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The Chixoy Dam and the Achi Maya: Violence, Ignorance, and the Politics of Blame

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By

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Abstract

In early 1980, a campaign of terror was waged against Maya Achi living in the community of Rio Negro. The campaign coincided with construction of the dam across the Rio Chixoy. The project was deeply flawed on many counts, and a connection between the project, the Guatemalan National Electrification Institute (INDE), and acts of terror has been firmly established. Project documents do not suggest that international financial institutions, consultants, and contractors played a direct role in the terror, but they do reveal a profound multidimensional ignorance about the meaning of place for Maya culture and economy on the one hand, the civil war unfolding in the area, and the evolution of Guatemala's predatory state. The project process as it evolved in the post-Bretton Woods world made inscrutable what in retrospect seem like obvious and highly problematic contextual issues. Did project funders and contractors have an obligation to consider these issues? And, if so, did they have an obligation to base their decisions to continue funding or withhold funding this information?

About the Author

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The Chixoy Dam and the Achi Maya Violence, Ignorance, and the Politics of Blame

Megaprojects and International Development: From Panacea to Problem

The rage against international financial institutions (IFIs) that exploded in the early 1990s was fueled not just by structural adjustment policies, but by the environmental and social impacts of big infrastructure projects, in particular hydroelectric projects. A tragic example of the big project run amok is the Chixoy Dam in Guatemala—a project associated with the massacre of over 400 Maya men, women, and children and the destruction of communities whose existence was predicated on an intimate relationship to place.

Over the past decade, a growing coalition of human rights and environmental NGOs in Europe, Central and North America launched a campaign to seek reparations from the World Bank and the Inter-American Development Bank (IDB) for Maya survivors. They have argued that these institutions were aware or should have been aware that their collaboration with Guatemalan state institutions during a period of ethnic violence would inevitably exacerbate that violence. In 1996, in response to NGO requests, the Bank sent a team to Guatemala to investigate complaints of genocide. In a letter to the NGOs, Bank President James Wolfensohn summarized its findings as follows:

Although team members had read about the events in Guatemala, and in some cases had worked there, they were deeply affected by their experience and the account of the events which they heard. The widespread destruction of indigenous organizations in Guatemala, the murders and repression were vividly recounted and have made a lasting impact. What happened is not questioned. In 1982, women and children from Rio Negro were brutally murdered by civil patrols from a neighboring village. Why they were murdered is less certain. Some people attributed the deaths to counterinsurgency efforts, others to the fact that the people of Rio Negro were politically organized, and some to the fact that they were opposed to resettlement. Others saw a confluence between these forces. It is evident, however, that the civil disorders which wracked Guatemala in the late 1970's and 1980's were not focused on or confined to the population displaced by the Chixoy Hydroelectric Project. Most resettled communities were not subject to violence and many communities in the vicinity, with no connection to Chixoy, experienced murder and repression. In 1982, the year of the massacre, neither the Bank, nor other observers, knew the extent of the violence and terror that were occurring in Rabinal, nor did Bank staff associate the violence, of which it had only general and limited knowledge, with resettlement activities. The Bank at the time attributed these actions to the ongoing insurgency/counterinsurgency struggle. To this day there are still varying and conflicting interpretations of the causes of the violence which occurred.” (P. 1-2)

Wolfensohn's letter reveals a conceptual separation of the project from its context that was made possible by ignorance.

The intent of this paper is to raise several questions about this ignorance and its ethical implications. I start from the assumption that the development project as it took shape in the twentieth century had a moral dimension: global inequality was a concern, and hydropower development—even in authoritarian states—was seen as a motor for economic growth and an instrument for poverty reduction, democratization, and environmental protection. Tennessee Valley Authority (TVA) administrator David Lilienthal spent the 1950s sharing his recipe for success with national governments throughout the world, and attempts were made to replicate the TVA model in the Indus Valley, Iran, Colombia, and the Dominican Republic (Neuse 1996, ch. 12). Yet, dam projects did harm in ways that were seldom foreseen.

My first question is to what extent was the maintenance of systematic knowledge gaps fundamental to the project process? Writing in 1968, A.O. Hirschman coined the phrase “the hiding hand,” to refer to these knowledge gaps, which he saw as largely benign and endemic to the project process. If the hiding hand was endemic to project planning in Guatemala, was it as benign or at least as neutral as Hirschman portrayed it, or did it enable violent displacement and the erasure of place-based communities? If the latter, did the IFIs and the contractors have an obligation to know? Or, if they knew more than the project documentation reveals, did they have an obligation to bring this knowledge into deliberations about whether or not funding for the project should have been replenished?

To address these questions, I first outline the trajectory of the Chixoy Dam project, indicating the roles of the different institutional actors as well as the kinds of data that they gathered and did not gather. I then review the history of violence in the project area, its connection to its implementation, and the organization of the reparations campaign. Next, I indicate some mechanisms that enabled the project culture that prevailed in the international institutions to produce the knowledge gaps that allowed them to move forward in the context of extreme ethnic violence.¹ I conclude by asking whether the international institutions engaged in project development and financing had an obligation to know about the project context. If so, did they have an obligation to withdraw in the face of escalating violence?

The Project Process

The Chixoy project – officially known as the Pueblo Viejo-Quixal Hydroelectric Project – was conceived during the optimistic development decade of the 1960s, but it was constructed (and refinanced) during the most violent period (1975-85) of Guatemala's 30-year civil war. It was intended to provide some 60 percent of Guatemala's electricity. It would be the energy source that would permit exploitation of copper and nickel deposits—and possibly oil – in the northern

¹ Berman (1982) and later Cowen and Shenton (1996) argue that it was Goethe who first wrote about ignorance as the product a purposive act—an act that allows the development project to move forward by concealing its destructive nature.

transverse strip.² The dam site is located about 75 miles north of Guatemala City in the province of Baja Verapaz; its catchment area stretches north into Alta Verapaz. In both provinces, levels of conflict between the military and civil patrols and Maya communities were among the highest in all of Guatemala (Guatemala, Human Rights Atlas 1995). When completed, the dam flooded approximately 1400 ha. of valley land. It became the largest hydroelectric facility in Guatemala.

