Environmental Conflicts and Social Movements in Postwar El Salvador

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El Salvador is the smallest and most densely populated Central American nation, and it lacks vast natural resources, unlike Brazil or Indonesia, where local fights against extractive industries influence worldwide news and even mainstream cinema. Yet, post-civil-war ecological and pollution struggles in El Salvador are relevant for environmental studies. Since the 1950s, the country has been considered one of the most deforested in Latin America and the Caribbean. Although estimates of the extent of its forests vary depending on which tree cover categories are used (Hecht and Saatchi 2007; FAO 2010), landscapes exhibit prominent levels of anthropization due to long-term agrarian and urbanization processes.[1] Moreover, Salvadorans are recovering from a devastating civil war (1980–1992), and the transition towards democracy coincided with a strict implementation of Washington Consensus guidelines such as the privatization of public services and incentives to foreign investment (Almeida 2008; Wade 2008). These factors have shaped the concerns and constituency of the Salvadoran environmental movement.

This essay characterizes environmental struggles in El Salvador from 1992 to 2014; and discusses what type of environmentalism has emerged from them.[2] The chapter begins with an account of the political and sociological changes in the last decades of Salvadoran history. Second, the essay presents an overview of post-civil-war environmental conflicts, describing issues at stake and groups participating in the mobilizations. Third, it discusses how local environmental conflicts have been the "breeding ground" of Salvadoran environmentalism. Finally, the conclusion section argues that environmentalism in El Salvador is a product of both environmental and social justice struggles and discourses.

Historical and Political Background

Salvadoran environmentalism was essentially elitist when it emerged in the mid-twentieth century. For example, "Friends of the Earth"[3] was a well-known amateur association that boasted

[1] In a 2010 assessment of land cover, agriculture and pastures covered 74 % of the country, including coffee grown under tree cover (10 %). Urban land uses accounted for 4 % (MARN 2013).

[2] Previous academic research on this topic is scarce (Navarro et al. 2007; Cartagena 2008, 2009a; 2009b; Valencia 2012). Therefore, the study relied on sources such as media accounts and NGOs reports. Methodology included archival research, interviews, case studies, and cross-case synthesis. The core of the data was gathered from Cartagena (2009a), but this paper updates those analyses to include developments from 2009 to early 2014.

[3] It is unrelated to the international homonymous network. Friends of the Earth was founded in 1946, and four decades later, in 1987, it was a founding member of the *Unión Ecológica Salvadoreña* (Salvadoran Ecological

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among its board of directors some of the largest coffee planters of the country and the owner of a leading daily newspaper, which weekly published a "Conservationist Page" in the 1950s, addressing environmental topics from a neo-Malthusian perspective (El Diario de Hoy 1955a, 1955b). In the early 1970s, some of its members and other businessmen financially and politically supported a conservationist agenda that filtered into official plans for a "System of National Parks and Biological Reserves" (Cartagena 2012).[4] But the 1970s were a decade of intense social struggles staged by labor unions, student, and peasant organizations, which coalesced into large multi-sectoral coalitions linked to emerging revolutionary organizations. A civil war erupted in 1980 as the military regime that had served the local economic elites for more than 40 years went into crisis (Almeida 2008).

Following the Peace Accords of 1992, the public sphere opened to historically excluded sectors. There was a salient surge in conflicts related to policy and investment decisions that endangered communities' welfare and natural resources, driven by grassroots groups and accompanied by a myriad of new NGOs. Meanwhile, the mobilization capacity of trade unions, peasants, and student organizations withered, along with the prominence of their traditional claims. Such changes are most evident in the countryside, where rural dwellers started to oppose large infrastructure and waste management facilities, or mining explorations. Simultaneously, struggles for agricultural wages have become rare. Pro-land reform mobilizations equally vanished in the mid-1990s, when land distribution mandated by the Peace Accords finished.

Meanwhile, a two-party system emerged from the 1994 general elections. The left-wing former revolutionary organization *Frente Farabundo Martí para la Liberación Nacional* (FMLN, Farabundo Martí National Liberation Front) became the main opposition party to *Alianza Republicana Nacionalista* (ARENA, Nationalist Republican Alliance), which ruled from 1989 to 2009 with a pro-business agenda. Environmental conflicts often reproduced this polarization, to which activists reacted. As put by one chief representative of Salvadoran environmentalism:

> We began promoting workshops for assembling bicycles, and have found ourselves most of the time quarreling in the National Assembly with right-wing conservative groups, who do not want the situation to change. (Ricardo Navarro, president of *Centro de Tecnología Apropiada,* Center of Appropriate Technology, from an unpublished interview quoted in Cartagena 2009a)

The general elections of 2009 brought a historic change. The center-left alliance headed by the FMLN took over the executive branch of the government, with Mauricio Funes as president (2009–2014). When choosing the heads of the *Ministerio de Ambiente y Recursos Naturales* (MARN, Ministry of Environment and Natural Resources), Funes appointed professionals who had a trajectory in sustainable development NGOs. That resulted in some changes in the government's approach to environmental conflicts and mobilizations.

Environmental Conflicts From 1992 to 2014

Many struggles to protect ecosystems or the environment may include social justice demands or economic objectives; while environmental values and discourses may appear in the (economic) struggles for resource access and control (Hombergh 2004). Thus, environmental conflicts comprise mobilizations fostering environmental values, as well as "resource conflicts," that is, struggles aimed to securing a natural resource base for local economies. The third section of this chapter addresses in further detail the links between conflicts and environmentalist identity.

This section draws on the analysis of 65 environmental conflicts that took place from 1992 to early 2013, which are listed in Tables 17.1 and 17.2. Some clarifications elucidate the scope of

Union, UNES; La Prensa Gráfica 1987), which became in the 1990s one of the most vocal organizations.

[4] The plans were not implemented at the time, as reflected in the belated declaration of the first national park until 1987, but it lead to the protection of the main forests that today compose the National System of Natural Protected Areas (Sistema Nacional de Áreas Naturales Protegidas).

