation, degradation, contamination, and undue imposition of associated risks on the poor are global in scope has been well documented (Neff 1990; Bunker 1985; Hilz 1992; Greenpeace 1994). In a similar vein, the transnational nature of human rights issues has been acknowledged by Donnelly (1998), Smith (1997), and the United Nations (1988). The provisions of human rights are intended to protect individuals and collectivity against abuses such as state-induced starvation, torture, violence and killings, and deprivation of people's means of sustenance (Howard 1995, 90; Donnelly 1998). Nevertheless, ecological imperialism, which implies wanton natural resource exploitation, degradation, and inequitable distribution of associated environmental hazards (or externalization of costs of production) by MNCs or other powerful foreign and local vested interests, remains a serious threat to the "global community." Since human rights involve the assurance of people's means of livelihood and well being, any significant threats to environmental bases of livelihood implies a violation of fundamental human rights.³

In recent years, increased global awareness of environmental and human rights problems has broadened the civil, political, and socioeconomic rights to encompass environmental dimension (Thorne 1991; Welch 1995; Wronka 1998; Dias 1999). However, the endorsement and adherence to socioeconomic and environmental rights vary considerably across countries (see Howard 1995; Smith 1997; Sullivan 1991). In his article "Not in Their Backyards Either," Neff (1990) addresses the problems associated with transnational codification of norms and their enforcement, which typically involve multilateral or multinational agreements or treaties under the umbrella of the United Nations (UN). In the UN's Universal Declaration of Human Rights of 1948, most nations officially recognize civil rights — i.e., freedom from

slavery, servitude, torture or inhumane punishment, arbitrary arrest, and imprisonment; freedom of speech, faith, opinion, and expression; the right to life, security, justice, property ownership; and freedom of assembly (Donnelly 1998; Wronka 1998). The latter set of rights is particularly germane to environmental justice principles. Unfortunately, most of these principles are not adhered to in practice by most countries, especially in the Third World (Alario 1992; United Nations 1992; Donelley 1998). Even in those countries that uphold the principles, the poor and minority groups, especially in remote areas, remain disenfranchised and are more susceptible to human rights abuse and environmental injustice. The following section presents theoretical perspectives on environmental injustice across and within nations and some evidence on North to South flow of toxic wastes.

Cross-National Environmental Injustice: Theory and Evidence

Several theoretical explanations of North to South flow of hazardous wastes and natural resource degradation have been offered in the literature (Moyers 1990; Uva and Bloom 1989; Bunker 1985; Clapp 1994; Hilz 1992; Asante-Duah, Kofi, Saccomanno and Shortreed 1992). Among these are the economic contingency and rational choice perspectives, the dependency/world system perspective, external and internal colonialism models, and the transnational environmental injustice framework. Each of these perspectives is briefly discussed in the following sections.

Economic Contingency Perspective (ECP)

The economic contingency theory suggests that “needs” and “goals” are prioritized by the individuals or collectivities depending upon how critical these needs and goals are at a particular point in time (Adeola 1998, 343). Partly derived from Abraham Maslow’s (1954) hierarchy of needs model, this perspective explains how individuals or groups may set priorities based on the most pressing needs at a particular point in time. Thus, when faced with basic survival needs, environmental degradation and exposure to toxic wastes may take lower priority or even be accepted as the necessary opportunity costs (i.e., alternative foregone). For example, a resident of the infamous Smokey Mountain (a nine acres heap of burning wastes) in Manila, Philippines, once remarked, “I don’t know which is worse — a clean home with no money, or an unclean life with money” (see Frank 1999, A1 and A8). Also, the case of a local man in Koko, Nigeria, who accepted cash for the use of his residence as a toxic waste depot is another excellent illustration of ECP’s assertion. (This latter case is discussed more extensively later in this article). Therefore, poor people are most likely to discount toxic

exposure and future health concerns for immediate economic gratification. The behavior of the people at the top level of the “hierarchy of needs” is quite different from those at the bottom. While the latter are more concerned about meeting the current most pressing survival needs at all costs, the former are more concerned about meeting aesthetic, health, and quality of life needs in a clean environment and as such, they would pay to avoid environmental risks. For the ECP, poverty and economic inequity are positive correlates of wastes and other anthropogenic environmental hazards.

The Rational Choice Perspective (RCP)

The rational choice perspective (RCP), also derived from neoclassical utilitarian economic theory, explains social interaction as akin to an economic transaction guided by the actor’s rational choices among alternative outcomes. In this framework, actors have ends toward which their actions are directed; thus, action is initiated only after the costs and benefits have been calculated or weighed (Coleman 1990; Zey 1998). Most schemes of toxic waste exports and natural resource exploitation are carefully planned with the potential costs and benefits predetermined by the MNCs and other vested interests. Ventures are implemented only when they are considered cost-effective; i.e., when the benefits outweigh the costs, at least in the short-run. Rational actors generally operate under the constraints of resource scarcity, opportunity costs, institutional limitations, and available information. To select the most preferred alternative outcome is to choose the one that yields the most benefits. For RCP, economic aid guided by the “norms of reciprocity” may encourage waste trade schemes between the core and non-core nations. Therefore, a positive correlation between economic aid per capita and volume of wastes (pollution) in Third World countries could be expected.

In the literature, the RCP has been criticized for not dealing with groups, collective behavior or social movement (see Coleman 1990, 13-44; Heath 1976, 7-8). Both the RCP and economic contingency frameworks remain controversial in the literature (see Zey 1998; Johnson 1998; Green and Shapiro 1994; Hernstein 1990). Given the nature of North-to-South toxic waste dumping characterized by inadequate or distorted information and limited knowledge among certain actors and unethical business practices accompanying such schemes, RCP is inadequate in explaining transnational toxic waste trade, natural resource exploitation, and environmental inequity. For a better understanding of the nature and dynamics of environmental inequity, social injustice, and the concomitant human rights transgression at the cross-national level, other paradigms are called for. In the following segments, the dependency/world systems, environmental justice, and internal colonialism theoretical perspectives are presented.

The Dependency/World System Perspective

The dependency/world system perspective offers a theoretical explanation of the global stratification system and its implications for the dominant and subordinate states. In its classical formulation, the term “dependency” refers to a condition or state in which the economy of certain countries (i.e., non-OECD [Organization for Economic Cooperation and Development], Third World, underdeveloped countries) is conditioned or influenced by the development and expansion of another economy to which the former is subjected (Dos Santos 1970; Frank 1967; Amin 1997; Cardoso and Faletto 1979; Chase-Dunn 1975).⁴ The “world systems” connote intersocietal networks in which the interactions (e.g., trade, resource extraction, warfare, information, etc.) are essential for the reproduction of the internal structures of the composite units and significantly affect changes occurring in these local structures (Chase-Dunn and Hall 1997; Chase-Dunn 1998; Amin 1990). The condition of environmental injustice is directly linked to the global stratification system in which the dominant states are able to shift or impose environmental hazards and other externalities on the weaker states. The fact that Third World societies are powerless and disadvantaged due to their weak, subordinate position in the world system has been discussed by Wallerstein (1979), Bornschier and Chase-Dunn (1985), Bunker (1985), and other dependency/world system theorists. Since they are passive, powerless or negligible actors in global environmental policy formulation and implementation, environmental burdens are continuously channeled to the Third World with a path of least or no resistance. Among several factors that make the current pattern of toxic waste dumping quite prevalent and attractive to MNCs are: weak or non-existing national environmental policy and standards in many developing countries, ineffective environmental laws and inadequate sanctions against polluters, a lack of adequate environmental law enforcement agents, bribery and corruption, and poverty or desperation to accept pollution for cash in many poor countries. Unfortunately, the short-term economic gains by both MNCs and the hosts generally overshadow the long-term adverse environmental and public health consequences.

Unequal exchange between the “core” and “periphery” has been the rule rather than exception. The “core” is generally described as a region of a world system (including the most powerful advanced industrialized nations) that dominates the system and the “periphery” refers to a region of the system consisting of weak and poor countries that are subordinated by the core (Chase-Dunn and Hall 1997). According to Chase-Dunn (1998, 39), the core-periphery relationship came into existence through extra-economic plunder, conquest, colonialism and neocolonialism, and is maintained by the operation of political-military dominance and economic

competition in the capitalist world economy. As a consequence of poverty and subordinate status, peripheral countries are forced or conditioned to accept inferior commodities and hazardous wastes in exchange for their extractive mineral and agricultural products (Adeola 2000a). Chase-Dunn (1975) contends that exploitation of the underdeveloped economies by the core countries occurs through the process of decapitalization, resource depletion, unequal exchange, and subordination to external controls in a capitalist world system. Thus, for a number of researchers, Third World resource plunder, environmental degradation, human rights abuse, and growing resistance are directly linked to global capitalism, maldevelopment, internal and external colonialism, and MNCs’ operations (see Guha 1990; Broad and Cavanagh 1993; Gedicks 1993; Pulido 1996; Renner 1996; Amin 1990, 1997). From the dependency/world system perspective, the MNCs contribute significantly to environmental inequity and human rights violations in the periphery.