The project involved an array of institutions – government and private, European, American, Guatemalan, and international. It was executed by the Instituto Nacional de Electrificación (INDE), a parastatal agency created in 1963 to provide power for the state electrical agency (INE). As an implementing agency, INDE acted both as a pass-through for huge tranches of international funding and as an intermediary between the firms and the government of Guatemala. It represented the government of Guatemala on the ground and acted as a coordinator of private sector activity, but it is not clear to what extent it had leeway to choose its contractors. INDE's Board of Directors was comprised of civilian administrators until 1982, when the agency was placed under military control. In the mid-1990s, INDE was privatized.

The project was financed in large part by loans from the Inter-American Development Bank (IDB) and from the World Bank as part of its broader energy plan (Table 1). Total financing came to \$924.3 million (IBRD 1992), over a third of which (\$350 million) came from international grants and loans.³ Responsibility for project design and implementation lay with private contractors. Fifteen firms from nine countries participated in project construction, all but two of which were at least partly foreign (Table 2). The governments of West Germany, Italy, and Canada made large grants for the project, and firms from these countries are well represented. Most of the work was done by these firms or contracted out to private consultants by the firms or directly by INDE.

Dam projects typically have long gestation periods, and Chixoy was no exception. The project entered Guatemala's (and the World Bank's) energy portfolio in the 1960s,⁴ where it remained for nearly a decade, a period when the Guatemalan economy appeared to be growing, despite increasing civil unrest. In 1972, the West German government made a grant to Guatemala to draft a plan for hydropower development (Aguirre and Johnston 2005, vol 2, p. 7), and Consorcio LAMI – a group of firms headed by Lahmeyer International – carried out a hydrological study in the Chixoy watershed (Aguirre and Johnston 2005).⁵ The study did not

² The project's second order displacements are not the subject of this study, but in 2006, about 2000 Q'eqchi Maya occupied parts of a Canadian open pit nickel mine, demanding land for subsistence production. The Maya have historical claims to lands affected by the mines, and are arguing that they have a legal right to determine its use (Buncombe 2006).

³ \$105 million from the Inter-American Development Bank and \$ 72 million from the World Bank. Additional project funding came from the governments of Germany, Italy, Canada, and from the Central American Bank of Economic Integration and the Investment Fund of Venezuela.

⁴ In 1961, the United Nations Special Fund and the World Bank financed a study of electric power and irrigation in Guatemala. Two years later, the World Bank approved a loan to Guatemala for a survey of energy development projects. Among other things the survey projected growth in demand for power and recommended the development of sources of renewable energy (Aguirre and Johnston 2005). Project documentation refers to Alliance for Progress support for energy development maybe as early as the late 1960s.

⁵ The German-based Lahmeyer International became transnational 35 years ago. According to its website, Lahmeyer operates in over 100 countries and has “evolved into one of the leading engineering and consulting

address potential social impacts, nor was there any community consultation during the project identification phase. However, another LAMI document remarked that a helicopter inspection of the Chixoy valley above the dam site revealed “considerable land under cultivation even on steep valley walls.” (Consorcio LAMI, INDE 1973: Annex A:p1, cited in Johnston 2005).

The project advanced in the context of increasing demand for power and heightened competition for investment sites due in large part to the 1973 oil crisis.⁶ The IFIs viewed the 1973 oil crisis as a potential brake on economic growth and promoted hydropower development as a route to energy self-sufficiency. At the same time, the number of sites where large dams could be feasibly constructed was diminishing, so the construction sector and its financial backers tended to focus their efforts on the small number of sites that appeared attractive from an engineering standpoint. Pressure to move money out of the door and to develop promising sites was sufficient to impede adequate engineering studies. These pressures may also have deterred the IFIs from carrying out thorough environmental and social impact reviews, although, at the time, environmental and social impact assessment was generally a marginal activity at best.

In 1974, INDE prepared a development plan which called for feasibility studies for four potential dam sites, one of which was Pueblo Viejo-Quixal—the Chixoy Dam site.⁷ The same year, two consultants – a tropical ecologist and a medical doctor – did a two-week environmental reconnaissance for LAMI (Goodland and Pollard 1974).⁸ In their report, the natural scientists addressed potential social impacts in a two-page section on human ecology and public health. The authors concluded that

the region is remote from population centers and comparatively few people will have to be relocated; only 210 dwellings will be affected. Public health in the area is reasonable at present and should improve with completion of the project. No major adverse effects on the plants and animals are predicted (Goodland and Pollard 1974:7).

A longer section on archaeology and history lists ancient Maya sites that would be endangered by dam construction, but the report’s brief section on the history of the watershed is confined to the early colonial period. No mention is made of the recent history of the Maya in the area or their relations with the Guatemalan state. The report’s summary’s treatment of contemporary

companies for complex large-scale projects and infrastructure schemes in the fields of energy, hydropower and water resources, transportation and infrastructure as well as technology and environment. (www.lahmeyer.de/e/company/history/tour/1972.html). With project offices, subsidiaries, and associated companies in over forty countries, Lahmeyer sees itself as “a global player in the engineering and consulting business” (<http://www.lahmeyer.de/e/company/history/history.html>). Other consortium members included the Swiss firm Motor Columbus, SA, and the San Francisco based International Engineering Co (Aguirre and Johnston 2005). The study was financed in part by a World Bank loan made in 1968 for the development of a national energy plan.

⁶ For a general discussion of this phenomenon, see Linder (1994).

⁷ INDE, Departamento de Planeamiento, Guatemala City. Plan de Desarrollo 1975-85. Hidroeléctrica Pueblo Viejo-Quixal (Desarrollo: Chixoy Medio) n.d. , probably written in 1974 . No clear title page on document.

⁸ According to the report, field studies and on-site inspections took place from April 18-24, 1973 (Goodland and Pollard 1974:7).

social issues suggests that neither the IDB, INDE, or LAMI believed that these merited serious investigation by social scientists who had worked with the Maya and could speak local Mayan languages.