Table 17.1 Postwar environmental conflicts until the year 2011. El Salvador

Case#	Description	Time span
1	Waste incineration: proposal to install a tire incinerator in La Unión city port	1993
2	Water rights: proposal to exploit springs in Nahulingo for water provision of Sonsonate city	1993–1994
3	Electricity production: construction of a diesel-powered facility in the outskirts of San Salvador city	1995–1998
4	Water rights: proposal to exploit spring/wells in Izalco for water provision of Sonsonate city	1995
5	Water rights: expansion of the water system in Panchimalco	1995
6	Water rights: expansion of the water system in the municipality of San Ramón, Cuscatlán	1996
7	Waste incineration: proposal for waste disposal in the metropolitan area of San Salvador	1995–1997
8	Water rights: conflict over community rights to manage public water service at rural Tacuba	1995–1997
9	River pollution and soil erosion: extraction of materials from Jiboa River, El Rosario, La Paz	1995–1997
10	Water rights: conflict over community rights to manage public water service in rural Ataco	1996
11	Water rights: installation of bottled water and soft drinks industry in Nejapa	1996–1997
12	Landfill proposal for wastes from the metropolitan area of San Salvador	1996–1997
13	Energy: propane gas (cooking gas) containers set up in La Union city port	1997
14	Tenure rights and deforestation: struggle to prevent partition of El Espino farm, San Salvador city	1991–1998
15	Water shortage: attributed to agri-business in rural San Martín	1998
16	River pollution: wastes from coffee mills dumped in rural Sonsonate, Santa Ana and Ahuachapán	1990s
17	River pollution and soil erosion: extraction of stone materials from Angue River, Metapán	1995–2000
18	Toxic waste: illegal burial of agrochemicals in rural Suchitoto	1998–2000
19	Toxic waste: agrochemicals stored in a warehouse in rural Cuisnahuat	1998–2000
20	Watercourse obstruction: construction debris dumped in El Garrobo Creek, San Salvador city	1990s–2000s
21	Waste management: open dump disposal in Santa Cruz Michapa	1990s–2000s
22	Watercourse overflow: struggles for prevention measures in the metropolitan area	1990s–2000s
23	Waste management: disposal done at Ojos de Agua District, Cojutepeque	2001
24	Air pollution: ashes from sugar mill in San Miguel city felt over university campus	2000–2002
25	Municipal sewage system proposal in Apaneca	2002
26	Toxic waste: chemicals for the cooking gas industry dumped in El Tobalón, La Paz	Early 2000s
27	River pollution and stench caused by a pig farm in San Julián, Sonsonate	2004–2005
28	Water shortage in suburban Residencial Los Chorros, Lourdes	2005
29	Water shortage in Colonia Montelimar, Olocuilta	2004–2006
30	By-pass road construction on the outskirts of Usulután city	2005–2006
31	Water rights: proposal to exploit wells in rural Ishuatán to provide water to Cuisnahuat, Sonsonate	2005–2006
32	Water rights: expansion of the water system in Colonia Buena Vista, Ahuachapán	2005–2006
33	Landfill construction: design flaws and pollution at waste facility in rural El Carmen, La Union	2006
34	Tenure rights: conflict over land property at site hit by the 2001 earthquake, Santa Tecla city	2001–2007
35	Construction of beltway (“Anillo Periférico”) through the metropolitan area	2002–2007

Table 17.1 (continued)

Case#	Description	Time span
36	Gold mining explorations in eastern municipalities of department of Chalatenango	2005–2007
37	Landfill proposal for waste disposal at San Isidro, Cabañas	2005–2007
38	Damages to coral reef Los Cóbanos due to beach resort expansion, in Acajutla	2007
39	Landfill proposal for disposal of waste at the Cutumay Camones District of Santa Ana	2007
40	Toxic waste: agrochemical leakage in an abandoned warehouse, city of San Miguel	1999–2011
41	Tenure rights: legal dispute over land of rural settlement *Santa Marta,* Cabañas	1998–2011

Dates refer to a time span for which it was possible to document complaints, petitions, protests, or other public collective actions

Table 17.2 Ongoing environmental conflicts circa 2012. El Salvador

Case#	Description	Start year
42	Floods caused by dam *15 de Septiembre:* struggles for compensation and prevention measures	1990s
43	Shortage of water in six municipalities of the metropolitan area of San Salvador	1990s
44	Conservation: community challenges to restrictions in El Impossible National Park	1990s
45	Deforestation of Cordillera del Bálsamo, as result of urban sprawl in the metropolitan area	1994
46	Beach resort and land tenure: proposal for urbanization at Garita Palmera, Ahuachapán	1995
47	Hydroelectric dam El Cimarron: proposal for taking water from Lempa River, Chalatenango	1997
48	Deforestation of El Espino coffee farm: real estate projects and highway construction	1999
49	Hydroelectric dam El Chaparral: proposal for dam on Torola River, San Miguel	2000
50	Tenure rights: regularization of precarious urban settlements on the railway sides in Santa Ana	2001
51	Landfill construction and operation in Salinas de Ayacachapa, Sonsonate	2002
52	Tenure rights: regularization of precarious urban settlements on the railway sides in San Salvador	2003
53	Geothermal energy: pollution attributed to geothermal plant in Berlín, Usulután	2004
54	Gold mining explorations in eastern municipalities of the department of Cabañas	2005
55	Toxic waste: lead pollution from a car battery factory, in San Juan Opico	2005
56	Tenure rights: proposal to relocate precarious urban settlements in Antiguo Cuscatlán	2006
57	Water rights: crisis of the municipal public water system of rural Tacuba	2006
58	Power plants: proposal to build a power-facilities using coal or natural gas at city port of La Union	2007
59	Mina San Sebastián: pollution from an abandoned mine, rural Santa Rosa de Lima	2008
60	Sugarcane: pollution of air and water bodies in departments La Paz and Usulután	2008
61	Conservation: local inhabitants demanding permits for shrimp farming in Jiquilisco's mangroves	2010
62	Landfill construction in Las Chinamas, outskirts of Ahuachapán city	2010
63	Landfill construction in El Zompopo District, rural Texistepeque	2011
64	Landfill redesign proposal in Melara District, rural La Libertad	2011
65	Deforestation in Mejicanos for building a megastore	2011

Dates refer to beginning of complaints, petitions, protests, and other public collective actions. Though these may have faded away in some cases, concerns remain among local inhabitants

this sample. First, conflicts that did not evolve into public debates and collective action were not included in this study. Thus, the following analysis comprises cases that prompted decisions from either local or national authorities, as a result of denunciations in the media, public petitions, rallies, or street protests.[5] Second, the list focuses on conflicts triggered by threats or risks to localized resources or ecosystems, as the aim of this section is to point out local considerations behind environmental mobilization. Thus, most conflicts challenged decisions or interventions that had local impacts. In 48 of the 65 cases, a single municipality[6] was affected by direct impacts or risks. An increase in the scale of intervention correlates to uncertainty about the number of municipalities involved. Most cases appeared not to reach farther than five neighboring municipalities. In the remaining cases, the extent of impacts is disputable.

