Abstract

Since 1972, companies have extracted almost two billion barrels of crude oil from the Ecuadorian Amazon (Oriente), and in the process have released billions of gallons of untreated toxic wastes and oil directly into the environment. Indigenous federations and environmental groups in Ecuador have organized in opposition to unregulated oil development, charging that contamination has caused widespread damage to both people and to the environment. Yet, faced with a weak economy and pressure from foreign creditors, the government is rapidly proceeding with plans to increase oil production. Little human rights advocacy or scientific research has been done on health effects of oil contamination in the Oriente. Exposure to crude oil and its constituents is harmful to human health, ranging from minor symptoms such as headache, nausea, and dermatitis to cancers and adverse effects on reproduction and immune response. This paper is one of the first attempts to apply the right to health and a healthy environment in assessing the human consequences of a country's development policies.

Desde 1972, varias compañías petroleras han extraído casi dos billones de barriles de petróleo crudo en el Amazonas Ecuatoriano (Oriente), durante este proceso se han liberado billones de galones de desechos tóxicos crudos y petróleo directamente en el medio ambiente. Las Federaciones indígenas y los grupos ambientales en el Ecuador se han organizado en oposición al desarrollo no regulado del petróleo, acusándole de que la contaminación ha causado un gran daño a la gente y al medio ambiente. Enfrentándose aún con una pobre economía y a la presión de los acreedores extranjeros, el gobierno está procediendo rápidamente con planes para incrementar la producción de petróleo. Poco activismo de los derechos humanos o investigación científica se ha llevado acabo acerca de los efectos a la salud por la contaminación con el petróleo en el Oriente. Exposición al petróleo crudo o sus derivados es tóxico para la salud humana, yendo desde síntomas menores tales como dolor de cabeza, náusea, y dermatitis hasta efectos adversos en la reproducción, la respuesta inmune, y los canceres. El artículo resultante es uno de los primeros intentos en aplicar el derecho a la salud y a un ambiente saludable al evaluar las consecuencias humanas de las políticas de desarrollo de un país.

Dans l'Amazonie Equadorienne (Oriente), depuis 1972, les companies pétrolières ont extrait environ deux milliards de barrils de pétrole brut. Simultanément, des milliards de gallons de déchets toxiques et de pétrole étaient rejetés dans l'environnement. Afin de lutter contre le développement incontrolé de l'exploitation des ressources pétrolières, les fédérations autochtones et les écologistes d'Equateur se sont regroupés et accusent la pollution d'avoir causé des dommages étendus dans la population et l'environnement. Cependant, dans un même temps, confronté à une économie faible et à la pression des créditeurs étrangers, le gouvernement a rapidement planifié une augmentation de la production pétrolière. Le plaidoyer en faveur des droits de l'homme et la recherche scientifique concernant les effets de la pollution due à l'exploitation du pétrole a l'Oriente n'ont guère été développés. Cette étude est une des premières tentatives d'application du droit à la santé et à un environement sain à l'évaluation des conséquences des politiques de développement d'un pays sur l'être humain.

RIGHTS VIOLATIONS IN THE ECUADORIAN AMAZON

The Human Consequences of Oil Development

Center for Economic and Social Rights

The physical environment is one of the key determinants of human health. The human cost of environmental degradation has spurred a strong international movement to link environmental protection with human rights. This trend can be seen both in growing awareness of the need for sustainable development and in the recent emergence of a new right the right to a healthy environment. The 1972 Stockholm Declaration supported the view that the environment should be protected in order to ensure established rights, such as the rights to life, health, personal security, suitable work conditions, and private property, for current as well as future generations. The International Covenant on Economic, Social and Cultural Rights (ICESCR) recognizes the right of everyone to the enjoyment of the highest attainable standard of physical and mental health. In Article 12b, ICESCR states that "steps to be taken by the States Parties to the present Covenant to achieve the full realization of this right shall include those necessary for the improvement of all aspects of environmental and industrial hygiene." This study represents one of the first attempts to apply the rights to health and to a healthy environment in assessing the human consequences of a country's development policies.