The next year, INDE approved the Chixoy project. The German and Guatemalan governments signed an agreement to draft a master plan for the project with the aid of foreign consultants.⁹ When in 1975, INDE applied for a project loan from the Inter-American Development Bank, LAMI prepared bidding documents for construction and equipment, evaluated tenders, carried out financial and engineering studies and developed the project design and specifications, but contracts were apparently put out to bid before the engineering study was complete (Aguirre and Johnston 2005: 8).¹⁰ The Guatemalan Institute of Anthropology and History conducted an archaeological survey and a salvage program (Partridge 1983), and an IDB mission studied geological aspects of the project, but there is still no record of a social impact assessment nor mention of a resettlement plan. Taken as an ensemble, the documents prepared for LAMI and for INDE suggest that the preservation of pre-Columbian cultural remains took priority over preservation of contemporary Maya culture and livelihoods.

In January 1976, the IDB and the government of Guatemala signed a loan contract for \$105 million or about a third of the projects estimated costs. Construction began in 1978, and INDE informed communities in the watershed that they would have to move. The following month a severe earthquake struck Guatemala. The international development community responded with an outpouring of aid. Again, there was pressure to move money quickly; so much of the foreign assistance came in the form of additional funding for projects seen as contributing to economic revitalization. Chixoy was one such project, and the World Bank added \$72 million to the IDB loan, but as a condition of the loan the Bank called for a resettlement plan. INDE submitted a resettlement plan in 1979, estimating that 450 residents would be displaced by the reservoir.

Project documents reveal that the effort was plagued by delay, engineering error, and routine bureaucratic incompetence. Huge cost overruns were attributed in part to INDE corruption, in part to design flaws resulting from the accelerated project process entailing a large number of firms doing work at the same time and sometimes without adequate communication. In 1983, the dam began to fill, but soon closed when it proved unstable and needed reinforcement. Also in 1983, the IDB for the first time engaged a social scientist familiar with Maya culture and

⁹ The work of advising the Guatemalan government was contracted out to four engineering firms (Lahmeyer International, Salzgitter Consult, Fichter Beeratende Ingenieure, and Motor Columbus) (Aguirre and Johnston 2005). According to the web site of its current parent company (UBS), “Motor-Columbus is a financial holding company whose only significant asset is a 59.3% interest in the Atel Group. Atel, based in Olten, Switzerland, is a European energy provider focused on domestic and international power generation, electricity transmission and energy services as well as electricity trading and marketing. Motor-Columbus also holds several other small finance and property companies” (http://www.ubs.com/1/e/investors/interactive_report/04q3/industrial_holdings/motor_columbus.html). The Guatemalan Government created a special executive body (Plan Maestro de Electrificación Nacional) to work with the European contractors.

¹⁰ According to a 1991 INDE report, “this was done in order to create pressure for rapid completion by using time during the construction phase for studies, research, trials and direct observation of hydrological conditions (p. 76). A 1991 World Bank report concluded that “the project preparation process appears to have been hurried in 1975 and 1976 due to a growing sense of urgency reflecting the fear of further ‘oil’ shocks and of growing needs for future generating capacity” (IBRD 1991:48).

languages to assess the project process. In 1985, the World Bank approved a second project loan of \$44.6 million to cover cost overruns, and the reservoir began to fill. By 1988, Chixoy loans represented 40 percent of Guatemala's debt (McCully 271).

INDE also failed to meet its resettlement obligations as called for by the terms of the second World Bank loan. These failures are amply discussed in the reparations campaign literature. More worrisome in the context were decisions by local firms to buy security from the military, INDE's own close ties to the military, and the willingness of the IFIs to continue project funding at a time when systematic state-sponsored violence against Guatemala's rural indigenous population was escalating, particularly in the project area (Sanford 2004).

Chixoy, Ethnic Violence and the Erasure of Place¹¹

The full extent of the project's social impacts was only revealed in the course of the 1990s. Investigation into atrocities associated with the project was made possible by the 1994 Oslo Accord. The treaty, which ended Guatemala's 30-year civil war, called for an inquiry into human rights violations and acts of violence. Massive and carefully documented studies by a Commission on Historical Clarification established by the treaty and by the Archbishopric of Guatemala cataloged violations and concluded that military campaigns waged against Maya communities amounted to genocide.

Thorp et al. (2006) see the period from 1945 to 1985 as one in which local Maya political institutions were progressively eroded. This erosion was not offset by opportunities for participation in formal Guatemalan political institutions. Loss of autonomy occurred in the context of continuing exclusion. In the early 1970s, Maya social mobilization increased, but peasant and ethnic organizations faced increasing repression by the late 1970s, when the sporadic use of state violence gave way to a more systematic campaign to destroy left, center-left, and indigenous organizations.¹² Thorp et al. (2006: 463) conclude that "Whilst unchecked violence affected both rural and urban areas, in the indigenous rural areas all restraints were removed." In 1980, army garrisons were established in rural areas; rural communities were ransacked, community leaders tortured and executed. Violence was concentrated in Guatemala's Maya Highlands or Northern Transverse Strip, a region comprised of the provinces of Quiché, Alta Verapaz, Baja Verapaz, and Huehuetenango. Estimates of death vary widely, but Human Rights groups estimated about 50,000 killed and up to a million were displaced.¹³ Over 83 percent of the victims of violence between 1962 and 1996 were Maya, and although the Guatemalan civil war was frequently depicted in the press as two-sided, the Commission on Historical

¹¹ Data for this section comes largely from Batres et al. (2000) COHRE (2004); Witness for Peace (1996); and the Report of the Commission for Historical Clarification (1999). I share Escobar's (2001) definition of the erasure of place and his assertion that "culture sits in places."

¹² Violence peaked during the regimes of General Romero Lucas García (1978-82) and General Efraín Ríos Montt (1982-83). Teachers, local officials, Maya community leaders, and cooperative members were singled out for abuse (Thorp et al 2006). The government also conducted scorched earth campaigns in which entire villages were massacred.

¹³ For the broader picture of the Guatemalan political landscape in the 1970s and 1980s, see Grandin (2004), Brockett (1988), Sanford (2003, 2004), Arias (1990), Trudeau and Schultz (1988), and Thorp et al (2006).