In the Health of the Planet (HOP) survey conducted in 24 industrial and less developed countries by Dunlap, Gallup and Gallup (1993), the respondents were asked “how much do you think Multinational Companies operating in developing countries contribute to environmental problems — would you say a great deal, fair amount, not very much, or not at all?” An overwhelming majority of the respondents (in samples of 770 to 4,984) identified the MNCs as a major culprit contributing a great deal to a fair amount of environmental problems in developing countries (see Dunlap et al. 1993, 57). Similarly, Wimberly (1990, 76) indicates that MNCs distort development in the Third World by retarding economic growth, promoting economic injustice, obstructing domestic political processes that may be contrary to core economic or ideological interests; and they also distort development by diverting land from sustainable production for domestic needs and by displacing poor farmers and indigenous landholders who have little or no alternative means of livelihood (Renner 1996; Amin 1997). The operations of MNCs in underdeveloped nations involve the use of hazardous materials, extraction of natural resource base, environmental degradation, and the spread of toxic materials, emissions of noxious gases, which pose immediate and long-term health risks to the masses (Moyers 1990; Baram 1994). Harper (1996, 373) recently described the environmental impacts of MNCs as:

At their outrageous worst, MNCs have promoted and sold pharmaceutical, pesticides, baby formulas, and contraceptives already banned or restricted as unsafe in their home country in the Third World. . . . They have brokered the international sale of solid and toxic wastes to poor nations. . . . Shipments of toxic industrial and medical wastes

arrive in African nations from most European nations and in central America, the Caribbean, Latin America, and Africa from the U.S. MNCs have orchestrated the cutting of rainforests in Indonesia and Malaysia. Similar to ecological degradation, ecocide, and genocide associated with Multinational Oil Companies in Nigeria, Texaco made a real mess in the Ecuadorian rainforests, where it dominated the nation's oil industry for over 20 years. (Emphasis added).

Incidentally, the MNCs have also imported fruits, vegetables, and other agricultural products grown in the Third World with heavy doses of banned pesticides for American consumers, thus completing the circle of toxins (Moyers 1990; Weir and Schapiro 1981).

It must be acknowledged, however, that there are both internal and external actors subjecting the poor and indigenous populations to social and environmental injustice, as a number of cases will later demonstrate. Within the dependency school, the struggles among local classes, ethnic and other interest groups are seen as shaped and conditioned by the country's relation to the advanced industrial societies of the "core" (Evans and Stevens 1988, 745). The extent of immiseration, natural capital expropriation, pollution and ecological degradation can be attributed to the collaboration between external imperialism and corrupt domestic elites. In most post-colonial societies, a legacy of classical colonialism persists in the form of internal colonialism, especially in the areas of resource exploitation, material allocation, and distribution of power among various sub-national groups. Following the world-system/classic colonial model, the core-periphery statuses are reproduced within a nation. Typically, the core exploits the resources of the periphery and maintains economic and political control (Blauner 1972).

The core-periphery model is taking a new meaning with the currently unfolding process of globalization accentuating the power of MNCs while diminishing the power of states' control of international movements of resources and capital. Ethnic fragmentation, primordial allegiance, and new resistance movements are among the products of this process of social transformation. According to Amin (1997, 4-5), the new world system under globalization regime is maintained by the core's technological monopoly, domination and control of global financial markets, monopolistic access to the planet's natural resources (in which the risks of reckless exploitation and degradation have become worldwide), media and communication monopolies, and monopolies over weapons of mass destruction. Thus, globalization seems to have produced a new hierarchy in the world system, more unequal than ever before and further subordinating the

peripheries. From the dependency/world system perspective, foreign direct investment, external debts, and inequity are asserted as positive correlates of environmental degradation.

The Internal Colonialism Theoretical Model

Colonialism as a process of economic and sociopolitical domination and exploitation of nations by other more powerful nations has a long standing in human history. Contrary to classic colonialism, internal colonialism is a condition in which both the dominant group and subordinate groups co-exist as natives of the same society (see Blauner 1969). Furthermore, the dominant group represents a numerical majority, as is the case in the U.S. Blauner (1972, 84) identifies the basic elements of the colonization process as: (1) Colonization originates with a forced, involuntary entry; (2) the colonizing power implements a policy that constraints, transforms, or destroys indigenous culture — including its values, orientations, beliefs, tradition, ways of life, and modes of subsistence; (3) the members of the subordinate or colonized group are typically governed or ruled by representatives of the dominant power; and (4) the colonized have the experience of being controlled and manipulated by outsiders who employ either a supremacist or a paternalistic ideology to maintain the system of dominant-subordinate relations.

A modified version of internal colonialism framework as originally formulated by Blauner (1969), in conjunction with the dependency school's emphasis on the development of underdevelopment (Frank 1967), would aid in understanding the relationship between the state, MNCs, dominant "core" ethnic groups, and peripheral indigenous tribes. The origin of internal colonialism in a country such as Nigeria involved the skillful, strategic pursuit of political dominance by the numerical majority following the independence in the 1960s. As explained by Naanen (1995, 49), the political power gained by the numerical majority ethnic groups in Nigeria (including the Hausa-Fulani, Yoruba, and Igbo), has been used hitherto to appropriate and transfer resources from the periphery to develop the core areas especially in the North, while creating immiseration and increased inequality among the subordinated resource-dependent ethnic communities in the periphery.

Focusing on the case of Nigeria, the three critical elements of internal colonialism in the country include: (1) an ethnic-centered political dominance, tactically employed to control and exploit the natural resource (wealth) of minority communities for the benefit of the dominant ethnic groups; (2) the alliance of the core ethnic groups, multinational oil companies, political elites, the military, and the government which generally represses the opportunity structures for the minorities; and (3) massive ecological disruptions and the subsequent destruction of the basic modes of subsistence of

the resource-dependent communities of indigenous minority groups. The unique cases of selected minority groups are discussed in more detail later in this paper to show the patterns of injustice, waste dumping, ecocide, and human rights violations including politicized in different regions of the Third World. However, before presenting selected case studies, it is apropos to discuss the evidence on transnational environmental injustice.

Reviewing the Evidence Concerning Transnational Environmental Injustice

As an unfortunate aspect of globalization, the relative ease of transnational movements of operations, capital, and resources has extended the problems of inequitable distribution of environmental hazards and associated risks from the local to global arena. As mentioned earlier, the patterns of distribution of hazardous wastes, toxic agents including lethal agricultural chemicals banned in the U.S. (e.g., pesticides such as DDT), herbicides, polychlorinated biphenyls (PCBs), asbestos, and other hazardous products follow the paths of least resistance from advanced industrial states of the North to underdeveloped societies of the South (Weir and Schapiro 1981; Pearson 1987; Uva and Bloom 1989; Moyers 1990; Asante-Duah et al. 1992; Hilz 1992; Greenpeace 1994; Frey 1994-95). The withdrawal and over-consumption of natural resources of the South are carried out both implicitly and explicitly by the core nations of the North, with the United States accounting for the lion's share (Caldwell 1990; Schnaiberg and Gould 1994). According to recent empirical data, the United States generates 85% of the world's hazardous wastes and EC countries generate about 10% of the world total. In general, advanced industrial nations produced 95% of the world's hazardous wastes and the international toxic waste trade has been facilitated by the new global economic system (UNDP 1998).