The paper provides a brief background of the economic,

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social and political aspects of oil development in Ecuador; describes the health effects of crude oil's toxic constituents; details Ecuador's failure to protect the rights to health and to a healthy environment; and assesses the human rights implications of oil production in the Oriente.

Background

The Oriente in Ecuador consists of more than 40 million hectares of tropical rainforest lying at the headwaters of the Amazon river network. The region contains one of the most diverse collections of plant and animal life in the world, including a considerable number of endangered species. According to tropical biologist Norman Myers, the area "is surely the richest biotic zone on earth and deserves to rank as a kind of global epicentre of biodiversity." The Oriente is also home to eight different indigenous peoples who have lived in the rainforest for thousands of years.

The oil boom in the Oriente

In 1967, a Texaco-Gulf consortium discovered a rich field of oil beneath the rainforest, leading to an oil boom that has permanently reshaped the region. While the state has retained dominion over all mineral rights, private companies have built and operated most of the oil infrastructure. The Oriente now houses a vast network of roads, pipelines and oil facilities. Settlers attracted by the roads and encouraged by government land policies have entered in large numbers, clearing vast regions of the rainforest and displacing indigenous inhabitants. This process has contributed to a deforestation rate of almost a million acres a year in the Oriente, one of the highest rates in Latin America.^{2,3} Half of the Oriente is currently planned for oil development, including the concessions offered in the seventh round of licensing in January 1994, which has almost doubled the amount of rainforest under development.⁴

Experts and observers have questioned the environmental soundness of practices and technologies used by Texaco and Petroecuador for oil exploration in the Oriente.⁵ Exploration for crude oil has involved thousands of miles of trail-clearing and hundreds of seismic detonations that have caused erosion of land and dispersion of wildlife. Each exploratory well that is drilled produces an average of 4,165 cubic meters of drillings wastes con-

taining a mixture of drilling muds (used as lubricants and sealants), petroleum, natural gas, and formation water from deep below the earth's surface (containing hydrocarbons, heavy metals and high concentrations of salt). These wastes are deposited into open, unlined pits called waste pits or separation ponds, from which they are either directly discharged into the environment or leach out as the pits degrade or overflow from rainwater.⁶

The major release of contaminants begins at the point of production. In a recent case brought against Texaco for contaminating the Oriente, the International Water Tribunal declared that "insufficient and at most superficial measures were taken for retaining and minimalizing spillage of oil and contaminating substances and leakages from pits" leading to "deterioration in the quality of the river water which is essential for the sustainable livelihood of the local population." Until 1992, oil operations in the Oriente produced 1.7 billion barrels of oil, 489 million barrels of formation water, and more than 355 trillion feet of cubic gas.8

As oil is extracted from the wells, it is pumped to separation stations, which separate oil from wastes comprised of formation water, oil remnants, gas, and toxic chemicals used in the extraction and separation stages.9 Every day, existing stations discharge over 4.3 million gallons of untreated toxic wastes (called produced water or toxic brine), which includes 2,100 to 4,200 gallons of oil, into waste pits. Virtually all of the wastes eventually leach from the pits into the environment. An additional 1,000 to 2,000 gallons of oil spill from the flowlines connecting the wells to the stations every two weeks.¹⁰ Oil and chemicals are spilled from leaks in tanks and storage drums. Through 1989, the Ecuadorian government had reported 30 separate spills in the main trans-Ecuadorian pipeline, involving a total of almost 17 million gallons of crude oil. This compares to the 10.8 million gallons spilled in the Exxon Valdez disaster. 11 Overall, more than 30 billion gallons of toxic wastes and crude oil have been discharged into the land and waterways of the Oriente since 1972.12