The Salvadoran environmental movement reflects the atomization of environmental conflicts. Most struggles have been local driven by rural or urban grassroots groups, in alliance with professional NGOs that address environment, development or human rights issues. These allies have provided legal advice, knowledge, media contacts, financial, and logistical resources (Almeida and Stearns 1998). Yet, the Salvadoran environmental organizations lack an articulated nationwide social base, or a large number of activists and sympathizers to mobilize in solidarity with single local struggles.

Environmental NGOs have addressed the latter vacuum channeling funding to forge regional or national coalitions among grassroots groups; but those networks have a tendency to be short lived. For instance, the *Red de Ambientalistas en Acción* (Network of Environmentalists in Action) engaged rural communities of the central and western regions; it was active through the mid-2000s, but fell into inactivity afterwards. The *Asociación de Comunidades Afectadas por el Anillo Periférico y Bypass* (Association of Communities Affected by Beltway and Bypass Projects) and *Movimiento Nacional Anti-represas* (National Anti-dam Movement) experienced a similar fate in the early and mid-2000s, respectively. The only active networks 5 years after their launching are the *Mesa Nacional Frente a la Minería Metálica* (National Roundtable against Metallic Mining, known as *Mesa Nacional*) and the *Foro Nacional para la Defensa, Derecho y Sustentabilidad del Agua* (National Forum for Water Defense, Rights, and Sustainability). These networks survive because of strong involvement of professional NGOs.

Triggers of Citizens Concern

Since the 1980s, vast national transformations reshaped investment priorities, which in turn caused most decisions, actions, and proposals that sparked environmental struggles. Among those transformations are a declining share of agriculture in GDP and exports, urbanization, and infrastructure expansion (Cartagena 2009a). Table 17.3 shows the frequency of projects and economic activities that triggered the 65 conflicts examined. Unsurprisingly given the decline in agriculture, agricultural activities (cases # 15, 60), agro-industry (# 16, 24), and animal raising (#27) seldom led to conflicts or did so indirectly, as exemplified by unsafe disposal of unused pesticides (# 18, 19, 40). Also foreseeable due to the limited extension of officially protected conservation areas[7], restrictions imposed to local in-

[5] The sample is a selection from a larger list of cases identified in bulletins, reports, memos, newspapers, and other documents kept in environmental NGOs archives and repositories, as well as personally interviewing activists (Cartagena 2009a). Thus, the sample may underestimate the occurrence of conflicts of little interest to media and environmental groups.

[6] The country is divided into 262 municipalities, each managed by a mayor and city council elected every 3 years. Proactively or reactively, they confront environmental issues for they must provide waste collection and management, construction permits and other relevant services. There is an intermediate division into 14 departments, yet their appointed governors have a limited influence on environmental matters.

[7] By late 2007, they comprised 0.5% of the country (Cartagena 2009a).

Table 17.3 Environmental conflicts prompted by economic activities and controversial projects. El Salvador, from 1992 to 2012

Type of project/economic activity	Count	% ($n=65$)
Conservation of natural areas (restrictions on the local inhabitants)	*2*	*3.1*
Public water systems	*12*	*18.5*
Expansion plans for water systems	7	10.8
Failure of public service	5	7.7
Collection and disposal of postconsumer waste[a]	*11*	*16.9*
Municipal landfill/dumping sites	10	15.4
Municipal sewage system	1	1.5
Urban expansion and urban land issues	*12*	*18.5*
Precarious urban settlements/eviction threats	3	4.6
Urbanization and construction	7	10.8
Road construction	2	3.1
Energy generation and distribution	*10*	*15.4*
Hydroelectric and geothermal	4	6.2
Thermal (diesel, carbon, gas) generation	2	3.1
Waste incineration (municipal waste, tires)	2	3.1
Storage and distribution of propane gas	2	3.1
Farming and rural settlements	*7*	*10.8*
Rural land tenure issues (agriculture and settlements)	1	1.5
Commercial agriculture	2	3.1
Farms (animal husbandry)	1	1.5
Disposal and storage of agrochemicals	3	4.6
Mining and quarrying	*5*	*7.7*
Exploration and mining (gold and silver)	3	4.6
Extraction of non-metallic materials	2	3.1
Industry and agro-industry (excluding energy)	*4*	*6.2*
Agro-industry	2	3.1
Other industries	2	3.1
Tourism and/or ecotourism	*2*	3.1
Hotels and other tourism infrastructure	1	1.5
Real estate development in coastal areas	1	1.5
Total	*65*	*100*

[a] Waste incineration for energy generation is excluded

habitants rarely sparked high-profile opposition (# 44, 61)[8].

Struggles mainly rejected four types of projects or situations: (a) public water systems expansion or failure, (b) urban expansion and urban land issues, (c) energy generation and distribution, and (d) collection and disposal of postconsumer waste.

Public water systems

The operation of public water services has been a leading cause of conflicts, divided in three types. First, rejection of projects that wanted to use a source already serving a community, in order to supply water to other settlements. Citizens feared that the new project would over-exploit the resource (# 2, 4, 5, 6, 31, 32). Second, rural communities reacted to a precarious service trying to take over the management of local water sources,

[8] Low-public-profile conflicts were omitted, although all protected areas face hunting, firewood extraction, crops, or human settlements. For instance, the Montecristo National Park is excluded from the sample but conflicts are latent. Over a 100 families inhabit the park without security of tenure (Cartagena 2012).

even by force (# 8, 10, 57). Third, protests to demand solutions to water scarcity in urban areas, which could linger for weeks during the dry season (# 15, 28, 29, 43).