Many underdeveloped countries of the South are used as a reservoir of garbage, toxic wastes, DDT, and hazardous products generated in advanced industrial nations (Hilz 1992; Greenpeace 1994; Weir and Schapiro 1981; Scherr 1987). Annually, more than 50 percent of the officially acknowledged volume of exported hazardous waste is channeled to less developed nations. The number of countries involved in export and import schemes, volume of trade, and properties of materials involved are often difficult to establish due to covert and criminal nature of the transactions (USGAO 1993). Among the litany of commonly exported hazardous wastes are: acids, asbestos, automobile scrap, computer/electronic scrap, banned pesticides and agro-chemicals, hospital waste, dioxins containing wastes from fossil fuel electric power stations, scrap tires, scrap PVCs, mercury waste, lead-

acid batteries, and metallic and galvanic sludges, all known to be lethal (see Greenpeace 1994). A typical approach of exporting toxic wastes to developing countries has been to falsify the labels. Some have been disguised as construction materials, fertilizer, and humanitarian assistance (Clapp 1994; Harper 1996). As mentioned earlier, the number of Third World countries that have imported, been targeted or proposed for hazardous waste imports increased significantly between the 1980s and 1990s, when most of these countries were experiencing severe economic hardships. Even during the period of improved economic conditions, many obsolete industrial products and hazardous materials such as PCBs, asbestos, polychlorinated dioxins, and pesticides such as DDT, and heptachlor restricted or completely banned for use in the United States are sold in Third World nations. Incidentally, CO₂ emissions co-vary with increased hazardous waste dumping in the majority of non-OECD countries included in this study (both the trend in CO₂ from 1980 to 1996 and bivariate correlation analysis are presented in the subsequent section of this paper). This pattern of trade represents a major aspect of transnational environmental injustice.

Environmental injustice transcends the waste trade across nations. As Dorsey (1998-99, 100) suggests, environmental injustices are apparent in several cases including exposure of people of color (ethnic and racial minorities) to radiation from nuclear testing, chemical contamination, and numerous adverse health conditions. Epidemiological findings suggest that negative health consequences of exposure to a wide range of these conditions may encompass immune deficiency, neurological disorder, reproductive dysfunctions, cancer, and abnormal behavior (Adeola 1994, 2000b; WRI et al. 1998-99, 55). The most infamous incidents of pesticide poisonings involved the banned pesticide exported from the U.S. to Egypt in the 1970s. The use of this product was linked to illnesses and deaths among the people and over 1,000 deaths of water buffalo. Mass poisoning has also been found in Ecuador, Iraq, and in several African countries (Scherr 1987, 131).

As aforementioned, stringent laws concerning hazardous wastes were introduced and enforced in the U.S. in the past three decades, forcing many companies to seek hazardous waste depots in underdeveloped nations.⁵ For instance, the U.S. Congress enacted the Resource Conservation and Recovery Act (RCRA) to regulate hazardous wastes within the U.S. (PL. 94-580, 42 U.S.C. 6901 et. seq). The 1984 Hazardous and Solid Waste Amendments (HSWA) to the act added a new section to govern exports of hazardous wastes (P.L. 98-616, 245a, 42 U.S.C. 6938), which established a program through which EPA monitors the export activities of U.S. hazardous waste generators and others and enforces

export regulations (USGAO 1993). The growing concerns about transboundary shipments of hazardous waste, and global awareness of the actual and potential effects of hazardous waste on the environment and public health in importing countries, have triggered negotiation of an international treaty. Even though concerted efforts have been launched to address environmental injustice issues in the United States, similar efforts to curtail the exports of hazardous materials from the core countries to periphery nations are grossly inadequate.

The Basel Convention on the control of transboundary movements of hazardous wastes and their disposal, was developed in response to the demands from developing countries for the international community to curb or regulate international trade of hazardous wastes.⁶ At the international and regional level, there have been several agreements to restrict the transboundary movements of wastes. The Bamako Convention signed by the members of Organization of African Unity (OAU) and the Lome Convention signed by the European Union (EU) and 69 African, Caribbean, and Pacific countries are cases in point.

Despite the global concerns about hazardous waste dumping, some officials of the World Bank have supported the idea of exporting more polluting industries from the core nations to underdeveloped countries for profit. They contend that, in order to maximize the overall economic efficiency, a given amount of health-impairing pollution should be done in those countries with the lowest cost and low wages. According to Lawrence Summers (1992), a World Bank official, human lives in the Third World are of lesser value relative to human lives in the core nations (Foster 1995, 101). The economic efficiency argument for hazardous waste exports is rather myopic. On a global scale and on the long run, hazardous waste trade may turn out to be very disastrous or inefficient for both the exporting and receiving nations. The public health and ecological costs of these schemes typically far outweigh the short-term economic gains (Adeola 1996; Moyers 1990; Weir and Schapiro 1981).

Environmental injustice and environmental racism are reflected in the policy and practices of most core countries' institutions toward periphery nations. Institutionalized discrimination is apparent in the World Bank's policies and official behavior toward the non-core countries. Basically, institutionalized discrimination refers to the policies of the dominant institutions in the core and the behavior of individuals who control these institutions and implement policies that are intentionally designed to have adverse impacts on non-core nations in the world system. Feagin and Feagin (1996) defined a direct institutionalized discrimination as any organizationally prescribed or community-prescribed action that by design or intention has a differential and negative impact

on members of subordinate groups (distinctively identified either by race, ethnicity, tribe, culture, or nationality). To combat the problems of environmental racism and injustice, the multinational and multicultural People of Color Environmental Leadership Summit was convened in Washington, D.C., in October 1991, to proclaim the principles of environmental justice.⁷ One of the principles specifically states that governmental acts of environmental injustice represent a violation of international law, the Universal Declaration of Human Rights, and the U.N. Convention on Genocide.

Empirical Evidence on Hazardous Waste Trade Schemes and Some Correlates of Solid Wastes and CO₂ Emissions

In this section, multiple data sources and methods are employed to address the research questions and relationships asserted by the theoretical perspectives presented. Descriptive data on exports of hazardous wastes from OECD to non-OECD countries were obtained from the Greenpeace (1994). The data for the 24 countries (shown in Table 2) were supplemented with other secondary data sources including the World Bank (1999-2000) and UNDP (1998). Data on poverty, inequity, MNCs' influence, and human rights were obtained from the UN (1988, 1998), the World Bank (1998-99), the World Resources Institute, UN and World Bank (1998-99), Amnesty International (1995), the Freedom House (1990), and Johnson and Sheehy (1990) of the Heritage Foundation. Data from these latter sources are used for bivariate correlation analysis of 16 variables suggested by the theoretical perspectives reviewed for a sample of 124 developing nations.⁸ Methodological triangulation encompassing a description of hazardous waste trade schemes, comparative cross-national analysis, bivariate correlation analysis of theoretically specified variables, and case studies is used to meet the objectives of this study. Both in the empirical and case studies, countries are selected based on data availability. The case studies offer better insights about the conflicts between MNCs, the nation states, and indigenous groups over resource exploitation, ecocide, waste dumping, and associated environmental injustice and human rights abuse. The descriptive account is presented first, followed by correlation analysis, and the selected qualitative case studies.

Hazardous Waste Dumping Schemes

Empirical evidence compiled by the NGOs indicates that annually, millions of tons of hazardous wastes are channeled by MNCs based in core advanced industrial countries to underdeveloped nations of Africa, Asia, Latin America, and Caribbean (Greenpeace 1994; Asante-Duah et al. 1992; Frey 1994-95; Uva and Bloom 1989; Hilz 1992). During the 1989 to 1994 period, more than 2.6 million metric tons of haz-

Table 1. Hazardous waste export schemes by OECD country and receiving non-OECD region (Third World), 1989-1994.

Exporting OECD Country	Volume of Waste Generated (1000 tons)	Receiving Non-OECD Region							Total
		Africa	Pacific	East Asia	South East Asia	South Asia	Middle East	Latin America	
Australia	426	0	0	13	13	6	0	0	32
Austria	550	1	0	0	1	0	1	1	4
Belgium	776	1	0	0	0	0	0	1	2
Canada	5,896	0	0	28	4	5	0	0	37
Denmark	250	0	0	0	0	0	0	2	2
Finland	559	0	0	0	0	0	2	0	2
France	7,000	1	0	0	0	0	0	0	1
Germany	9,100	1	0	1	9	4	0	9	24
Italy	2,708	2	0	0	0	0	0	2	4
Japan	n.a.	0	1	1	0	0	0	2	4
Luxembourg	180	0	0	0	0	0	0	0	0
Netherlands	1,520	0	0	0	1	0	0	0	1
New Zealand	110	0	2	0	0	0	0	0	2
Norway	500	0	0	0	1	0	0	1	2
Spain	1,708	0	0	0	0	0	0	0	0
Sweden	440	0	0	0	0	0	0	0	0
Switzerland	854	2	0	0	0	0	0	2	4
UK	1,844	6	0	20	31	15	11	15	98
USA	213,620	8	8	31	24	14	0	109	194
TOTALS	248,041	22	11	94	84	44	14	144	413

Sources/Adapted from: 1) UNDP, Human development report, 1998, and 2) The Greenpeace, Database of Hazardous Waste Trade Export Schemes from OECD to non-OECD countries (1989-1994).

ardous wastes were exported from the OECD countries to non-OECD countries mostly located in the Third World (Greenpeace 1994). As shown in Table 1, OECD generated 248,041 per thousand metric tons from 1989 to 1994. At least 413 hazardous waste exports schemes originating from OECD to non-OECD countries in Africa, East and Southeast Asia, Latin America, Middle East, and Pacific, have been reported for the period.