Economic, social, and cultural aspects of oil development

Oil development has failed to improve Ecuador's economic situation. While the start of the oil boom corresponded to rapid increases in per capita income and gross national product, the national debt has risen from \$200 million in 1970 to over \$12

billion today, forcing structural adjustments and cuts in social spending.¹³ The impact on the poor majority is reflected in the rising poverty rate, from under 50 percent in 1975 to 65 percent in 1992.¹⁴ Moreover, the country's overwhelming dependence on oil revenues, accounting for roughly half of the national budget, has left it extremely vulnerable to oil price fluctuations. As international prices have slumped and reserves declined, Ecuador has sought to expand production in marginal oil fields and protected natural parks. At current production rates Ecuador's reserves will be depleted within 15 years.¹⁵

A small segment of the population has disproportionately enjoyed the benefits of oil development; at the same time, few of the profits have been reinvested in the Oriente. The majority of the benefits have been captured by the elite and the military, while the urban poor, colonists and indigenous groups have almost uniformly suffered worsening conditions. Settlers drawn to the region by the promise of jobs and land now cluster in desperate and squalid oil towns, with little running water, sanitation, or basic health facilities. According to the World Bank, "field visits to the urban areas of Napo province indicate that local public service levels and coverage in the region are in a calamitous condition." A 1989 government study revealed that Shushufindi, a primary oil center that accounts for almost half of national production, lacked public sewers and provided electricity and water to only one in 500 homes. 18

The oil boom has most severely affected the indigenous population, who account for more than 40 percent of Ecuador's total population of 11 million. Eight different nations, with a total population of between 100,000 and 250,000 people, inhabit the Oriente. The Quichua and Shuar account for the majority, with the rest divided among the Huaorani, the Secoya, the Siona, the Shiwiar, the Cofan, and the Achuar. These peoples have distinct cultures and traditions that are inextricably bound to the rainforest in which they have lived for thousands of years. Their economic and spiritual existence revolves around sustainable management of rainforest resources.

Despite an international trend towards legal recognition of indigenous rights and cultures, exemplified by the United Nations' International Decade of Indigenous Peoples (1995-2005), the government of Ecuador has refused to recognize indigenous ownership of lands and instead has encouraged a stream of im-

migration by granting title to any settler who clears and cultivates land. Since the discovery of huge oil fields beneath the rainforest, almost 250,000 settlers, mostly poor campesinos, have entered the Oriente through new oil roads, displacing indigenous residents from traditional areas and creating tension and occasional open conflict. In addition, contact with outsiders and the introduction of a cash economy has undermined traditional cultures and subjected indigenous peoples to discrimination. As one of Ecuador's foremost judges has noted, "Ecuador is a country characterized by deep racism against its own indigenous people... This reality supersedes all constitutional declarations and international conventions on human rights, and there is constant discrimination and unequal application of the law." These various factors have combined to drive some indigenous nations to the point of extinction.

Health Effects of Exposure To Crude Oil

Crude oils are a mixture of 100 or more hydrocarbons, sulfur compounds, and a range of metals and salts in smaller quantities.²⁰ In addition, a variety of other toxic pollutants are typically generated during oil drilling and production operations, including drilling fluids, drilling cuts, and treatment chemicals that contain heavy metals, strong acids, and concentrated salts.²¹ These include polycylic aromatic hydrocarbon (PAH) compounds (e.g.benzo[a]pyrene) and volatile organic compounds (e.g., benzene and its derivatives), toxic and carcinogenic substances that pose a threat to human health. Crude oil and its constituents enter the human body through three primary routes: (i) skin absorption, (ii) ingestion of food and drink, and (iii) inhalation of oil on dust or soot particles.

The fat solubility of most oil constituents allows them to be absorbed into and through the skin. Repeated or prolonged skin contact with crude oil has been reported to cause skin loss, dryness, cracking, changes in skin pigmentation, hyperkeratosis, pigmented plane warts, and eczematous reactions.²² Limited evidence suggests that prolonged exposure to constituents of crude oil, such as benzo[a]pyrene and other hydrocarbons, can result in dermal neoplasms.²³

Constituents of crude oil ingested in water or food, such as PAH compounds, have been linked to adverse health effects ranging from cancers to toxic effects on reproduction and cellu-

lar development.²⁴ The United States Environmental Protection Agency (EPA) estimates that exposure to a PAH water concentration of 2.8 nanogram per liter corresponds to an upper-bound lifetime risk of cancer of one in 1 million.²⁵ This risk could be significantly increased through added skin and inhalation exposure.