Clarification (CEH) concluded that Guatemalan government forces (including the army and civil patrols) were responsible for 93 percent of human rights violations and acts of violence, as opposed to 3 percent perpetrated by guerillas (CEH database). This period also saw coercive recruitment into “civil patrols,” and struggles between insurgents and the military in the project zone. In December 1981, the Guatemalan army occupied Pacux, a new settlement where, in principle, housing was to be provided for people displaced by the dam.

Those harmed by the project were largely Achi Maya, but the communities that had expressed opposition to their displacement suffered disproportionately.¹⁴ One such community was Rio Negro. From 1980 to 1982, INDE and the Guatemalan government responded to Rio Negro’s unwillingness to move with revocation of their title to their lands, theft of their documents proving title, and the massacre of some 440 Rio Negro community members—men, women, and children. The Achi Maya who survive today still live in substandard housing and have been reduced to conditions of abject poverty. The lands they have received in compensation for those flooded are generally unsuited for agricultural production, and hunger has become endemic. Housing was insufficient and of poor construction, commitments to provide public facilities were generally honored in the breach, and so were prior agreements to provide free electricity.

It is worth recounting the story of Rio Negro in detail. In 1976, INDE officials, accompanied by Guatemalan troops, arrived in Rio Negro by helicopters and told residents that their homes and lands would be flooded by the dam, which was already under construction (Aguirre and Johnston, vol 2, p. 22; Chicruz Community Report 2004; Chen 2000). Between that time and early 1979, a community committee and INDE met several times to negotiate the terms of resettlement. With logistical support from the army, INDE gathered demographic and socioeconomic data on the communities facing displacement as well as data on ethnicity, religion, and attitudes toward the project.

In 1979, the climate changed. According to the testimony of Rio Negro survivors, INDE officials demanded that Rio Negro citizens hand over their land titles, promising to return them. Months later, the community asked for its titles. INDE officials claimed not to have received them. In 1980, incidents of intimidation in the project area grew more frequent; military police working under the contract of the project shot seven Rio Negro residents. Villagers chased away the police, one of whom drowned in the river. INDE and the Guatemalan Army accused Rio Negro of murdering the police officer and supporting the guerrillas. That summer, two representatives of Rio Negro community, at INDE’s request, visited the dam site to present their “Libros de Actas” –their only other proof of title to their lands and documentation of their historic relationship to place. The book also contained the resettlement and compensation

¹⁴ Although the dam was completed in the 1980s, as recently as September, 2004 Achi Maya occupied the dam demanding restitution and compliance with unfulfilled promises. In January 2005, Carlos Chen, leader of the Coordinadora of Communities affected by the dam, was arrested. He was released, but the charges against him were not dropped. According to Rights Action and the International Indian Treaty Council, Chen was jailed on “trumped up” charges – illegal detention of and threats against two Chixoy dam operators, false entry into INDE offices, actions against public services, and actions threatening the internal security of the nation. See http://www.treatycouncil.org/new_page_5244111121111111111.htm.

agreements signed with INDE. A week later their mutilated bodies were found, and the Libros de Actas were never recovered. Testimonial statements made in the 1990s implicated INDE project staff and vehicles in the disappearances.

By February 1982, Rio Negro and INDE had reached an impasse over resettlement. The local military commander ordered 73 men and women to report to an upstream village. Only one returned home. The remainder were tortured, raped, and murdered by the local Civil Defense Patrol—a paramilitary unit established by the Army. A month later, 10 soldiers and 25 civil patrol members came to Rio Negro, rounded up remaining women and children, marched them to a hill above village where they were subjected to torture and rape. Seventy women and 107 children were killed. Two women escaped and became witnesses to the atrocities. When the patrols arrived, village men assumed that they would be the targets and most hid out in the hills surrounding the village. Eighteen children survived and were forced into servitude. In May, 82 Rio Negro residents were massacred in nearby village; fifteen were taken away by helicopter and never seen again. Witnesses testified that the perpetrators were government soldiers and civil patrols who arrived in a truck owned by a subcontractor of INDE working on the Chixoy project. Later in September, 35 orphaned children from Rio Negro were among the 92 people machine gunned and burned to death in another village near the Chixoy Dam.

In sum, 440 Maya Achi from Rio Negro were killed. The rest fled and went into hiding. Soon afterwards the dam began to fill. Slowly, the Rio Negro survivors filtered into the designated resettlement site of Pacux – a “model village” more aptly described as a subdivision of substandard housing located just behind a military base on the edge of the town of Rabinal. According to one NGO, for years afterwards, “survivors were frequently beaten or raped or both by military personnel as they walked past the military base to Pacux,” and the community faced continual harassment from soldiers stationed at the base (COHRE 2004). Maya Achi from Rio Negro who refused to move to INDE’s resettlement site was subjected to intimidation by paramilitaries and military police.

While this history is not contested, causal explanations vary. Some suggest that Rio Negro was singled out for abuse because of a history of conflict with a neighboring community that hosted the civil patrol unit. If so, the story could be chalked up to long standing ethnic conflict. As noted above, the 1996 World Bank review attributed the plight of Rio Negro to generalized violence against rural indigenous communities that had nothing to do with the dam. Drawing on evidence from the 1999 report of the Commission for Historical Clarification, entitled “Guatemala: Memory of Silence,” several environmental and human rights group attribute abuse of Rio Negro community members to INDE. Their position is supported by Rio Negro survivors who argue that INDE encouraged the violence so that its officials could appropriate compensation funds due to the displaced.

Project documentation suggests that IFI staff and international contractors were not aware that INDE was complicit in violence against local residents of the dam area, despite mounting evidence to the contrary. While it is certainly possible that INDE’s complicity had been noted and dismissed as irrelevant to the project, it is equally likely that the epistemological and social

preferences of IFI and contractor personnel as well as their institutional practices prevented them from building the knowledge base that would have led them to question INDE's role and wisdom of implementing the project in the context of the civil war.