Over the past decade, there have been about 300 documented cases of hazardous wastes dumping in Eastern Europe, 239 in Asia, 148 in Latin America, and 30 in Africa (cf. Sachs 1996, 144). Specific cases include dioxin-laden industrial wastes exported from Philadelphia to Guinea and Haiti in 1987; radioactive milk exported to Jamaica by EC in 1978; more than 10,000 tons of radioactive wastes, PCBs (polychlorinated biphenyls), and other toxic elements exported by Italian firms to the town of Koko in Nigeria; and several other similar cases involving a systematic dumping of hazardous wastes to these regions (the case of Koko is discussed in more detail later in this article). Within the past decade, several Third World nations including Argentina, Bangladesh, Brazil, Colombia, Guinea, Haiti, Lebanon, Mexico, Nigeria, Sierra Leone, Somalia, Syria, Venezuela, and Zimbabwe have been targeted for toxic waste dumping

(Hilz 1992, 17; Greenpeace 1994). Table 2 presents a list of selected countries targeted for toxic waste dumping schemes including the type and quantity of waste proposed to be delivered by companies based in the U.S., U.K., or other developed OECD countries. Environmental injustice and human rights transgression are pervasive in all of these cases. The table also presents selected environmental health indicators for the countries. It shows the gap in life expectancy between each toxic waste receiving country and exporting countries' average (indexed at 100, see UNDP 1998, 150-1). Increased toxic waste dumping and CO₂ emissions are directly related to poor quality of life and adverse health conditions in these countries as will be demonstrated in the subsequent analysis. With the exception of Guatemala, Jamaica, and Nigeria, CO₂ emission increased from 1980 to 1996 for all non-OECD (developing) countries included in the table.

In Table 3, bivariate correlations between volume of solid wastes (measured in thousands of tons), carbon dioxide emission per capita, and selected domestic and world system socioeconomic, demographic, and human rights variables are reported for a sample of 124 developing nations. Pearson correlation coefficients are calculated for sixteen variables grouped into five broad categories including environmental pollution factors, domestic and international economic fac-

Table 2. Life expectancy gaps,¹ transnational toxic waste schemes, and CO₂ emission in selected developing countries, 1980-1996

Country	LEXP Gaps		Place of Origin	CO ₂ Emissions (million)			
	1995	Proposed Toxic Waste Types 1989-1994		(metric tons)		(Per capita)	
				1980	1996	1980	1996
Argentina	2	10,000 tons/month (sewage sludge)	U.S.	107.5	129.9	3.8	3.7
Bangladesh	23	60,000 tons/month (municipal waste)	U.S.	7.6	23.0	0.1	0.2
Belize	0	10,000 tons/month (sewage sludge)	U.S.	n.a.	n.a.	n.a.	1.9
Brazil	10	Unspecified volume of industrial waste	U.S.	183.4	273.4	1.5	1.7
Colombia	51	million tons/month (incinerator ash)	U.S./U.K.	39.8	65.3	1.4	1.7
Costa Rica	0	200,000 tons/year of incinerator ash & 4 million coal ash	U.S.	2.5	4.7	1.1	1.4
Dominican Republic	5	1 million/year	U.S.	6.4	12.9	1.1	1.6
EquatorialGuinea	34	240,000 tons of radioactive waste & 1 million tons of incinerator ash/yea	U.S.	0.9	1.1	0.2	0.3
Guatemala	13	245 tons lead slag & 1 million tons of ash	U.S.	4.5	6.8	0.7	0.7
Indonesia	14	20,843 kg. of toxic ash & 6.4 million of toxic ash/year	MNC	94.6	245.1	0.6	1.2
Jamaica	0	1 million tons (incinerator ash) & 3,600 tons of (garbage/day)	MNC	8.4	10.1	4.0	4.0
Mexico	3	34 barrels of toxic chemicals & 6,500 drums of toxics	U.S.	251.6	348.1	3.7	3.8
Morocco	11	2,000 metric tons of toxic waste/yr.	U.K.	15.9	27.9	0.8	1.0
Namibia	25	7 million tons/yr. (nuclear wastes, sludge, and plastics)	U.S.	n.a.	n.a.	n.a.	n.a.
Nicaragua	9	200,000 tons of incinerator ash/mo. & 1,700 tons of toxic ash/day	U.S.	17.6	29.8	5.6	8.0
Nigeria	31	Unspecified volume	U.K.	68.1	83.3	1.0	0.7
Panama	1	30 million tons/yr. (incinerator ash)	U.S.	3.5	6.7	1.8	2.5
Papua New Guinea	23	600,000 metric tons/mo. (toxic waste)	MNC	1.8	2.4	0.6	0.5
Paraguay	7	200,000 tons/mo.	U.S.	1.5	3.7	0.5	0.7
Philippines	9	Unspecified volume(of battery/plastic)	MNC	36.5	63.2	0.8	0.9
Sri Lanka	2	Over 245 tons/yr.	MNC	3.4	7.1	0.2	0.4
Thailand	6	Several hundreds tons of uranium, thorium, & 13,000 tons of toxic waste	U.S.	40.0	205.4	0.9	3.4
Uruguay	2	Unspecified volume of industrial wastes	MNC	5.8	5.6	2.0	1.7
Venezuela	2	40,000 tons of sewage sludge/year	MNC	89.6	144.5	5.9	6.5

Sources: UNDP, Human Development Report, 1998; The Greenpeace, Database on Hazardous Waste Trade Export Schemes from OECD to non-OECD Countries, 1989-1994; The World Bank, World Development Report, 1999-2000. ¹Note: All figures are expressed in relation to the North (Core) average, which is indexed to equal 100. LEXP = Life expectancy.

tors, social inequality and poverty, human rights measures, and demographic and health measures respectively. The indicators for domestic economic condition are per capita Gross Domestic Product (GDP) and Gross National Product (GNP) growth rate, 1980-1990, both in U.S. dollars. Three world system economic indicators used are total external debts in 1990, average foreign direct investment, 1981-1985, and economic aid per capita. The three indicators of human rights used include the number of human rights convention signed and ratified by each country, political rights index (Arat 1991), and freedom status measured on a scale of 1 (most free) to 7 (not free). Gini index serves as a measure of social inequality, and percent of people on less than \$1.00/day income measures poverty. For demographic and health factors, population size, percent population change are the demographic measures and crude death rate and infant mortality rates constitute the health measures.

The three columns showing Pearson correlation coefficients among these variables and their level of significance are displayed in Table 3. Consistent with the ECP's assertion

that poverty and inequality are positively related to hazardous waste and other environmental hazards, total external debts ($r = .510, p < .01$) Gini index ($r = .271, p < .01$), and poverty ($r = .298, p < .01$) are significant positive correlates of solid wastes and CO₂ emission per capita respectively. For the RCP, a significant correlation between economic aid per capita and solid wastes ($r = .588, p < .01$) is confirmed. Also of interest are the inverse correlations found between human rights measures and solid wastes or CO₂ emissions per capita. These suggest that those nations with higher human rights protection standards and practices are most likely to have stringent policies and measures to minimize hazardous waste, especially in their backyards. Thus, freedom status ($r = -.204, p < .05$), human rights conventions entered ($r = -.405, p < .01$), and political rights index ($r = -.167, p < .10$) are significant inverse correlates of wastes.