Inhalation of high levels of crude oil fumes can lead to adverse effects on the nervous and respiratory systems, sometimes causing life-threatening chemical pneumonitis and other systemic effects.²⁶ In the Oriente, oil particulates have been emitted into the atmosphere from burning waste pits. These pits also contain drilling fluids with pentachlorophenols,²⁷ which when burned are a formation pathway for tetrachlorodibenzodioxins. In summary, substantial health effects from exposure to crude oil and associated toxic pollutants have been reported in the general environmental health literature.

In the Oriente, oil contamination allegedly damaged people's health, contaminated their water, and deprived them of fish, game and crops. For example, the physician-director of the largest government hospital in Coca reported a rise in child mortality believed to be associated with drinking water contamination, a result of increased population density. Other area health care providers have reported substantial apparent increases in birth defects and skin rashes. Studies and interviews cited in a report by the Natural Resources Defense Council found extremely high rates of child malnutrition in areas impacted by oil development. As Robert Kennedy Jr. noted in his visit to the region:

We met with the center's chief clinician and with the representatives of fourteen communities accounting for about 40,000 people from the Aguarico River basin. Each of them told the same story. Sick and deformed children, adults and children affected with skin rashes, headaches, dysentery and respiratory ailments, cattle dead with their stomachs rotted out, crops destroyed, animals gone from the forest and fish from the rivers and streams.³⁰

A study of health effects from oil exposure was recently published by the Ecuadorian Union of Popular Health Promoters of the Amazon (UPPSAE).³¹That study examined 1,465 people in 10 communities, of whom 1,077 resided in oil-contaminated areas and 388 were from non-contaminated areas. Those exposed to oil reported a higher occurrence of spontaneous abortion, elevated rates of fungal infection, dermatitis, headache, and nausea.

Ten percent of the oil-exposed group surveyed were currently ill.

Violations of the Right to a Healthy Environment

The recognition of a right to health dates to the Universal Declaration of Human Rights of 1948³² and its two successor International Covenants of 1966.³³However, while the right to health under the International Covenants includes a reference to environmental protection, the linkage of human rights to environmental concerns is relatively new. International treaties and national constitutions speak of rights to a "clean," "healthy," "decent," and/or "safe" environment, but no consensus yet exists as to the specific shape or meaning of such rights.

The 1972 Stockholm Declaration established a framework for this debate by recognizing that the environment is "essential to [human] well-being and to the enjoyment of basic human rights —even the right to life itself." In that Declaration, the United Nations General Assembly unanimously endorsed the principle that "man has the fundamental right to freedom, equality and adequate conditions of life, in an environment of a quality that permits a life of dignity and well-being."34As this link between human welfare and environmental quality has become increasingly clear, national legislatures and international bodies have begun to develop a new standard to protect the environment for the benefit of human health: the right to a healthy environment. This right, which should not be confused with claims to protect the environment for its own sake, now appears in international declarations, regional covenants, and virtually every constitution revised or adopted in the last 30 years. In 1990, the U.N. General Assembly passed a resolution, echoing its earlier endorsement in the Stockholm Declaration, that "all individuals are entitled to live in an environment adequate for their health and wellbeing."35A similar principle was recognized in the 1992 Rio Declaration on Environment and Development (31 I.L.M. 874 U.N. princ. 1), and in the World Charter for Nature. Regional treaties and declarations in the Americas, Africa, and Europe all recognize some form of the right to a healthy environment.³⁶

Few attempts have been made to interpret in detail the rights to health or to a healthy environment; until uniform standards have been developed, violations must be judged on the basis of a minimum set of governmental duties necessary to make these rights meaningful.