The Reparations Campaign

Although the military still exercised control over the countryside and human rights violations continued, the election of Vincinio Cerezo in 1986 meant that human rights issues were aired for the first time in thirty years. In this slightly more relaxed environment, the reparations campaign on behalf of those displaced by the dam began. The campaign was supported by the findings of the Commission for Historical Clarification which investigated human rights violations that had occurred during the country's 35-year long civil war.¹⁵ The commission recommended that those who gave financial and other forms of support to the Guatemalan military governments should contribute to reparations (Rights Action 2002).

Guatemalan and international NGOs joined in a campaign to force attention to the plight of the Rio Negro survivors and to force the IFIs and the Guatemalan government to comply with the terms of INDE resettlement agreements and to compensate survivors for losses of family members and arable lands.¹⁶ In response to a 1996 Witness for Peace Report that documented dam impacts and a strong letter from the NGO coalition, the World Bank sent its inspection team to investigate causes of violence and implementation of resettlement plans. In addition, local NGOs working with Rio Negro survivors collected oral histories and testimonies that documented INDE's role in the disappearance of Rio Negro residents. In 1998-99, the Archbishopric of Guatemala's Office for Human Rights published "Guatemala: Nunca Mas," a ten-volume report on the violence, based heavily on forensic anthropology and oral history.¹⁷ Evidence from exhumations corroborated local testimonies about the Rio Negro massacres. Drawing on the Commission's findings and evidence from the Archbishop's report, the coalition of local and international NGOs and Achi Maya, including Rio Negro survivors who were still very much in danger, was in a position to begin making claims for reparations. In 2003, the American Association for the Advancement of Science (AAAS), which had supported the first Guatemalan forensic team working with the Historical Clarification Commission, sent a team to

¹⁵ The commission found that 42,275 men, women, and children of all classes and ethnic backgrounds were victims of human rights violations, 23,671 Guatemalans were arbitrarily executed, and 6,159 were victims of "forced disappearance." It also found that the Guatemalan military had committed crimes of genocide against peoples living in the Chixoy project area.

¹⁶ Guatemalan NGOs included Rights Action Guatemala, the Center for Legal Action in Human Rights (CALDH), the Center for Popular Education Padre Hermengenes (CEPAHER), CONGCOOP, Campesino Unity Commission (CUC), the Asociacion Campesino Rio Negro 13 de Marzo Maya Achi (ASCRA), the Asociacion para el desarrollo Integral Nueva Union Maya Achi (ADIVIMA), the Pacux Comite de Desarrollo, and the Coordinadora de Comunidades Afectados por la Represa Chixoy. International NGOs included Witness for Peace, the International Rivers Network, the Center on Housing Rights and Evictions (COHRE) based in Geneva, la Campagna per la Riforma della Banca Mondiale, an Italian NGO, and Rights Action (Johnston 2003).

¹⁷ The report's findings are summarized in Comisión para el Esclarecimiento Histórico (2004).

Guatemala to assess damages to and the continuing needs of Chixoy-Dam-Affected communities. By this time the Chixoy case had become an important one in the field of environmental rights.¹⁸

It proved impossible to hold INDE accountable for its actions, because the agency was privatized in the late 1990s. Income from the sale of INDE's infrastructure enabled Guatemala to pay its loans (IRN 2005), but with privatization, INDE's Resettlement Agency closed its doors and INDE distanced itself from its performance as a parastatal agency. Due to this reason, the campaign focused on the World Bank and the IDB; it sought to hold the IFIs accountable for wrongs that could be attributed to INDE or its contractors. To pursue this strategy, the campaign would have to prove, at a minimum, that the IDB and the WB considered obligations with regard to the loans to have been met even in the absence of evidence that the dam-affected people had received just compensation as defined in the loan packages. A stronger case could have been made if it could be demonstrated that the IFIs knew when they made the loans that the project was connected to state-sponsored violence, and that the rights of the Achi Maya were systematically violated. But this case could not be made from the welter of available documentation. Rather, what is revealed is a pattern of silence, tolerance of knowledge gaps that is less deliberate than a "don't ask, don't tell" policy. This pattern appears to be inherent in the project process and supported by the institutional culture of the IFIs and the international contractors or experts to whom the IFIs continually turn. It is a form of Hirschman's "Hiding Hand," but it is no longer benign.

How the Hiding Hand Worked

The knowledge gaps that allowed the project to move forward in a toxic political environment can be attributed in part to the interests of the various actors, including INDE and the major contractors. It is highly likely that the LAMI Consortium, hired to do pre-feasibility and feasibility studies, had an interest in getting the contract for the project. In that case, LAMI would have had little interest in exploring or drawing attention to factors that might complicate, slow down or even halt funding for the project. The same would have been true of subcontractors and bilateral assistance agencies. They could also be attributed to the reluctance of the IFIs to intervene in the domestic affairs of their member nations or to render judgment on particular governments or their leaders. But equally, if not more important were an international institutional culture that fostered ignorance and some optimistic assumptions that underlay—and still inform – the development project.

The project culture. Several studies have addressed knowledge gaps of the sort that enabled IFIs to continue supporting the Chixoy project.¹⁹ Scott (1998, p.4) attributes similar gaps to what

¹⁸

See www.cmm.com/2004/WORLD/americas/09/08/guatemala.dam.reut for reporting on the 2004 occupation of the dam site. On the relevance of the Chixoy case for the delineation of environmental rights, see *Human Rights Dialogue* special issue on "Environmental Rights" (Series 2, Number 11, Spring 2004).