From the dependency/world system perspective, MNCs' influence as measured by average FDI only has a small positive association with both solid wastes and CO₂ emission per capita ($r = .178, p < .05$ for the latter). As already mentioned,

Table 3. Correlations of solid wastes, CO₂ emissions with selected measures of inequality, human rights, and socio-demographic variables in developing countries

Variables	Solid Wastes in million metric tons Correlation coeff	CO ₂ Emission per capita Correlation coeff	Freedom status Correlation coeff
Environmental Pollution Factors:			
Solid waste	—	.902***	-.204**
CO ₂ emission per capita	.902***	—	-.085
Local and Global Economic Factors:			
Per capita GDP	-.158*	-.155*	.472***
Per capita GNP growth rate, 1980-90	.022	-.006	.301***
Economic aid per capita, 1990	.588***	.568***	-.157
Total external debts, 1990	.510***	.554***	.083
Ave. foreign direct investment, 1981-85	.144	.178*	.258***
Social Inequality and Poverty Factors:			
Gini index	.271***	.284***	.224**
Poverty, % people on less than \$1/day	.298***	.305***	.186**
Human Rights Measures:			
Human rights convention entered	-.405***	-.387***	-.115
Political rights index, 1990	-.167*	-.061	.972***
Freedom status, 1990	-.204**	-.085	—
Demographic and Health Measures:			
Population size, 1990	.629***	.664***	-.190**
% Population change, 1990-1995	.819***	.805***	-.054
Crude death rate, 1990	.896***	.858***	-.091
Infant mortality rate, 1990	.900***	.864***	-.113

#Note: N = 124 nations, ***p < .01, **p < .05, *p < .10 significance (2-tailed).

total external debt is among the world system variables with a significant correlation with environmental degradation. Table 3 confirms significant correlations of .510 and .554 ($p < .01$ respectively) between external debts and solid wastes and CO₂ emissions. For the demographic and health measures, infant mortality rates ($r = .900$, $p < .01$), crude death rates ($r = .896$, $p < .01$), percent population change ($r = .819$, $p < .01$), and population size ($r = .629$, $p < .01$) are strong correlates of both solid wastes and carbon dioxide emissions as expected. In column 3 of the table, the finding concerning the relationship between inequality and freedom is consistent with the extant literature. Also consistent with the literature are the relationships found between freedom (or liberty) and per capita GNP growth rate, per capita GDP, and average FDI.

The internal colonialism theoretical model can be better understood using the qualitative case study approach.

However, cases presented will also support some of the contentions of ECP, RCP, and dependency/world system perspectives. In the following section, specific cases of transnational environmental injustice, genocidal imperialism, state oppression, and collective local responses to these forces are presented.

Cases Of Environmental Injustice And Human Rights Violations

While there are numerous cases of transnational environmental injustice across the globe, three prominent cases are selected for the purpose of illustration in this study. Specifically, the cases of toxic waste dumping in Koko and oil-induced conflicts between the state, multinational corporations, and indigenous Ogonis in Nigeria, and the plights of resource-dependent tribes in Malaysia are discussed respectively. Cases were selected on the bases of availability of materials on the extent of environmental injustice, human rights violation, and conflicts involving indigenous groups, states, and MNCs over natural resources, environmental exploitation, and hazardous waste dumping issues.

The Case of Koko, Nigeria. The case of a small town of Koko, Nigeria, gained an international spotlight in 1988 when it became exposed as a dumping ground for toxic wastes generated and exported by two Italian firms. Consistent with economic contingency perspective, this case illustrates that poverty is often a critical factor enticing people into accepting hazardous wastes for cash. In 1987, the two Italian Multinational Corporations—Ecomar and Jelly Wax enticed a Nigerian businessman, Sunday Nana, into signing an agreement to use his residential property located in Koko, Nigeria, for the storage of 18,000 drums of hazardous wastes disguised as building materials and allied chemicals for about \$100 a month (Greenpeace 1994).⁸ This offer was too attractive to be rejected, especially in a country with a per capita Gross National Product of less than \$300.

Upon media exposure of this case, Nigerian authorities later discovered that the illegal toxic wastes included a wide range of lethal substances including polychlorinated biphenyls (PCBs), dioxin, methyl melamine, dimethyl formaldehyde, and asbestos fibers (Greenpeace 1993; Frey 1994-95; Ihonvbere 1994-95). Over 100 employees of the Nigerian Port Authority were assigned to remove the wastes, which have been deposited for several months prior to the discovery, thus contaminating the soil, water, and air in the vicinity of the dump. Even though the government provided the workers with protective devices, the wastes were more toxic than many had suspected. The exposure suffered by the workers, the residents of Koko including the host, led to severe adverse health consequences including burns, nausea, paralysis, premature births and deaths including the death of

Sunday Nana, the host. Other health hazards associated with the dump include birth defects, brain damage, cancer, stunted growth, and other pathological conditions.

Through international politics and diplomacy, these wastes were removed and sent back to Italy. However, for the residents of Koko, the damage has already been done. In addition to adverse health consequences, Koko became stigmatized as a toxic place to be avoided. The vernacular of reference to this town included any combination of the terms: "toxic," "hazardous," "sick," "poisonous," "radioactive," "dreadful," "corrosive," and "dangerous." As noted by Ihonvbere (1994-95, 211):

The public started avoiding Koko town. Commercial vehicles would not stop at the intersection leading to the town, and private car owners would hold their breath and wind up their windows as they approach the town. Traders stayed away from the community market and visitors to Koko were avoided like plague. *The only bank in the town closed its offices, and non-indigenes fled the town.*

Thus, there were anxiety, feelings of destitution, isolation, anger, and rejection among the local residents. The adverse social and psychological impacts of Ecomar and Jelly Wax's dumping on Koko still linger even years after the incidence. Although the role of Italian MNCs as the culprit seems glaring, the underlying problems, especially in Nigeria at that time included government corruption, bribery, inefficiency, and abuse of power by military and public officials at the expense of the poor innocent people.

The role of the media was pivotal in galvanizing public response to Koko's contamination episode. Among the responses, public rallies and protests were launched demanding immediate evacuation of the toxic wastes, free medical screening and treatment of the potential victims, while rejecting any idea to evacuate or relocate the population of Koko. Several grassroots anti-toxic groups developed including Koko Defense Group and People United to Save Koko among others organized to promote environmental justice in the region. In this case, the community contamination episode reflects mostly environmental injustice (undue imposition of toxic wastes and associated adverse health effects on innocent people). Other than jeopardizing the health and quality of life of the residents, there were little evidence of flagrant violation of other human rights articles unlike the other cases reviewed below.

The Case of Ogoni in Nigeria: MOSOP, Ecocide and Politicides. Social change induced by political protest, demonstration, civil disobedience, and rebellion by communal minority groups has attracted scholarly interest in recent years (Harff and Gurr 1989; Gurr 1993; Homer-Dixon 1994; Lindstrom and Moore 1995). Pervasive conflicts char-

acterize several resource-dependent communities. Lane and Rickson (1997) suggest that an enduring dilemma in locality where development is dependent on resource extraction is that powerless indigenous communities tend to suffer most of the social, economic, and environmental costs while enjoying little or no benefits. The Niger Delta region in Nigeria has historically been the site of major conflicts between the native population, multinational oil corporations, and the Nigerian government military and police forces, often resulting in serious human rights violations including killings and massive environmental degradation. The Ogoni people represent one of many diverse minority ethnic groups in the Niger Delta, marginalized by the dominant tribal groups of Hausa-Fulani, Igbo, and Yoruba as aforementioned. Located within the Delta, Ogoniland consists of about 404 square miles of wetlands and mangrove forest naturally endowed with rich crude oil reserve and biodiversity. This area is home to indigenous Ogoni tribe with a population size estimated at about 500,000 people who are mostly dependent upon subsistence farming and fishing.

The provisions of the Nigerian Constitution stipulates that: All minerals, mineral oils and natural gas in, under or upon any land in Nigeria or in under or upon the territorial waters and the Exclusive Economic Zone of Nigeria shall vest in Government of the Federation. Therefore, the federal government has the absolute claim over minerals or any precious metals discovered within its jurisdiction. The natural resources in Ogoniland under the control of the government, contribute immensely to the overall economic viability of Nigeria. For instance, the first and largest oil field was developed in Ogoniland and by 1972, there were six oil fields yielding a combined output of more than 200,000 barrels per day. Furthermore, Nigeria's major fertilizer plant, two oil refineries, a large petrochemical plant, and other oil servicing enterprises are located in Ogoni. However, most of the economic benefits from the oil extraction activities in Ogoniland are not shared by the Ogoni people and the perception of relative deprivation has ignited frequent conflicts in the Niger Delta area. According to the Sierra Club's press release and official correspondence from Stephen Mills, Sierra Club's Human Rights and Environmental Campaign Director, Royal Dutch Shell and other associated Multinational Oil Corporations [MNOCs] (e.g., Agip Corp., Chevron Corp., Elf, and Mobil) have taken over 30 billion dollars from Ogoniland leaving behind ecological ruins, destitution, environmentally induced illnesses, and pre-mature deaths or shorter life expectancy among the people. Despite the magnitude of oil and petrochemical withdrawal activities in the area, there is a deplorable underdevelopment as reflected in the absence of basic infrastructures such as good roads, electricity, pipe-borne water, hospitals, and schools (Welch 1995; HRW 1999).