Urban expansion and urban land issues

Land-use change in urban areas or land tenure conflicts for urban use accounted for ten cases in the Metropolitan Area of San Salvador (AMSS, Área Metropolitana de San Salvador) and two more cases in inner cities.[9] Land tenure conflicts evolved around informal settlements on public lands (# 30, 50), long-established settlements of *colonos*[10] in private coffee farms transformed to urban use (# 14, 56), and a contested memorial park for victims of the January 2001 earthquake (# 34). Deforestation was a salient trigger for conflict in four cases, comprising clearance of shaded coffee[11] farms (#14, 45, 48) and of downtown tree remnants (#65). In San Salvador, two conflicts concerned flood risks: one related to land use changes (#22), another to unsafe disposal of construction debris (#20). Finally, highway expansion/construction accounted for two cases (#30, 35). Notice that conflicts take place in private and public (state and municipal) land.

Energy generation and distribution

In the early postwar years, environmental organizations successfully blocked two waste incinerator proposals (#1, 7). They also contested but could not stop a diesel-powered facility (#3) and a propane gas storage farm (#13). Since the late 1990s, energy disputes include concern for pollution from a geothermal plant (#53), new proposals for thermal facilities (#58), and hydropower (#42, 47, 49). An early-1980s hydroelectric dam became a visible disaster threat (#42). In this case, the reservoir's water level approached safety limits, discharges occurred without enough warning time and evacuation previsions, as during Hurricane Mitch (1998). This has resulted in human casualties and extensive loss of crops, livestock, and homes in the lower Lempa River basin. During the 1990s, two dams were designed and challenged (#47, 49) on the grounds of population displacement and river deviation, respectively.

Collection and disposal of postconsumer waste

Almost a fifth of conflicts related to pollution or pollution risks resulting from waste management issues elicited by municipal landfills, dumping sites or incineration proposals. Ordinary (municipal) waste disposal spurred ten conflicts. In two conflicts, communities fought municipalities that discarded waste in open dumps (#21, 23), forbidden by the 1998 Environment Law. Afterwards, local governments preferred landfill construction, an option shunned by citizens. Seven cases of public opposition emerged, resulting in two halted projects (#37, 39) and one closed by MARN (#33).

Conflicts related to waste management amount to almost a third of all cases, comprising municipal services, energy utilities, mining, industry and agro-industry, agriculture, and construction. Table 17.4 presents five types of waste management issues (not economic activities) involving ordinary, special, and hazardous wastes.

Hazardous waste disposal led to six cases (Table 17.4), including four milestone examples of advances in law enforcement and problem-solving capacities by state institutions. In 1998, a trader company discarded dozens of agrochemicals drums by burying them in an open field or a rural community (#18). When discovered, the drums were taken to a warehouse in another municipality, resulting in a new conflict with its own dynamics (#19). In 1999, an abandoned warehouse stored dozens of drums leaking agrochemicals (#40), in the city of San Miguel. During 2000, three people died after industrial chemicals were dumped on the sides of a country road (# 26). In 2007, the Ministry of Health shut a car battery factory, after blood samples taken from

[9] This account excludes case #46 caused by tourist and real estate interests in a rural coastal community.

[10] Agrarian labor precariously housed in latifundia with the right to cultivate a small area for self-subsistence. *Colonos'* descendants still live in estates that became urban land or national parks.

[11] Coffee plantations grown under the shade of large trees are valued as part of the country's forests, because they have strategic roles for biodiversity protection and climate change mitigation (Hecht and Saatchi 2007).

Table 17.4 Environmental conflicts prompted by waste management. El Salvador, from 1992 to 2012

Type of project/activity	Count	% (n=65)
Municipal landfills/dumping sites	10	15.4
Incineration proposals (municipal waste, tires)	2	3.1
Municipal sewage system	1	1.5
Hazardous/toxic wastes (chemicals, lead pollution)	6	9.2
Disposal of construction debris	1	1.5
Total	20	30.8

surrounding residents revealed high lead levels (#55). The four cases were brought to trial and, although some suspects were declared innocent, the practice of toxic disposal in open fields was largely eliminated. Meanwhile, the government stepped up for proper mitigation. MARN shipped the first set of toxic drums (#18, 19) to the Netherlands for safe destruction, in 2002. Then, it paid for the incineration of the second set of drums (#40) in a cement factory operating in the country, in 2010. That same year, MARN assessed the presence of lead particles in soils and homes near the old batteries factory (#55), and began a decontamination program that continues with community monitoring.

Ecosystem Services and Natural Resources at Stake

The variegated issues and arguments raised in environmental conflicts may be classified according to types of ecosystem functions/services damaged or threaten in each situation (Millennium Ecosystem Assessment 2003). Yet, Salvadoran grassroots groups seldom expressed concerns in that academic type of vocabulary, but as damages or risks for discrete goods and natural resources (Cartagena 2009a). Table 17.5 classifies environmental concerns conjoining the academic and popular languages.

As stated in Table 17.5, three quarters of struggles showed concerns for *provisioning services,* that is, primary goods provided by ecosystems

Table 17.5 Natural resources at risk and associated ecosystem services, according to mobilized grassroots groups' concerns. El Salvador, from 1992 to 2012. (Classification of ecosystem services based on Millennium Ecosystem Assessment 2003, and Gómez-Baggethun and de Groot 2007)

Resources and ecosystem services involved	Count	% (n=65)
Functions or provision services	*48*	*74*
Water supply (provision services)	38	58
Crops/animals (provision services)	16	25
Fisheries and aquaculture (provision services)	8	12
Regulating functions or services	*37*	*57*
Water quality (regulating services)	18	28
Air quality (regulating services)	14	22
Flood control (regulating services)	7	11
Substrate services	*18*	*28*
Land for settlements and agriculture (substrate services)	18	28
Functions of habitat for flora and fauna	*18*	*28*
Rivers and lakes (habitat for flora and fauna)	9	14
Forests, mountains, tree cover (habitat for flora and fauna)	9	14
Cultural services	*12*	*19*
Rivers (cultural services)	6	9
Forests, mountains, tree cover (cultural services)	5	8
Marine and coastal resources (cultural services)	3	5

such as water sources, crops, livestock, and firewood. Citizens also feared the impacts of pollution and deforestation on issues such as air quality, water quality and availability, pests and local climate. These concerns account for damages and risks to *regulating services,* that is, the water cycle, water and air purification, microclimate regulation, or pest control. People also contested threats to land rights resulting from tenure conflicts or evictions triggered by large infrastructure projects, such as roadways, freeways, and dams. These situations compromised *substrate services,* which are suitable places for people to locate settlements, crops, and livestock.[12]

Concerns about risks to wildlife or natural environments—that is, risks for *habitat services*—showed up in struggles against deforestation, pollution of rivers, or damage to coral reefs. In a lesser proportion, local grassroots groups also worried about losing *cultural services,* meaning benefits attached to ecosystems, such as recreational, spiritual, or aesthetic experiences. Such conflicts usually referred to rivers and coastal resources. The total number of conflicts involving water—provision, regulating, cultural and habitat services—amounts to 44 (68%). Such a trend reconfirms severe institutional failures in water management, and increased public awareness about the country's limited and polluted water resources.