¹⁹ Robbins (2002) refers to this new dimension of political ecology analysis as "gazing up." His argument is that while in the past—in contrast to state and international institutional actors—political ecologists have tended to confine their work to environmental actors and issues at the base, they are finding it increasingly important to understand the ways in which the work of international institutions is done.

he calls “high modernist ideology,” “best conceived as a strong, one might even say muscle-bound, version of the self-confidence about scientific and technical progress, the expansion of production, the growing satisfaction of human needs, the mastery of nature (including human nature), and above all, the rational design of social order commensurate with the scientific understanding of natural laws.” He argues that high modernist practice has entailed the standardization the subjects of development—that is, the elimination from consideration of what he calls “situated and contextual attributes” (p. 346). Mitchell (2002) brings a similar perspective to his study of development in Egypt, as he asks “What strategies, structures, and silences transform the expert into a spokesperson for what appear as the forces of development, the rules of law, the progress of modernity, or the rationality of capitalism?” Mitchell argues that the politics of development were “enframed” in an economic rationality that placed emphasis on calculability and rules, and defined “rules and violence, law and coercion as opposites” (p. 296). The construction of these opposites, he concludes, obscures the extent to which the use of force and violence were deployed to bring about economic reform and advance the broader development agenda as conceived by the IFIs and bilateral assistance agencies.

Goldman (2005: 50-51) takes this line of inquiry directly into the domain of the IFIs. He credits McNamara with turning the World Bank into “a new transnational space” that it filled with “professional networks and discursive regimes of rule, truth and government.” Goldman identifies several elements in the project process that constrain and direct knowledge production. These include the “terms of reference” which specify the kinds of information to be collected, the time frame for completion, and a report deadline.

Other elements in IFI culture that foster institutional ignorance include pressures to move money out of the door, reliance on short-term consultants,²⁰ and the development of close ties between IFI staff and major international contractors. Three facets of the project culture played a particularly important role in perpetrating ignorance: one has to do with the timing of different parts of the project process; the second with the contractors and IFIs as producers of knowledge, and the third with the notion of public good.

In the Chixoy case, the long gestation of the project coupled with a sense of urgency stemming from the oil crisis and earthquake meant that the forces favoring implementation were overwhelming. Considerable resources had already been invested in project identification and feasibility studies, and contractors had made plans in anticipation of a positive decision. Both the sense that the path to the project was somehow inevitable and perceived need to “**just do something**” created an environment where the kind of careful social and environmental research needed to shed light on potential impacts was unlikely to be conducted.

The technical biases of the institutions who carried out the project identification and feasibility studies reflected a project culture in which engineering concerns dominated technical questions were routinely accorded priority over social issues, which were rarely addressed until significant investments had already been made. In this culture, modernization was a goal to be achieved, non-commodity agriculture and cultural production was systematically undervalued. Language skills were not seen as particularly relevant to the data gathering process, which in any case

²⁰ On this topic, see Michael Goldman (2001); see also Robert Chambers on rapid rural appraisal.

avored the collection of quantitative over qualitative data. Economic calculations obscured the impacts of construction on people whose economies are not fully monetized and integrated into the national economy; analyses systematically undervalued crops and livestock produced for ‘ subsistence or for local markets, nor did they take into account the importance of resource complementarity in rural livelihood strategies. For example, a study recommending to what should be covered in an impact assessment for INDE (LAVALIN 1981: p. 9) concluded that negative impacts “can essentially be summarized as the loss of agricultural production in flood zones. This loss will be of little importance owing to the small extent of the cultivated area and the scant value of the products of the zone.”

A side effect of the technical bias was the loading of multiple and diverse mandates on the wrong project actors. One example is the 1973 environmental impact reconnaissance for LAMI, which purported to identify social impacts, even though it was carried out by two biologists, neither of whom were Maya speakers. A second instance would prove more serious. INDE was charged with the responsibility for resettlement by both the BID and the World Bank, yet it claimed to lack the capacity to do this and called for the transfer of responsibility for resettlement to other government agencies. Its requests went unanswered by the government of Guatemala, and the result was at best continuing ineptitude (Partridge, 198?: 46-47).

The third element in the institutional culture of the IFIs, and very likely of the contractors as well as a conception of the public good that helped to buttress the decision to promote hydropower development in Guatemala in the first place, contributed to the idea that speedy responses to the oil crisis and earthquake were required, and encouraged the World Bank to stay course even in the face of civil war. There are several aspects to this framing of the public good. First, expressed by Cernea (2001) is that there are times when a minority—however virtuous – must be inconvenienced for the good of the majority. At times projects will be necessary. A second is the idea of progress—that the public good is expressed in the progression from pastoralism and subsistence agriculture to urbanization and industrial development supported by a modernized commodity production. A third belief that informs the institutional culture of the IFIs is the idea that a project in the public interest can be carried out independently of the political context in which it is situated. This is, I believe a corollary of the broader idea of progress that undergirded the development project.

As I studied Chixoy documents, I wondered whether it wasn’t malevolence, but the optimistic philosophy that undergirded development thinking in the 1950s and 1960s that led to the Rio Negros tragedy. I kept coming back to Hirschman’s work, not only because he was one of the few to address the project process, but also because over the years, he was a reflective political economist, with the social conscience of a progressive and an abiding interest in Latin America.

I have earlier referred to Hirschman’s metaphor of the “hiding hand,” his suggestion that optimal ignorance makes good projects happen despite the numerous obstacles thrown up in one’s path. This faith, I would argue helped international actors to move big projects forward. In *Development Projects Observed*, Hirschman argued that development projects would be far less likely if their initiators could predict the difficulties that would be encountered in their implementation. The hiding hand appeared to guide not only the pre-feasibility and feasibility studies, but the entire course of the Chixoy project process well into its evaluation phase. We

can even see evidence of its operation in 1996, after the restoration of democracy, however fragile, in Guatemala, although by this time local and international organizations had entered into an ongoing and risky effort to uncover what the hiding hand hid and to seek reparations for the damages caused as a result.

A second Hirschman contribution to the project culture was the idea that one can make constructive changes in one sector even in the absence of a good supporting environment in other sectors. Hirschman argued that one can't wait for all the right conditions to come at once. By undertaking infrastructure projects in problematic environments (Hirschman was referring to Colombia during a period of civil war in the 1950s), it may be possible to create the economic conditions that would allow democratic change to follow.