The well-documented record of unsafe and unsanitary oil industry practices in the Oriente and the ostensible evidence and likelihood of oil contamination-related health problems strongly suggest that the Ecuadorian government has failed to comply with the minimum duties associated with the right to a healthy environment: viz. (i) to take reasonable precautions to avoid contaminating the environment in a manner that threatens human health, (ii) to regulate private actors effectively to prevent such contamination, and (iii) to provide potential victims of contamination with judicial remedies, including access to information on oil development. Each of these three minimum duties is discussed below.

Direct contamination

Under international and Ecuadorian law, the government is liable for any contamination caused by the state oil company, Petroecuador, in the Oriente. Since 1992, Petroecuador has owned and controlled almost all oil production in the Oriente. For the 20 preceding years, Petroecuador was part of a consortium whose operating partner, Texaco, released roughly 30 billion gallons of toxic wastes and 17 million gallons of crude oil into the environment. During this time, Petroecuador also operated its own facilities, accounting for roughly 11 percent of total production. The record shows that the state has been involved in the bulk of past contamination in the Oriente, and is responsible for nearly all ongoing contamination.

Reasonable precautions, such as safe disposal of toxic wastes, use of water-based instead of oil-based drilling muds, reinjection of produced waters deep into the ground, proper maintenance and monitoring of the pipelines and production facilities, and spill prevention and response measures could have prevented much of the contamination and resulting health impacts.³⁷ Such measures would have added only a small percentage to overall production costs. Nevertheless, interviews with environmental and industry experts, and recent field visits to Petroecuador facilities by environmental groups, independent observers and CESR, confirm that Petroecuador still has not upgraded the equipment nor altered the environmentally dangerous practices inherited from Texaco.

Ineffective regulation

The government is responsible as well for contamination

by private companies that results from ineffective regulation, as opposed to accidents or random acts. Although Ecuador's constitution calls for legislation to ensure the right to a contamination-free environment, the government has enacted a confusing and ambiguous set of laws with weak environmental provisions.^{38,39}

Moreover, state agencies responsible for environmental protection have lacked the necessary resources, expertise, and political support to enforce their mandates. Interviews with independent industry experts, legal scholars, and environmentalists confirm the view that these agencies, in the words of one legal authority, "have functioned like silent spectators to the environmental problems of the country."⁴⁰

Ecuador's three primary laws relevant to the environmental impact of petroleum development have done little to prevent oil-related contamination. The country's first petroleum law, adopted in 1971, included a provision requiring oil companies "to prevent pollution of the water, the atmosphere, and the land," but contained no specific standards to give the law substantive content.⁴¹ This law was subsequently supplemented by a decree ordering companies "to prevent the escape and waste of hydrocarbons in order to avoid loss, damage and pollution."42 A draft of the official audit criteria for measuring Texaco's environmental record, approved by the Ecuadorian government, Texaco, and Petroecuador, reported that due to the absence of standards, "no environmental compliance was necessary until August 19th, 1982."43 This date merely refers to an amendment of the petroleum law stating that oil companies were to operate "in accordance with international practices in these matters." Specific environmental regulations for the oil industry were not passed until 1992.44

A second law, the 1976 Law of Prevention and Control of Environmental Contamination (LPCCA), has had no impact on oil operations in the Oriente. Egulations interpreting this law were not elaborated until 1989, and then only covered water quality. Moreover, neither the Ministry of Health, charged under the LPCCA with ensuring the safety of Ecuador's water supplies, nor the Interinstitutional Committee for Environmental Protection, established as an enforcement agency under the LPCCA, has taken action to address the problem of contamination in the Oriente. The American State of Prevention and Control of Prevent