Citizens also expressed anguish about environment changes that do not fit into the resources/system classification of concerns in Table 17.5. They listed conditions that may affect the quality of the living environment, such as noise, pollution and odors; or the emergence of risks caused by new infrastructure or interventions. Examples are a neighborhood corner transformed into a crossing point of high-speed lanes (#35), or a pleasant village where life is disturbed by trucks taking garbage to a landfill (#51). At least 17 conflicts (26%) explicitly displayed this type of concern.

[12] Substrate services are not considered in the Millennium Ecosystem Assessment (2003) but in Gómez-Baggethun and de Groot (2007).

Social Origins of Grassroots Mobilizations

The social characteristics of those groups taking part in collective action reflect on their territorial provenance, economic activities and income source, gender, etc. The names of towns or communities which issued complaints are known for most cases; accordingly, it was possible to determine that most of of the conflicts emerged in rural communities or territories. However, available records—found in media and NGO reports—provide meager information about the locality's income source or livelihood base to assess social class. Data about women's participation was even less reliable.[13]

Table 17.6 summarizes references to the geographic origins of mobilizations (urban or rural), People from rural municipalities and rural peripheries/districts (peasants, cattle raisers) engaged in 71% of conflicts, while urban dwellers from San Salvador and urban municipalities showed up in 40% of cases (see Table 17.6 notes for definitions).

Based on expressed concerns and communities of origin, engaged rural and urban citizens do not come from middle or upper classes. Rather, most participants come from the poor, as affirmed by one informant:

> The population that gives the fight is mainly the vulnerable population, the [directly] affected… there is no middle class that constitutes a [social] movement. Here, those who struggle against NAFTA, against the Plan Puebla Panama are rural people, not the professionals from universities; there is no middle-class movement. (Cecilia Olivares, representative of the Salvadoran Ecological Union, from an unpublished interview quoted in Cartagena 2009a)

[13] Women were accounted only when they were individual leaders (#6, 8, 56) or when women's organizations openly engaged in mobilizations (#53, 54). Such information could indicate underreporting, since rural and urban women have taken leadership and public roles in their communities during the postwar years (Herrera 2008).

Table 17.6 Environmental conflicts by territory of residence of mobilized population. El Salvador, from 1992 to 2012

Type of territory[a]	Count	% ($n=65$)
San Salvador Metropolitan Area (AMSS)	*16*	*25*
Popular urban sectors	8	12
Middle-class urban sectors	6	9
Residents of the rural periphery	7	11
Urban municipalities (except AMSS)	*13*	*20*
Main town mobilizations	10	15
Rural districts mobilizations	5	8
High-density rural municipalities	*15*	*23*
Main town mobilizations	8	12
Rural mobilizations	3	5
No data available for residence or occupation	4	6
Low-density rural municipalities	*19*	*29*
Urban mobilizations	18	28
Rural mobilizations	3	5
Urban environmental activism without local or grassroots mobilization	*2*	*3*
Total	*65*	*100*

[a] AMSS includes 14 municipalities, but some conflicts involved adjacent municipalities
Urban municipalities defined as those where 50% or more of its inhabitants lived in urban areas, according to the 2007 Census Threshold between low- and high-density rural municipalities defined at 150 inhabitants per km^2 Rural mobilizations comprise actions by people living in districts (or *cantones*) outside the main municipality "town" (*casco urbano*), or population depending on agricultural livelihoods, fishing, and animal husbandry Urban and main town mobilizations include actions by people living in the main municipality "town" (*casco urbano*)

A Typology of Involved Organizations

There are two main types of civil society organizations engaged in environmental conflicts, which differ in their territorial reach, resources, and relationship to stakeholders. First, there are groups representing local communities or territories with a direct stake in the conflict's outcome (type I); secondly, those that join the struggle because of their scope or mission statement, that is, organizations with headquarters in the capital city (type II).

The first type can be subdivided into two subtypes. On the one hand, grassroots or civic organizations that represent small communities, such as community development associations (ADESCO), small cooperatives or ad hoc committees organized to coordinate collective action (type I-a). On the other hand, organizations and institutions that foster local interests, but are not limited to the realm of the small community. These usually have some paid employees; sometimes they have a thematic specialization derived from their mission. Examples are municipal governments and locally rooted NGOs (type I-b). Table 17.7 summarizes the participation frequency of all three types.

Type I-a organizations took part in almost all cases (59 of 65), and type I-b organizations joined half the cases, which is less than the type II involvement. The latter participated in 77% of all 65 cases. If only conflicts or struggles outside of the metropolitan area are counted (49 cases), these capital-city-based organizations acted in 34 cases, that is 69% of this subsample. Table 17.7 endorses two empirical findings. First, small urban and rural communities have a salient role in environmental conflicts and environmental movements. Second, most struggles have taken the form of coalitions between local grassroots groups and organizations with greater resources acting as allies (see Almeida and Stearns 1998 for other similar cases in Asia).