Hirschman's long-term involvement with Latin American development began in Colombia in 1952 following a long period of work on European reconstruction and the Marshall Plan. It is worth quoting his commentary on the shift from Europe to the Third World because it so closely mirrors a shift in global attention:

In the meantime, my interests had shifted to other areas to which I had not devoted sufficient attention, such as the problem of development in the 'backward' countries. In 1952, the possibility of either going to Europe . . . or of going to Colombia as an economic adviser arose. I opted to take the second road, because it was new There was a new planning council that had been established on the recommendation of the World Bank, which had sent a mission to the country. But the Colombians said, 'If you want us to set up a new planning council, send us an economist who is capable of advising us.' The Bank looked around, my name was mentioned, and I was ready to come—and in fact I did come. I never was an employee of the World Bank, but entered into a direct contract with the Colombian government, for two years. At the end of these two years, I did not renew the contract, but decided to stay in Colombia. These two years had been quite tiring. We had General Rojas Pinilla's coup, among other things... (1998: 80- 81)

At one time I was actively involved in the attempt to develop a regional authority on the model of the Tennessee Valley Authority. The idea to create a multifunctional entity was then quite widespread. This entity would provide irrigation, electric power, and even land reform. This kind of work gave me the desire to begin to know in depth the reality of this country, and it put me into contact with many people. Now it hardly ever happened that I would take a plane without meeting this or that minister or corporate executive whom I knew personally. I felt positive about all this because I had the feeling that the country was moving forward. However, I don't want to deny the tremendous problems the country was going through—we must not forget that a civil war was still going on—but in any event we had the perception that the country was progressing.

Hirschman did not view the project as a weapon of counterinsurgency or military control, nor did he display willful ignorance of Colombia's political realities. Nonetheless, optimist that he was,

he managed to shield his faith in human progress through public works from doubts about the efficacy of infrastructure projects in a climate of civil unrest or about any untoward impacts on particular communities, ethnic groups, social classes, or human rights in general that might result from undertaking massive development projects in a time of war. What Hirschman's story tells us is how the empowering optimism of the Marshall Plan (as well as the experiences of the US New Deal, in particular the TVA) created a will to take on new technical challenges and a certain hubris about the ability to create political change through infrastructure investment.²¹

What the Hiding Hand Hid. As Hirschman predicted, the hiding hand hid a number of technical problems that would ultimately result in enormous cost overruns for the Chixoy project. These resulted in part from incorrect assessments of the Middle Chixoy Basin's geology and seismicity. Other overruns were probably due to poor management, but other blind spots that would have a more profound impact on people living in the project area.²²

As noted earlier, project documentation obscured the existence of peoples whose culture depended upon a strong relationship to place. With one exception, the project literature portrayed residents of the project area as a scattered, uni-dimensional group of backward folk resistant to change. While some later project evaluations addressed the inadequacies of INDE's resettlement efforts, only one report to the IDB gave any serious consideration to Maya relationships to place and what the loss of place would mean for individual livelihoods and community survival. This may reflect the technical bias of the project culture and the failure to include Maya speakers or students of Maya culture on the teams doing pre-feasibility, feasibility, and impact assessment studies for either the IDB or the World Bank. Most project documentation ignored, belittled, and misconstrued the concerns of those affected by the dam. For example, a 1981 Ex-post evaluation of the dam's social and economic impacts (LAVALIN 1981) made no mention of ethnicity, of the cultural value of landscapes or even archaeological sites for the Maya. By 1991, the IDB was devoting somewhat more attention to residents of the project area, but despite the submission of at least one sensitive consultant report (e.g., Partridge 198?), a 1991 loan proposal for management and conservation of renewable natural resources in the Upper Chixoy Valley described area residents as follows:

In the world view of the native peoples, traditional lifestyles and agricultural practices are expected to remain changeless for evermore, which explains why native campesinos fitting the traditional mold have proven resistant to change and novelty and prefer to stick to subsistence agriculture" (IDB 1991, Annex II-2, p. 1).

²¹ On this topic, see also Berman (1981) and Caro (1974) on Robert Moses and the memoirs of David Lilienthal.

²² In this regard, a 1992 Project Performance Audit Report for the World Bank noted that ". . . the engineering companies involved are prestigious international firms that are very dependent on their reputation. They also had ample and successful experience in the difficult construction work of the type they were facing in Guatemala. Although there are indications that at various points in time, the consultants set forth at least some of the risks . . . , the record suggests that often they lacked the clear-eyed approach to this issue or at the very least that they failed to make INDE fully aware that taking high risks means that there is a non-negligible chance that these risks will materialize." (P. 13).

In contrast, a proposal for indemnification made by the Community of Pacux to the World Bank at some point in the mid-1990s (Pacux n.d.) makes this poignant assessment of the impacts of the project on the elderly:

[A] majority of elderly lost their family even when young since the massacres of Pacoxom, Xococ, El Naranjo and also Rio Negro. Now they are already growing old and cannot go to gather firewood. Some have been abandoned by their families, today they have no money for health care Youth don't respect them, the committee has not been able to do anything to protect them. Authorities don't take an interest. There are no programs to support them either on the part of the municipality or the department" [my translation] (p.5).

The Chixoy Project was about the production of space (Lefebvre). In the process of production of space, place was erased, first conceptually and then literally. Components of place that were obliterated in the transformation of the project area included its connection to ancestors, sacred elements in the landscape, the knowledge that resides in landscape and its features, relations and networks²³ of economic interaction, and knowledge about safety and danger.

Part of "placeness" is the ability to distinguish not just between sites appropriate for different activities, but the ability to distinguish between safe and unsafe places, and the activities that may be considered safe or unsafe in a particular site at a particular time. Rio Negro inhabitants not only were reluctant to lose the connections implied by place, but their testimonies also indicate their fear that in moving to a community dominated by Guatemalan military and civil patrols, they would be moving from a relatively safe haven to a site of danger (cite testimony). If the international community were aware or at the very least showed itself to be aware of the dangers that Rio Negro Maya Achi faced once relocated, they would have been forced to recognize that development could easily come at the cost of ethnocide. For this reason, for the project to move forward, the hiding hand had to hide not only place, but the conditions that made some places safe and others unsafe. Even as it reflected critically on the performance of INDE with regard to resettlement, World Bank staff minimally acknowledged the place-based nature of Maya Achi concerns, when it cited the need to allocate resettlement lands "along kinship lines." (p. 50, WB Project Completion Report 1991). For the most part, however Bank criticism addressed INDE's failures to comply with its own standards developed in line with spatial and economic criteria.