The 1981 Law of Forestry and Conservation of Natural Areas and Wildlife, the third significant piece of legislation regulating oil development, was intended to protect certain areas designated as natural reserves and national parks. However, Petroecuador and private companies have circumvented the law's strict decree that natural areas must be "inalterably preserved," by interpreting the law to permit exploitation of sub-surface minerals like oil.⁴⁸ The Constitution and the Law of Hydrocarbons grant the state control over all sub-surface mineral rights within the country and leaves it to the state oil company to exploit the oil either on its own or jointly with private companies.⁴⁹ Ecuador's courts have upheld this position, allowing oil companies to construct new roads and facilities and exploit oil in all of the protected areas with known deposits. Five of the six protected areas touching the Oriente are under some form of oil development.⁵⁰

The lack of environmentally protective legislation is compounded by insufficient resources, expertise, and political support for the state environmental agencies charged with monitoring compliance with laws.⁵¹ The main environmental agency, DINAMA, answers to the Ministry of Energy and Mines, which is also responsible for planning oil development policy. Not surprisingly, DINAMA has received little official support for conservation efforts. Since 1989, DINAMA's staff has been reduced from 35 to 14, only four of whom monitor the environmental impact of oil development.⁵² According to DINAMA personnel, the agency now lacks the capacity even to review all the environmental impact statements received from oil companies, let alone to monitor compliance in the field.⁵³ To make matters worse, the current Sub-secretary for the Environment, in charge of DINAMA, disavows any environmental problems within the oil industry, and challenges the need for independent studies or further investigation of oil damages in the Oriente.⁵⁴

In 1992, the Ecuadorian Congress established a separate body, the Institute for Forestry, Natural Reserves and Wildlife (INEFAN) to manage and monitor activities in the protected areas. INEFAN has had some success in carrying out its mandate—challenging Petroecuador's illegal drilling in Cuyabeno Reserve, a protected area, and reserving a seat on its board for a representative of environmental organizations. But at the same time, INEFAN has permitted oil development in other protected areas such as Limoncocha and Yasuni National Parks. Also, staff mem-

bers report that the agency lacks adequate resources to monitor oil companies effectively,⁵⁵ and that its efforts have been hampered by the lack of government support.

Finally, Petroecuador's internal environmental unit (UPA) lacks any independent authority to monitor industry practices. Experts generally agree that the UPA exists purely to boost Petroecuador's public image: the UPA has not acted to prevent Petroecuador's frequent violations of environmental laws. ⁵⁶ In an interview with CESR and other environmental groups, UPA's current director dismissed reports of oil contamination and health problems by suggesting that the Oriente's inhabitants deliberately inflicted these harms on themselves to harass the oil companies. ⁵⁷ The government plans to abolish or significantly reduce UPA in the near future.

Lack of judicial remedies and information

The right to a healthy environment requires Ecuador to provide citizens with access both to judicial remedies and to relevant information regarding oil contamination. However, Ecuador's judicial system provides no practical means to redress environmental harms and private citizens have no standing to compel information from either state agencies or private companies.

Ecuador's tort system is inhospitable to environmental suits. 58 The civil code, relatively unchanged from laws introduced by the Spaniards in the seventeenth century, creates significant procedural barriers for potential plaintiffs. For example, courts lack jurisdiction over defendants with foreign domiciles, forcing Ecuadorian plaintiffs to sue foreign companies like Texaco outside of Ecuador.⁵⁹ Plaintiffs may not join together to bring class action environmental suits, rendering the costs to each individual plaintiff prohibitively expensive. Suits for personal damage may only be brought by those individuals directly affected; individuals may not represent a class of persons seeking compensation. 60 Also, compelled document production, an essential element of any suit against a major oil company, is extremely limited in Ecuador; plaintiffs may request only documents whose existence is known beforehand, and company refusal to produce such documents results only in a nominal fine.⁶¹ In addition, plaintiffs may not call their own expert witnesses, but instead must rely on a court-appointed expert whom they may not cross-examine