Table 17.7 Environmental conflicts by type of grouping mobilized. El Salvador, from 1992 to 2012

	Count	% ($n=65$)
Type I-a: Grassroots (community/neighborhood) organizations	59	91
Type I-b: Other local organizations	30	46
Type II: Extra-local organizations	50	77

The top local allies (type I-b) backing up grassroots groups were municipal governments (23 % of conflicts); their support usually involves local activists and leadership from the mayor's own party[14] (Almeida 2010). Parties show different participation patterns, FMLN backed 12 out of 15 cases with municipal involvement. The latter trend indicates differences in Salvadoran political culture, since right-wing followers generally reject social protests, while leftist activists usually embrace environmental causes. The other relevant local allies are Catholic Church groups or representatives (11 %)[15]. Non-Catholic faith-based organizations have a less frequent role. The main extra-local allies (type II) were environmental organizations with headquarters in the capital city, as they turned up in 63 % of all conflicts. Human rights or development NGOs had a much lesser involvement. Meanwhile, unions and students[16] acting as allies account for just one and three cases, respectively.

Governmental Changes and Environment Conflicts Since 2009

The center-left government that took office in 2009 developed a new stance on many environmental conflicts. Of the two large hydropower projects inherited from the ARENA era, the new government ordered to fully redesign the *El Cimarrón* project (#47), but refused to stop *El Chaparral* (#49), since construction was underway. In the first case, there was no final decision as to early 2013. In *El Chaparral,* the grassroots movement changed its main objective, from stopping the project to focus on a "fair bargaining" (Valencia 2012).[17]

Concerning anti-mining struggles, activists hoped that the Funes government would support a definite ban on metallic mining. Instead, in 2012, MARN proposed a law to the National Assembly, which would temporarily suspend mining permits until the national capacities to regulate and control mining activities were improved. Meanwhile, the FMLN hesitated to support its own bill to ban metallic mining, proposed in 2006. MARN addressed other conflict-generating situations, especially major pollution cases (#40, 59, 55, 60). Also, it implemented a program to support municipalities in constructing landfills with new standards, which prompted local opposition (#63, 64). Unlike before 2009, those struggles were not supported by the most vocal environmental organizations in the postwar years, the *Unión Ecológica Salvadoreña* (UNES, Salvadoran Ecological Union) or the *Centro de Tecnología Apropiada* (CESTA, Center of Appropriate Technology). Both NGOs, kept their critical stance on some governmental policies, such as gold mining and hydroelectric dams, but at the same time avoided to stage conflictual mobilizations that would suggest they were siding with the right-wing opposition to Funess gov-

[14] Until 2012, the winning party in municipal elections kept the mayor seat and 100 % of the council seats. Thus, local government and political party completely overlapped.

[15] Catholic Church representatives are considered here as local instead of extra-local actor, since diocesan bodies engaged in conflicts recruited their members among the local population. Even bishops have roots in the territories.

[16] University students supported the *El Espino* case (#14) and the anti-mining campaign (#54, 59). They also carried on a struggle against pollution in San Miguel (#24).

[17] After a harsh storm showed compromising geological risks, construction of *El Chaparral* halted in May 2010 and had not resumed by May 2015.

ernment. Thus, support for local communities opposing the new landfills came from the *Coordinadora Nacional de Medio Ambiente* (CNMA, National Coordination for the Environment), an organization hardly known before 2010. The CNMA is not linked to leading environmental organizations or the FMLN, instead it drew support from ARENA deputies (Morán 2011). Moreover, some environmentalists affirm that the CNMA gets funding from a private monopoly, whose business interests benefit when blocking the construction of landfills (Flores 2011; Consejo Social 2011).

From Environmental Conflicts to Environmentalism

Many environmental struggles in Latin America are carried out by groups and individuals who do not see themselves as environmentalists (Martínez-Alier 1995; Folchi 2001; Fontaine 2003). Accordingly, the *environmental conflicts* approach that informed the previous analysis does not presuppose an environmentalist identity as a driver for collective action. However, at least in El Salvador, such conflicts have been the "breeding ground" of a sort of new social movement we could call environmentalism.

This recent Salvadoran environmentalism seems to be of a hybrid type, because it reacts to both classic environmentalist discourses and as well as social justice issues. Notice in Table 17.6 that damages or risks for regulating ecosystem services appear in 57% of the cases. When summed up, concerns for regulating, habitat or cultural ecosystem services account for 41 cases (63%); including pollution, clearance of forests and other natural areas. Such topics echo the 1960s archetypal environmentalism of industrialized countries. At the same time, 55 (85%) mobilizations contested threats or risks for provisioning or substrate ecosystem services , that is, community livelihoods and assets. Thus, economic distribution and social justice issues are exceedingly relevant, as in depictions of the *environmentalism of the poor* (Martínez-Alier 1995, 2002) and *eco-populism* (Szasz 1994).

Both types of concerns are evident in water conflicts. Thus, mobilizations stirred by contamination expose a discourse about protecting water. Others exploded when rural inhabitants learned of plans to build water systems using local springs, not to serve the local communities lacking access to water, but to "export" it to cities or other municipalities. In these cases, discourses showed both social justice issues and worries about the over-exploitation of local water resources (cases #2, 6, 31).

However, water conflicts also demonstrate that the link from environmental conflicts to environmentalism is not a direct one. For example, protests triggered by water shortages in urban areas do not elaborate a discourse about ecological conditions that affect water provision. Hence, for struggles around natural resources to be considered an expression of environmentalism, values underlying mobilizations should relate to ideas such as sustainable use of limited resources, or notions of human–nature interdependence (Folchi 2001). If based on these criteria, the only environmental struggles in El Salvador disconnected from environmentalism would be those sparked exclusively by water scarcity, land tenure issues, or restrictions resulting from conservation of ecosystems. Even in these cases though, engaged actors may not be totally unaware of ideas about sustainable use of resources.

Small and Large Environmental Coalitions

Most environmental struggles in El Salvador develop as coalitions between local groups that usually show no explicit environmentalist identity and those that do. The latter may be recognized by their names or stated objectives, as the talk about protecting nature or fighting anthropogenic causes of environmental degradation.[18]

[18] However, other groups may adhere to values of environmental protection and sustainability, but do not necessarily define their identity or mission accordingly.