While the MNOCs and the military government are reaping the benefits of the oil and gas refinery activities, the entire ecological landscape of Ogoniland has been laid to waste by oil spills, hazardous waste dumping, decimation of aquatic species, and emissions of noxious gases. Even though the Federal Environmental Protection Agency (FEPA) has the authority to enforce the Environmental Impact Assessment (EIA) Act (Decree No. 86 of 1992), EIA or a comprehensive social Impact Assessment (SIA) has not been conducted in Ogoni up-to-date. Consequently, there is little publicly available empirical data on the extent of environmental degradation and the impact of oil production on the area. The only environmental survey conducted by the MNOCs and NGOs, for the region has been criticized for a lack of validity and scientific rigor (Human Rights Watch 1999). Nevertheless, the survey identified the major environmental and social problems associated with oil production in the area as: land degradation, oil pollution, air pollution, noise and light pollution, degradation and depletion of water and coastal resources, loss of biodiversity, health problems among the resident population, low agricultural production, socioeconomic problems, lack of regulations, and a lack of community participation (HRW 1999). Thus, this case raises an important question as to what extent the rights to a safe, clean, healthy ecologically-balanced environment needed to ensure subsistence, a life of dignity, and good health of the Ogonis have been violated by the MNOCs and the state. The fact that Ogoniland and its people suffer the “double jeopardy” of neocolonialism and internal/indigenous colonialism was initially expressed by the late Ken Saro-Wiwa (1998, 331-32) as:

I looked at Ogoni and found that the entire place was now a wasteland; and that we are the victims of an ecological war that is very serious and unconventional. It is unconventional because no bones are broken, no one is maimed. People are not alarmed because they can't see what is happening. But human beings are at risk, plants and animals are at risk. The air and water are poisoned . . . Even though we come from the richest part of Nigeria — a place endowed with fertile land, with water and clean vegetation, oil and gas, I'm seeing soldiers, bandits, actually coming to take away these and develop their own home while pretending that they are running Nigeria. Oil has brought nothing but disaster to Ogoni people (added emphasis in italics).

These remarks were made prior to the subsequent violent conflicts, arrests, detention, bloodshed, genocide, and polio-cide that took place in Ogoniland.

The plight of the Ogoni people has been described as a case of genocide being perpetrated by both the MNOCs and military government against local citizens in Nigeria at the close of the twentieth century (Naanen 1995, 66). As a response to human and environmental rights abuse, continuous economic deprivation, social and political disenfranchisement, the Movement for the Survival of the Ogoni People was formed in 1990. According to Rahman (1991, 73), a self-conscious people, who are poor and oppressed can progressively change their environment by using their own praxis. The MOSOP was organized to promote the people's consciousness, empowerment through cultivation of knowledge, resource mobilization, and collective efforts to bring about change in their disadvantaged position. The movement was designed to use non-violent strategies similar to the Civil Rights movement of the 1960s in the United States (Adeola 2000a, 699).

By 1990, under the leadership of Ken Saro-Wiwa, MOSOP drafted the Ogoni Bill of Rights (OBR) which seeks to secure a reasonable share of the oil revenues from Ogoniland, reduction in environmental degradation by oil producing MNCs, and greater political autonomy to participate in the affairs of the Republic as a distinct and separate entity (The Guardian 1995, 11).⁹ Acting both as the founder, Publicity Secretary, and President, Saro-Wiwa brought the human rights and environmental injustice concerns of the MOSOP into international prominence. Ogoni people's case was presented before the United Nations Commission on Human Rights in Geneva in 1992, and in 1993, Ogoni became a registered member of the Unrepresented Nations and Peoples Organization (UNPO) based in Hague. The International Federation for the Rights of Ethnic, Linguistic, Religious, and Other Minorities based in New York also became interested in the Ogoni case. Many Non-Governmental Organizations (NGOs), international human rights organizations, and environmental activist groups were sympathetic and supportive of the MOSOP's objectives.

As Obibi (1995, 11) reported in the Guardian, with the spirit of MOSOP in Ogoni, everyone appears emancipated, well informed, self-conscious, and deeply committed to achieving the aims of the OBR. Even the illiterates and semi-literates became aware of how oil wells are being depleted in the area, how aquatic life has become extinct, how oil spillage is pushing the people to the brink of extinction, how the nights have been turned into days through continuous gas flaring, and how Royal Dutch Shell Company, Chevron, and other MNOCs have degraded the environment. Ken Saro-Wiwa criticized the Nigerian military government for perpetrating socioeconomic hardship, ecocide, social and environmental injustice. Internal colonialism involving the transfer

of oil resources from the Niger Delta to feed areas of the country most favored by the government was found unjust and unacceptable. According to Saro-Wiwa (1991, 2102):

The current structure of Nigeria spells the death-knell of the Ogoni and other delta minorities and their environment. Solving none of our traditional problems, it merely intensifies the murderous struggle for power at the center by the dominant ethnic groups and is an invitation to chaos. What we require is a loose federation or a confederation of egalitarian ethnic interdependence. The federating ethnic groups should hold a National Conference now to resolve the basis of their union and install an interim government in which the military will have no role.

A challenge to the legitimacy of military government by the MOSOP's prominent leadership was taken seriously by the government which quickly responded by promulgating a Treason and Treasonable Offenses Decree of 1993. This decree criminalizes any protests or demonstrations demanding a separation or autonomy by any ethnic or tribal groups as a capital offense against the nation. Specifically, it provides that any person who utters any word, displays anything or publishes material which is capable of breaking up Nigeria or part thereof; causing violence or a community or section thereof to engage in violence against that community or against another community, is guilty of treason and liable on conviction to be sentenced to death. This decree sets the stage for the subsequent arrest and hanging of Ken Saro-Wiwa and eight other Ogoni activists. The decree legitimizes the use of absolute violence as the means of controlling minority group's rebellion.

Other major events occurred on January 4, 1993, when MOSOP staged a large scale protest attended by approximately 300,000 participants demonstrating against Royal Dutch oil MNC and Nigerian military government. The subsequent event involving a riot of May, 1994, in which four prominent Ogoni leaders were massacred has the denouement of a series of violent confrontations leading to the arrest, incarceration, and public execution by hanging of prominent members of MOSOP including Ken Saro-Wiwa on November, 10, 1995. However, the trial of civilians by a special military tribunal and the execution raised serious concerns among the international community about human rights violation, especially pertaining to the right to a fair and just trial, freedom from torture, genocide, and inhumane treatment as provided for under the UN declaration. Nevertheless, some criticisms have been leveled against the international community for a lack of adequate response to the crisis and

against the Amnesty International and UNPO for providing the MOSOP leadership with a false sense of security. More specifically, Orage (1998, 48) charged that the Amnesty International declaration of Ken Saro-Wiwa as a prisoner of conscience without a proper investigation of the nature of a series of violent conflicts masterminded by the militant branch of MOSOP was grossly irresponsible.

The problems of gross human rights violation and massive pollution continue in the entire Niger Delta despite the death of General Sani Abacha, the military dictator, and recent transition to democratic regime in Nigeria. According to a recent report by Human Rights Watch (1999), military crackdown in Bayelsa and Delta states in December 1998 and January 1999 led to the killings of more than 100 people, the torture and inhuman treatment of several individuals, and arbitrary arrests and detention of many others. Meanwhile, MNOs are continuing their non-sustainable, environmentally destructive oil production and gas flaring activities in the region with the support of security forces. Thus for the MOSOP, *a luta continua* (i.e., the struggle continues) in the Delta region.

Deforestation and Assault on Indigenous People in Malaysia. Among the indigenous population of Malaysia, the Penan tribe of Borneo rainforest confronts radical social and cultural changes imposed by the government and multinational corporations. As a hunter-gatherer society, the Penan people are completely dependent on the rainforest for their habitat, food, shelter, medicine, customs and culture. However, with the encroachment of logging industry generating over 2 billion dollars in foreign exchange, communal forests traditionally belonging to the Penan and other indigenous groups are being usurped and exploited by the state and multinational business interests. The environmentalists and indigenous rights activists have warned that the last remains of the ancient Borneo rainforest are being decimated three times faster than the Amazon rainforest. Evidence suggests that the communal forests of indigenous tribes have been reduced from approximately 30,300 hectares in 1968 to less than 5,000 hectares (HRW and NRDC, 1992). This represents a tragedy for the future generations of the Penan tribe. The process of forest and land usurpation generally involves the use of "common law" to override the "Native Customary Law" of indigenous people.