orally; 62 most Ecuadorian experts in the oil industry and environmental science are affiliated with or dependent upon either the government or oil companies. Finally, most judges are appointed by Congress for short, renewable terms, rendering them highly susceptible to political pressure, especially when dealing with an issue with broad national implications such as oil development. According to local lawyers and former judges, the corruption that accompanies such politicization has reached alarming proportions. In a speech given last year, Alejandro Ponce Martinez, a distinguished professor of law, observed that "corruption has reached absolutely unimaginable levels, judicial norms and principles lack effectiveness, and new problems facing the judicial system are avoided, hidden, not confronted or completely ignored."63 Ernesto Lopez Friere, Minister of the Tribunal of Constitional Guarantees, concurred, recently stating that "according to the Constitution, there is an independent judiciary. In reality, it is weak, inefficient, vulnerable to political and economic pressure, lacking in human and economic resources, and characterized by a high level of corruption and ill-repute."64

As an alternative to the tort system, Ecuadorian lawyers have tried to sue the government before the Tribunal of Constitutional Guarantees (TCG). However, the TCG has limited ability to influence state agencies and has demonstrated susceptibility to oil industry pressures. In October 1990, one month after holding unanimously that plans by Petroecuador and Conoco to exploit oil in the Yasuni National Park violated Article 19(2) (the right to a contamination-free environment), the TCG abruptly reversed itself without explanation. 65 A judge subsequently revealed that the reversal had come in response to foreign oil companies' threats to freeze further investments in Ecuador. Jugo Ordenez, a judge on the Constitutional Tribunal, publicly described threats made to Ecuadorian officials by foreign oil companies intent on exploiting oil within the reserves. In a case brought two years later, the TCG again found violations of Article 19(2), this time based on drilling in the Cuyabeno. 66 However, because the TCG lacks a mechanism to enforce its decisions, the government has allowed this drilling in the Cuyabeno to continue. Following 10 months with no compliance, Fundacion Natura brought another formal demand before the Tribunal, with no response yet given.67

Members of Ecuador's government have acknowledged

that victims of oil contamination cannot receive justice from domestic courts. Not surprisingly, the government's Congressional Commission on Mining Affairs has publicly approved of recent cases brought against Texaco in United States federal courts by Ecuadorian plaintiffs, stating that "the Ecuadorian judicial system does not offer sufficient guarantees of justice to the petitioners." As a judge on the TCG recently observed, "considering all the obstacles surrounding the Ecuadorian judiciary and taking into account that Amazonian peoples are among the most marginalized peoples in the country, there are no realistic possibilities to obtain a just and impartial decision in a lawsuit against Texaco [in Ecuador]." 69

People affected by oil development are also severely handicapped by the lack of available information. While Ecuador requires oil companies to provide environmental impact statements to state environmental agencies, those agencies are not obliged to make their statements public. With no legal incentive to share information, agencies and oil companies have created a wall of secrecy around their operations, under the cloak of national security. Affected communities have no access to information regarding development plans, quantity and types of chemicals used and discharged during production, or potential health hazards from exposure to oil and related toxic wastes. For example, the unprecedented two-year audit of Texaco's environmental damages, commissioned by Texaco and Petroecuador, has been withheld from private organizations.and communities in the Oriente.70 Without such basic information, people are left ignorant of potential risks and cannot participate meaningfully in public policy or hold companies accountable for their actions.

All these obstacles to judicial remedies and access to information faced by Ecuadorian citizens are significantly compounded for indigenous peoples. In addition to widespread racism in Ecuadorian politics and society, indigenous peoples are politically, culturally, and logistically removed from the centers of decision-making power.

Summary

Écuador's government has imposed significant harms on thousands of its citizens by failing to prevent, or provide remedies for, hazardous oil contamination in the Oriente. In view of this failure, even a conservative interpretation of the scope of Ecuador's legal obligations suggests that it has violated the rights to health and to a healthy environment under both international and constitutional law. The state oil company continues to place local communities at risk through irresponsible practices; environmental regulations and state protection agencies have proven incapable or unwilling to monitor oil development effectively; and the state has left potential victims of toxic contamination ignorant of the risks and without legal redress, forcing them to seek relief in courts outside of Ecuador. While Ecuador's need to exploit natural resources for economic development is acknowledged, it cannot justify these violations of human rights.