Table 17.8 Participation of environmental organizations in environmental conflicts, from 1992 to 2012

	Count	% ($n=65$)
Total cases involving environmental organizations	*44*	*68*
Grassroots community based	10	15
Local environmental NGOs	7	11
Environmental NGOs with national scope	41	63
Total cases without involvement of environmentalists	*21*	*32*

Consistent with Table 17.8, community or grassroots groups who call themselves environmentalists[19] turn up rather infrequently. Possibly, the social identities that unite or give meaning to local citizens in these struggles could be more traditional; they may think of themselves as peasants, communities, *the poor,* or *the people*. However, grassroots organizations often look for allies among environmentalists. As Table 17.8 shows, environmental organizations from the capital city joined two thirds of all cases, and they tend to be the same organizations. In 32 out of the 44 cases with environmentalist involvement, either UNES or CESTA joined.[20] These NGOs represent a strand of the environmental social justice movement critical of capitalism, named *counter-hegemonic* (Gudynas 1992) or *critical ecology* (see Chap. 18 in this volume).

Interestingly, one third of the conflicts evolved without engagement of any environmental organization (21 of 65 cases). Many were prompted by water system failures or plans that caused fear of over-exploitation of water sources (#6, 8, 10, 11, 15, 28, 29, 32, 43). Others evolved around land tenure conflicts (#34, 41, 50, 52, 56), flooding risks (20, 22, 42), pollution (#3, 19, 24), and restrictions to livelihoods caused by conservation measures (#61). Most were strictly local conflicts around *provisioning ecosystem services*. Thus, not every grassroots group facing a threat to its natural resource base looked for allies among environmentalists.[21] On other hand, most cases (61 of 65) account for the participation of entities different or additional to environmentalists, which confirms that a stated environmentalist identity is not a precondition for involvement.

By contrast, environmentalists rarely engage in struggles if not allied to grassroots organizations. Organizations such as UNES and CESTA seem to fear that campaigns lacking local mobilization may have insufficient legitimacy, and low chances of success. Some activists think they should not engage in campaigns "if communities do not mobilize first to defend their own resources" (Raquel Cruz, representative of the Center of Appropriate Technology, from an unpublished interview quoted in Cartagena 2009a). Accordingly, the sample only shows two cases of activism without local grassroots support: pollution from an abandoned gold mine (#59) and the deforestation of *El Espino* farm after 1998 (#48). The former may be explained because local villagers are now engaged in artisanal mining[22], while the latter will be addressed in next section.

[19] Using names like "ecologic group," "environmental committee," or "environmental monitoring committee" (*Grupo ecológico, comité ambiental, comité de monitoreo ambiental, respectively*).

[20] Counted cases refer to having a salient role in the coalition, but both UNES and CESTA have public statements on a larger number of conflicts, including many not listed in the sample.

[21] Interestingly, one sustainable development NGO supported communities challenging strict conservation measures in *El Imposible* National Park (Martínez 1997).

[22] Insufficient information in four conflicts (#3, 7, 11, and 38) does not enable to confirm or rule out local grassroots participation.

Two Landmark Coalitions: "El Espino" and Anti-Mining Mobilizations

Some conflicts are particularly suited to trigger the convergence of environmentalism with other social movements because of the wide range of concerns they prompt. The top post-civil-war alliances of this type are the 1990s campaign to prevent the urbanization of *Finca El Espino* (#14) and the ongoing campaign against gold mining projects (# 36, 54, 59).

El Espino is the largest shaded coffee plantation adjacent to prime metropolitan real estate[23]. The 1980 agrarian reform seized the property and organized workers in the *El Espino* Cooperative. A few years later, a court took part of the Cooperative's property and returned it to the former landowners, who planned to urbanize it at a high price (Martínez 2003). Struggles to prevent the clearance of *El Espino* happened in two stages, with actors and objectives changing to the point that it can be considered two different conflicts (#14 from 1991 to 1998, and #48 since 1999).

In the first stage, the court's decision against the tenure rights of the cooperative became politically contested. Moreover, the peace accords strengthened the *Comité de Defensa del Espino* (*El Espino* Defense Committee), which amalgamated unions, peasants, cooperative federations, diverse religious groups, human rights NGOs, universities, political entities (including the FMLN), students, and environmental organizations. For many coalition members, before environmental concerns, the issue at stake was a class confrontation between the cooperative and the traditional elite. However, environmentalists framed a discourse that raised environmental awareness in the public eye (Martínez 2003).

The second stage started in 1998, when the Cooperative's board of directors entered into an agreement with the government and landowners, breaking the alliance. Afterwards, environmentalists tried to stop development works. Yet, construction of exclusive shopping centers, apartment buildings, and town-houses continues still, with nefarious metropolitan consequences—such as increased flooding dangers during the rainy season (#22). Few activists have staged protests or denunciations, without much support from public opinion, except journalistic publications. Meanwhile, the municipalities of San Salvador and Antiguo Cuscatlán preserved remnants of the coffee plantations as their joint "ecological" park. The cooperative also has its own "ecological" park, but it has sold at least half of the remaining land to real estate developers (Baires 2010; Labrador 2012).

Gold mining prompted the other large coalition in 2005. It started from rural struggles in Chalatenango and Cabañas and has broadened up to a national scale with transnational allies and scope. In the northern department of Chalatenango, there is a strong sense of territorial identity marked by shared war experiences and a long trajectory of peasant and territorial organization that predates war (Borgh 2003). Thus, citizens and local governments cohesively rejected mining exploration and, in late 2005, they "expelled" a Canadian mining company while in the early exploratory stages (Cartagena 2009b). Contrastingly, in the central department of Cabañas, the Canadian company Pacific Rim built a supportive social base among its employees, their families, and local governments. This region displays a conservative political culture and clientelist traditions. According to an anti-mining local leader, most communities in Cabañas "have been pretty tough to organize, they do not like to get organized" (Francisco Pineda, president of the Environmental Committee of Cabañas, from an unpublished interview quoted in Cartagena 2009a). War memories and enduring impunity could be deterring collective actions due to fears of social protest as the prelude to political violence:

> one compañera [fellow woman] was telling me… she is a religious person…that the priest advised her not to attend today's rally, that only God would fix things, be careful not to get in trouble because of the anti-terrorist law[24] and that if we came to this march we would be in danger. She did not

[23] The farm is in the municipal terms of San Salvador, Santa Tecla, and Antiguo Cuscatlán.

[24] The priest seemed to be referring to the Special Law Against Terrorist Acts passed in 2006.