Similar to the case of Ogonis, the resource-dependent indigenous people of Malaysia — the Penan and Sarawak have had a series of conflicts with the state and federal authorities as well as with multinational corporations over the issue of logging and decimation of their habitats. The problems of business and government encroachment on tribal

lands and excessive logging and deforestation have attracted the attention of the HRW and NRDC (1992, 45) who identified the adverse impacts of these activities as:

The voracious timber export industry has already caused land erosion, water contamination, the extinction of wildlife and plant species and the annihilation of indigenous cultures. Consistent with the internal colonialism model, the state and federal government benefit economically from logging at the expense of peripheral indigenous people whose habitats and ways of life are being destroyed.

Much like the opposition of the Ogonis in Rivers State, Nigeria and rubber tappers in Brazilian Amazon rainforest, the indigenous tribes of Malaysia have engaged in non-violent (peaceful) protests involving human blockades obstructing logging roads. Approximately 500 indigenous people have been arrested, detained, and subjected to all kinds of human rights abuse including starvation, torture, police brutality, intimidation, harassment, and killings. Other types of human rights violations such as censorship and false accusation of environmental activists have been reported (HRW and NRDC 1992; Amnesty International 1995). Once again, human rights transgression and environmental injustice are closely interrelated.

Conclusions

A growing number of environmentalists, civil rights activists, and environmental organizations are vehemently emphasizing the need for codification of the rights to a safe and sound environment at all levels (Nickel 1993; Gormley 1976; Thorne 1991; Boyle and Anderson 1998; Dias 1999). The rights to a safe and healthy environment have been recognized in the United States and other advanced industrial states due largely to the proliferation of grassroots activism (e.g., NIMBY [Not in My Backyard], anti-toxic waste movement, environmental justice movement, etc.), vigorous environmental information campaigns, growing public awareness, efforts of various environmental organizations, media exposure of environmental disasters, and strong legislative and political responses. The rising cost of hazardous waste disposal and increased sensitivity to LULUs and other toxic waste Storage, Treatment, and Disposal Facilities (STDFs) have encouraged MNCs to venture into the interiors of Third World countries where they can avoid visibility, stringent regulations, liability, and environmental pollution accountability. Historically, MNCs have been attracted to the Third World by the availability of cheap raw materials and labor and lack of regulations.

Available empirical evidence suggests that the pattern of North-to-South or "most resistance" to "least resistance" flow of hazardous wastes remains unabated, despite the

Basel Convention, the unilateral legislative responses in the U.S., and other regional agreements discussed in this paper.¹⁰ Thus, evidence supports the transnational environmental injustice hypothesis concerning the unidirectional pattern of toxic waste flow from the OECD to non-OECD countries. As mentioned earlier, environmental justice activists have leveled the charges of "environmental racism," "garbage imperialism," and "toxic terrorism" against MNCs and government agencies with disregard to the environment, human health, and human rights (Uva and Bloom 1989; Bullard 1990; Hilz 1992; Frey 1994-95; Adeola 1996; Glazer and Glazer 1998).

Implicitly, any deprivation of individuals or groups of the rights to clean air, water, land and healthy environment involves a serious human rights violation incompatible with articles 3, 17, and 25 of the U.N.'s Universal Declaration. Clearly, the protection of human rights is a necessary precondition to achieving global environmental justice and ecological protection. According to Amnesty International (1995), human rights violations have increased substantially over the past decade in almost every category it monitors. Similarly, environmental degradation has increased to an unprecedented level in human history. In several parts of the world, minorities suffer various types of discrimination, injustice, environmental and human rights abuses. The indigenous minorities such as the Ogoni people, the Penan people of Borneo, Malaysia, the Irian Jaya people of Indonesia, Native Americans, and many other communal groups around the world continue to bear disproportionate burdens of ecological withdrawals, pollution, and contamination of their environment, natural resources, and modes of subsistence. The economic contingency, rational choice, dependency/world system, internal colonialism, and environmental injustice/human rights theoretical frameworks have been used in this article to analyze the plights of minorities, toxic waste flow, and natural resource exploitation. Undoubtedly, the MNCs, other international business ventures, authoritarian governments, and corrupt local leaders who benefit from ecologically disruptive activities represent the critical elements promoting environmental injustice, ecological imperialism, and human rights transgression both in the core and non-core societies.

Even though grassroots environmental and civil rights activism are not found wanting in remote areas of the Third World, the efficacy of grassroots social movements under a repressive authoritarian regime is extremely low as demonstrated by the cases presented in this study (also see Alario 1992 for the cases of Brazil and Chile). In response to the first two major questions posed at the outset, it has been shown that a disproportionate exposure of powerless groups to environmental hazards and deprivation of such groups to natural bases of livelihood constitute a serious violation of

basic human rights. Extermination and repression of these groups by the security forces are even more compelling aspects of human rights abuse. It has been shown in this study that environmental justice principles are couched in the Human Rights Declaration and its Conventions (also see Boyle and Anderson 1998). The poor nations and impoverished communities are essentially the havens for dirty and hazardous wastes industry as argued by the dependency/world system perspective. Positive and significant correlations between poverty, inequality, and wastes and CO₂ emission per capita have been shown in this study to support the assertion of the ECP. Evidence of environmental injustice across nations is mounting and the health effects of exposure to environmental hazards are critical, especially in light of strong correlations shown between infant mortality rates, crude death rates and solid wastes or CO₂ emissions per capita in the correlation analysis (see Table 3). Substantial evidence exists to buttress the contention that environmental injustice exists in many faces at the local and cross-national levels (USGAO 1983). For the other question, it is reasonable to conclude that global inequality of power and wealth, institutionalized discrimination at various levels, racism, neocolonialism and internal colonialism, unethical international business practices, authoritarian government, and corrupt local leaders are the bases of global environmental injustice and human rights transgression. Both the empirical analysis and case studies reviewed support this conclusion. MNCs' activities are inseparable from several cases of environmental injustice and human rights repression including genocide in the Third World.

Unfortunately, most of the practices involving environmental and human rights violations are not considered preemptory norms (*jus cogens*), i.e., norms universally accepted, recognized and enforced by the international community. As indicated by Magnarella (1995, 169), the list of universally recognized human rights under the principle of *jus cogens* or universal jurisdiction is rather narrow including genocide, torture, slavery, apartheid, hijacking, attacks on internationally protected persons, war crimes and crimes against humanity. The nature of environmental injustice and associated human rights abuse carried out in remote regions of society, make the true account of such events to the international community quite problematic. The lack of reliable data on the volumes and characteristics of wastes trafficking across nations has limited systematic statistical analysis up-to-date (Greenpeace 1994; USGAO 1993).

In order to ameliorate environmental injustice, ecocide (unlawful killings of species), politicide (unlawful killing of political opposition), and violations of basic human rights to safe and sound environment, the cooperation of the NGOs, international human rights and environmental groups, MNCs,

the United Nations, the World Bank, national and local governments is *sine-qua-non*. Furthermore, there is a need to develop a systematic close monitoring of environmental and human rights records of MNCs operating in non-core nations and companies with dismal environmental and human rights records should be sanctioned through higher environmental tax, fines or prohibition. Economic sanctions involving heavy taxes and fines on MNCs with dismal environmental records and tax credits or environmental subsidies for companies with environmentally sustainable practices are particularly attractive policy options to combat cross-national environmental degradation and toxic wastes dumping. There is a need to develop a mechanism to enforce the EIA and SIA of the activities of multinational oil companies operating in the interiors of Third World countries. The "polluter pays" principle needs to be extended worldwide and there is a critical need for the establishment of a "Global Superfund" under the umbrella of the U.N.

To achieve global environmental justice, the same environmental standards applicable in core industrialized countries should be extended to other nations without bias. In fact, similar stringent environmental standards required of MNCs within the core nations should also apply to their operations in non-core nations. The issues of equitable distribution of resources, power, and opportunities among the core and periphery, as well as socio-political integration are important challenges to be confronted at both the domestic and world system levels if environmental justice is to be achieved. Most importantly, adequate reparation should be made available to the victims of toxic waste dumping, deforestation, and environmental contamination due to extractive, exploitative activities of MNCs and the state. Although whether the goals of environmental justice and respect for human rights to safe and sound environment are achievable cross-nationally remains an important question yet to be resolved, therefore, future research is strongly encouraged along this line of enquiry. Clearly, a better understanding of the dynamics of global environmental injustice and human rights problems remains a challenge to future research.