Conclusion

Human rights can play an essential role in the search for solutions to these problems in the Oriente, by mobilizing public and political pressure, and opening the possibility of legal avenues through which Ecuadorian citizens may take action against the state. However, human rights advocacy must be viewed as only one aspect of a broader struggle to protect the people and environment of the Ecuadorian Amazon.

Human rights' focus on the responsibility of state actors is less apparent today than it was 50 years ago, when sovereign states had near absolute power in the international legal system. The growing prominence of international law, and in particular free trade arrangements like the General Agreement on Trade and Tarriffs and the North American Free Trade Agreement, has shifted significant power away from states to international regulatory and financial bodies, and to multinational corporations (MNCs). MNCs now exert tremendous power over human beings; the annual revenues of individual MNCs are often greater than the gross domestic product of developing countries. For example, Texaco's annual global earnings of about \$40 billion dwarf Ecuador's \$12 billion gross domestic product. As a result, the basic human rights goal of protecting human dignity is no longer adequately served through a focus limited to states and quasi-state actors (i.e., governments-in-exile, guerrilla movements).

The problems associated with Ecuador's oil development underscore the limitations of the current human rights framework. When the Texaco-Gulf consortium first discovered oil in the Oriente, the Ecuadorian government had neither the expertise nor the resources to develop it. As a result, the government

relied wholly upon foreign companies to conduct exploration, build infrastructure, and extract the oil. Texaco has defended its technologies and practices as complying with Ecuador's environmental laws. However, placing full blame on the Ecuadorian government for failing to adopt and enforce stronger environmental regulations disregards the tremendous influence on national oil policy enjoyed by foreign companies like Texaco.

In addition, exclusive focus on Ecuador's responsibility obscures the international community's critical influence on shaping the country's oil development policies. Like many other developing countries, Ecuador is caught in a financial vise in which it must weigh the costs of any added environmental measures against the need to maximize oil revenues to repay foreign debt. In 1991, more than one-quarter of every dollar earned through exports went to repay foreign creditors. Rather than insist upon compliance with human rights or environmental norms as a condition for these enormous loans or for restructuring debt, these creditors have encouraged Ecuador's pursuit of higher oil revenues.

None of these factors can relieve Ecuador, or any sovereign state, from its fundamental obligation to protect human rights. At the same time, contribution to human rights violations in the Oriente by MNCs and the international community carries a corresponding responsibility to help resolve them.

Addressing the crisis in the Oriente should be a matter of vital interest to the entire international community. The recent Rio Conference and the World Conference on Human Rights underscore the growing importance and interdependence of human rights, environmental protection, and economic development. These concerns are joined in the debate over Ecuador's Amazon: promoting the human rights of the local population is essentially linked to protecting their environment. The outcome of the clash in the Oriente between short-sighted oil exploitation and human rights will provide a litmus test for the future direction of global development.

CESR pays tribute to the people of the Oriente, who have sparked greater awareness of the need to develop natural resources in a manner supported by local communities and consistent with human rights. We wish to thank the John D. and Catherine T. MacArthur Foundation, Ping and Carol Ferry and several other donors for their generous support. Our thanks to Lenore Azaroff, Anthony LaMontagne, Steve Kales, and Manuel Paillares for technical assistance. Special mention goes to Judith Kimerling, Adriana Fabra, Andy Ryan, Douglas Southgate, David Christiani, Debbie Loring, Matt Nimetz, Jonathan Mann, Paul Epstein, Oxfam America, Accion Ecologica, Fundacion Natura, Rainforest Action Network, Confederation of Indigenous Nationalities of Ecuador (CONAIE), Universidad Andina Simon Bolivar, Michael Ullman, Sarah Leah Whitson, Michael Eisner, and others who helped faciliate our work in Ecuador and the United States. We gratefully acknowledge the logistical assistance provided by the firm of Paul, Weiss, Rifkind, Wharton and Garrison and the Harvard Center for Population and Development Studies.

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