> come. (Woman from the Cabañas Women's Coalition, *Coalición de Mujeres de Cabañas,* from an unpublished interview quoted in Cartagena 2009a)

The movement strengthened its position though. In 2006, a group of NGOs formed the *Mesa Nacional Frente a la Minería Metálica* (National Roundtable Against Metallic Mining; Navarro et al. 2007). By 2008, its 13 members included Catholic groups, development and environmental NGOs. In May 2007, the Episcopal Conference—which gathers the country's Catholic bishops—condemned metal mining. In 2008, more people in Cabañas opposed Pacific Rim as some water wells dried because of exploratory drillings. One of the movement's achievements was to expose the flaws of the environmental impact assessment submitted by the Canadian company. Consequently, the Ministry of Environment denied the permit needed to launch extractions. The company suspended operations in June 2008 and lobbied to obtain the permit; yet President Antonio Saca spoke out against the project. Early in 2009, Pacific Rim filed a lawsuit against the Salvadoran government at the World Bank's International Centre for Settlement of Investment Disputes (Cartagena 2009b).

Since 2008, the movement's actions morphed from a struggle focused in Cabañas into a national campaign facing multiple issues, among them the assassination and harassment of activists. Between June 2009 and 2011, four activists from Cabañas were murdered. The Salvadorian judicial system prosecuted and sentenced several local gang members. Yet, community leaders and organizations criticized that prosecutors never searched for the intellectual authors. Activists also point to a 1994 report on "Illegal Armed Groups with Political Motives," which concluded that prior death squad structures were tied to common and organized crime and could potentially participate in political violence (Mesa Nacional 2012).

Contemporarily, the anti-mining movement denounced the international lawsuit filed by Pacific Rim, and the reluctance of legislators and the government to issue a law banning metallic mining. Moreover, the movement began documenting the impacts of a formerly abandoned gold mine where locals recommenced artisanal extractions, in San Sebastián (#59). In 2011, the movement criticized the risks that a new gold mining project in Guatemala posed to El Salvador, given its location on the binational Lempa River basin. Recently, a support network emerged in the US and Canadian cities linked to international environmentalism as well as Salvadoran immigrant communities in those countries (Stop El Salvador Mining 2013).

What type of environmental movement arises from these coalitions? Links among local struggles or grassroots groups are weak or nonexistent; and local mobilizations have gone into a sort of latent state once the (feared) threats are no longer imminent. Meanwhile, environmental organizations such as UNES and CESTA keep supporting struggles in other communities, and they give these alliances a language to frame and disseminate their grievances and demands. But this framing does not develop into grassroots identities under the label of "environmentalists." Even long-time activists may doubt to consider themselves as environmentalists (Valencia 2012). One representative from UNES acknowledges that limitation:

> It is ambitious to state that in El Salvador there exists an environmental movement, but since these concepts have no frontiers, I think there is a growing social movement that bolsters among its demands environmental issues, sustainability issues. (Ángel Ibarra, president of the Salvadoran Ecological Union. From an unpublished interview quoted in Argumedo et al. 2006)

This statement echoes the concept of *socio-environmentalism;* that is, the influence of environmentalism on other social movements (Viola 1994). Salvadoran environmentalism has emerged from that type of influence working in both ways. There are community groups that react to local environmental issues, but whose concerns are not limited to the "environment." Environmentalist discourses and frames characterize some NGOs, but even these ones seem to be a specialized, environment-focused branch of a wider social movement, as demonstrated by their long-term links to social and political orga-

nizations and networks (Argumedo et al. 2006; Cartagena 2009a; Valencia 2012).

Conclusions: The Convergence of Ecological Critique and Distributive Critique

Unlike the nonconfrontational trajectory of prewar Salvadoran environmentalism; its postwar embodiment had a different social base, agenda, concerns, and repertoire of action. The movement confronted economic and political power holders through collective action; thus, it transformed environmental concerns into political debates. This renovated environmentalism evolved through engagement in dozens of environmental conflicts of limited geographic scope; the result is a loosely articulated social movement. Most struggles for environmental protection have been carried out by limited alliances between grassroots groups and environmental NGOs. Generally, local actors retain their social and local identities, without becoming explicit "environmentalists."

When this movement was budding, the country was ruled by a pro-business party that rarely compromised on environmental struggles. As a result, the environmental movement found itself to the left of the political spectrum and its potential social base reduced to those prone to challenge political stigmatization for a seemingly lost cause—stopping investment projects that threaten the environment. Another influence on postwar environmentalism was the physical and human geography of the country, already characterized by a high population density and reduced extension of forests. The hardship of local ecological conditions for rural people subsisting on a deteriorated ecosystem and the limited income of the urban middle class divert most Salvadorans from romantic preservationism[25] and green anti-consumerist discourses that characterize environmentalism elsewhere.

Instead, the Salvadoran environmental movement has been shaped by a two-way process of *socio-environmentalism* (Viola 1994), as exhibited in discourses that link social demands, such as the right to livelihoods, to questions about the economic and political drivers of pollution, deforestation, water scarcity, etc. Thus, this social movement displays both a critique of distributive grievances as seen in the "old" or "classic" social movements (i.e., peasants, revolutionary, etc.) and an ecologic critique expressed in the language of the international environmental movement (see Fig. 17.1).

In short, environmental conflicts in El Salvador have influenced not just the political agenda but also the cultural frames of social movements as they have bridged values and interests among a small number of environmental groups and the broader sphere of entities working on human rights, social justice, and local development. The postwar Salvadoran environmentalism is a product of this convergence.

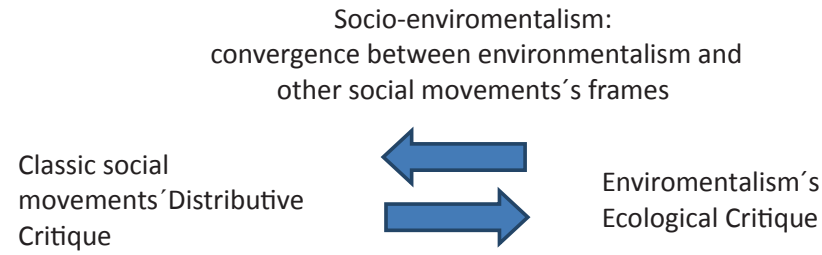

Fig. 17.1 Socio-environmentalism

[25] NGOs specialized in wildlife conservation have emerged but they are delinked from grassroots struggles (Cartagena 2008).

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