Endnotes

1. Francis O. Adeola is an Associate Professor of Sociology and the Director of the Environmental Social Science Research Institute at the University of New Orleans, New Orleans, Louisiana. A version of this paper was presented at the Annual Meeting of the Mid-South Sociological Association, Jackson, Mississippi (November 3-6, 1999). Please address correspondence to: Francis O. Adeola, Department of Sociology, University of New Orleans, New Orleans, LA 70148, USA; E-mail: fadeola@uno.edu.
2. Any argument concerning the link between human rights violation and environmental injustice is tantamount to a "chicken or egg"

debate. The two concepts are extremely intertwined and as such, environmental injustice represents a subset of human rights violation. Thus, when used as separate concepts, a strong positive correlation should be expected between the two concepts.

3. Articles 3, 17, and 25 of the Universal Declaration of Human Rights are particularly germane to global environmental justice. In Article 3, everyone has the right to life, liberty, and security; Article 17 stipulates that everyone has the right to own property and no one shall be arbitrarily deprived of his/her property; and in Article 25, everyone has the right to a standard of living adequate for the health and well-being of him/herself and his/her family, including food, clothing, housing, and medical care and necessary social services, and the right to security (see Wronka 1998, 15-20). A draft of the U.N. Declaration on Human Rights and the Environment stipulates that: (i) All persons have the right to a secure, healthy, and ecologically sound environment; (ii) All persons are entitled to be free from discrimination regarding actions and decisions that affect the environment; (iii) All persons have the right to an environment adequate to meet equitably the needs of present generations without impairing the similar right of future generations; (iv) All persons have the right to freedom from pollution and environmental degradation that threaten life, health, livelihood, and well-being within, across, or outside national boundaries; (v) All persons have the right to information concerning the environment; and (vi) All persons have the right to participate in planning and decision making activities that impact the environment (Dias 1999, 400-401).
4. The classical dependency theory asserts that the development of the core nations took place at the expense of non-core peripheral nations through the appropriation of natural resources, exploitation of labor, and unequal exchange in the world system (see Amin 1990; Frank 1967; Dos Santos 1970). However, Cardoso and Faletto (1979) and other dependency theorists emphasize a condition of dependent development whereby some developing countries may benefit as a result of their ties to MNCs and other core interests. Recent cases of debt peonage, dwindling foreign aids, inappropriate technology transfers, and the growing economic gaps between the core and periphery nations seriously undermine this latter perspective (see Chase-Dunn and Hall 1997; Chase-Dunn 1998).
5. The 1976 Resource Conservation and Recovery Act (RCRA) is a "cradle to grave" regulation of all aspects of hazardous wastes. It provides standards for the treatment, storage, and disposal of hazardous wastes. The EPA is authorized to seek civil and criminal penalties of substantial magnitude for any RCRA violation. The 1980 Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA), further provides the EPA legal mechanisms to assign financial responsibility for hazardous waste cleanups to responsible parties in the U.S. (Plater et al. 1992, 251-54).
6. In March 1989, representatives of 117 nations convened in Basel, Switzerland to work out a treaty on the export of toxic waste. The substance of the Basel Convention is that waste exporters must notify and receive permissions from waste importers prior to any shipment. The treaty also calls for signing nations to accurately label all international waste shipments, to prohibit waste shipments to nations that have banned them, and to try to reduce such exports to a minimum. Among several loopholes, this treaty does not address waste exports intended for recycling (see Moyers 1990, 13). Hence, thou-
- sands of tons of toxic waste are disguised as recyclable waste across several international borders. In subsequent amendments, a total ban on hazardous waste trade has been agreed upon by OECD member states (with the exception of the United States, Australia, Canada, and New Zealand).
7. At the First People of Color Environmental Leadership Summit convened in Washington, D.C., 17 guiding principles for merging civil rights and environmental activism were adopted. Prominent among these are: (1) Environmental justice affirms the sacredness of Mother Earth, ecological unity, and the interdependence of all species, and the right to be free from ecological destruction; (2) Environmental justice calls for universal protection from nuclear testing and the extraction, production and disposal of toxic/hazardous wastes and poisons that threaten the fundamental rights to clean air, land, water, and food; (3) Environmental justice considers governmental acts of environmental injustice a violation of international law, the Universal Declaration on Human Rights, and the United Nations Convention on Genocide; (4) Environmental justice opposes the destructive operations of MNCs; and (5) Environmental justice opposes military occupation, repression and exploitation of lands, peoples and cultures and other life forms. For all the Principles, see United Church of Christ Commission for Racial Justice, collection of papers presented at the National People of Color Environmental Summit, Washington, D.C., (October 24-27), 1991.
8. List of countries is in Appendix. Countries are included based on the classification of developing countries by UNDP and the World Bank.
9. See the Trade Environment Database (TED) at: <http://www.american.edu/projects/mandala/TED/NIGERIA.HTML>
10. As indicated by Orage (1998, 45-6), the objective of MOSOP as a mass movement was to serve as a vehicle to achieve the aims and objectives of the OBR which includes, but not limited to: (1) Political control of Ogoni affairs by Ogoni people; (2) Control and use of a fair proportion of Ogoni economic resources for Ogoni development; and (3) Protection of Ogoni environment and ecology from further degradation.
11. See the U.S.G.A.O, 1993. Hazardous Waste Exports: Data Quality and Collection Problems Weaken EPA Enforcement Activities.

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Appendix 1. List of countries in the correlation analysis

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|-----------------------|------------------------|----------------------|------------------------|
| 1. Afghanistan | 2. Algeria | 3. Angola | 4. Antigua/Barbuda |
| 5. Argentina | 6. Bahamas | 7. Bahrain | 8. Bangladesh |
| 9. Barbados | 10. Belize | 11. Benin | 12. Bhutan |
| 13. Bolivia | 14. Botswana | 15. Brazil | 16. Brunnei Darussalem |
| 17. Burkina Faso | 18. Burundi | 19. Cambodia | 20. Cameroon |
| 21. Cape Verde | 22. Central Africa Rep | 23. Chad | 24. Chile |
| 25. China | 26. Colombia | 27. Comoros | 28. Congo |
| 29. Costa Rica | 30. Cote d'Ivoire | 31. Cuba | 32. Dem. Rep. of Korea |
| 33. Djibuti | 34. Dominica | 35. Dominican Rep. | 36. Ecuador |
| 37. Egypt | 38. El Savador | 39. Eq. Guinea | 40. Ethiopia |
| 41. Fiji | 42. Gabon | 43. Gambia | 44. Ghana |
| 45. Greneda | 46. Guatemala | 47. Guinea | 48. Guinea Bissau |
| 49. Guyana | 50. Haiti | 51. Honduras | 52. Hong Kong |
| 53. India | 54. Indonesia | 55. Iraq | 56. Iran |
| 57. Israel | 58. Jamaica | 59. Jordan | 60. Kenya |
| 61. Kuwait | 62. Lao People's Rep. | 63. Lebanon | 64. Lesotho |
| 65. Liberia | 66. Libya | 67. Madagascar | 68. Malawi |
| 69. Malaysia | 70. Maldives | 71. Mali | 72. Mauritania |
| 73. Mauritius | 74. Mexico | 75. Mongolia | 76. Morocco |
| 77. Mozambique | 78. Myanmar | 79. Namibia | 80. Nepal |
| 81. Nicaragua | 82. Niger | 83. Nigeria | 84. Oman |
| 85. Pakistan | 86. Panama | 87. Papua New Guinea | 88. Paraguay |
| 89. Peru | 90. Philippines | 91. Qatar | 92. Rep. of Korea |
| 93. Rwanda | 94. Saint Lucia | 95. Samoa | 96. Sao Tome Principe |
| 97. Saudi Arabia | 98. Senegal | 99. Seychelles | 100. Sierra Leone |
| 101. Singapore | 102. Solomon Islands | 103. Somalia | 104. South Africa |
| 105. Sri Lanka | 106. Sudan | 107. Suriname | 108. Swaziland |
| 109. Syrian Arab Rep. | 110. Thailand | 111. Togo | 112. Trinidad Tobago |
| 113. Tunisia | 114. Turkey | 115. UAE | 116. Tanzania |
| 117. Uganda | 118. Uruguay | 119. Vanuatu | 120. Venezuela |
| 121. Viet Nam | 122. Zaire | 123. Zambia | 124. Zimbabwe |