Lastly, Hirschman's views notwithstanding, war zones are not usually good environment for infrastructure projects. The transfer of INDE to the military should have been a serious concern for the lending agencies, given the escalation of human rights abuses in the countryside. More thorough investigation of conditions in the project area was warranted, yet, ironically, by the early 1980s, when the World Bank was contemplating its second loan, it was no longer sending teams into the countryside even for brief periods, citing generalized violence as the reason. This vastly increased the likelihood that INDE's activities in Rio Negro would have very likely gone undetected by the IFIs and international contractors. And, in fact, the very first mention of the

²³ To some extent, this may reflect the devaluation of place in the social sciences. On this topic, see Agnew and Duncan (1989).

civil war that I found in the project documentation was this quote from a 1991 Ex-post evaluation (INDE 1991: 81) carried out by an economist, a civil engineer, a geologist, and a public accountant:

“ . . . especially in El Quiche and part of Alta Verapaz, where the presence of security forces (army, Guardia de Hacienda, and paramilitary groups) as well as subversive cells, provoke an instability in the communities who see the need to keep moving (perigrinar) and at times leave the region and seek refuge on the Mexican border.”

The Hiding Hand allowed the World Bank to attribute resettlement failures to poor management rather than deliberate malfeasance or criminality on the part of the borrower or to its own blindness. Even in retrospect, the World Bank used its ignorance to explain its presence in Guatemala in a continuing context of rapacity and violence.

I would like to conclude by returning to the question of obligation. Did the IFIs have a moral obligation to know enough about the context of their intervention? Did this go beyond Colin Powell's "You break it, you own it" dictum? The history of Chixoy Dam project is not an isolated instance of development miscarried or a cautionary tale about the effects of well-intended international intervention. The systematic exclusion of the voices of project neighbors and their understandings of place and its importance was due to fundamental flaws in the way knowledge has been defined within the IFIs. Exclusion of local concerns and values led to the violation of human rights and to the implementation of very bad projects, both to the detriment of the development project as conceived in the Post-Bretton Woods decades. And, for these reasons, this exclusion from consideration can be defined as a wrong even if as the project unfolded, it was largely the product of a firmly embedded institutional culture. It is a wrong similar in many respects or perhaps even identical to institutional racism.

Confronting the Need to Retreat

This leads us to Hirschman's second contribution to the culture of development: the belief that it is possible to make good happen even in an unfavorable political context. Is there a point when a political environment becomes so hostile that development as usual cannot take place without making things worse? This is a question that international NGOs, bilateral assistance agencies, and relief organizations face in a number of conflict zones. In environments of chaos or impunity, it may be impossible to "do development" without first focusing efforts on peacemaking and resolution of ethnic conflict.

It is not always easy to define the point where conflict resolution takes precedence over development, but this difficult decision requires information not only about the nature of the state, but about the presence of the state in the project-affected region. Had the IFIs and contractors known about the nature of genocidal activity in the provinces where the Maya Highlands and about INDE's (and, more broadly, military) complicity in that genocide, it does not necessarily follow that they would have withdrawn support for the project. Fox and Brown (1998) call our attention to World Bank insistence on "the counterfactual" – If we didn't

participate in the process, it would be worse. And there is some truth to this in the case of Chixoy. Only when the World Bank negotiated its loans did resettlement planning enter the conversation.

On the other hand, even in the absence of other information, Rio Negro's resistance to resettlement should have raised concern. Of the four reasons to resist resettlement offered by Oliver Smith (1991:36), three are highly germane. First is the relationship of the target population to its environment, a relationship having to do with factors ranging from soil fertility and resource availability to "territoriality and inter-group relations" to "the intimate connections between environment and religion, cosmology, world view and individual and cultural identity." Second is the "the target population's relationship to the resettlement agent." Oliver Smith notes that resistance to resettlement frequently occurs where there are ethnic differences between those in control of the state and those subject to eviction, and where the state's resettlement history is bad. A third factor in resistance, he argues, is the quality of the resettlement plan. All three were at issue in the Chixoy case. At a minimum, before making their respective decisions to fund the project, the IDB and the World Bank should have called for open and honest assessments of effects that the project would have on the integrity of local Maya communities and of the likely impact of Guatemalan and regional patterns of interethnic relations on the conduct of the project. Perhaps, more importantly, the role of INDE as a state actor deserved closer attention, especially at the moment when the agency was placed under military control.

Table 1: Funding for INDE and the Chixoy Project

| IFI | Loan approved | Amount |
|---------------------------------|----------------------|------------------------------------------------------------------------------------------------------|
| World Bank | 1967 | \$15 million to INDE |
| World Bank | 1975 | Energy sector review \$250,000 to INDE for management |
| Inter-American Development Bank | 1976 | \$105 million to INDE for Chixoy |
| World Bank | 1978 | \$72 million to INDE for Chixoy |
| Inter-American Development Bank | 1981 | \$70 million to INDE for Chixoy |
| World Bank | 1985 | \$44.6 million to INDE for Chixoy |
| World Bank | 1996 | review of resettlement compliance, directive to provide additional housing and services to displaced |

Source: IRN (2005), Johnston 200

Table 2: International Firms Contracted to work on the Pueblo Viejo-Quixal Hydroelectric Project, 1968-2000

| Country | Contracting Firms | Ultimate Funding source ²⁴ | Role |
|----------------------|----------------------------------------------------------------|---------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------|
| Germany | Consorcio LAMI – Lahmeyer, International Holchtief | WB, IDB, W. German gov't IDB | Prime contractor, feasibility studies, bid preparation, etc. Lahmeyer is leading firm in consortium designed and built tunnel |
| Italy | COFEGAR (Impreglio) QUASIM | IDB, WB, Italian gov't COFEGAR | Built gallery to adjust water level in dam COFEGAR subcontractor, built relief tunnel, installed basin doors |
| Japan | Mitsubishi | IDB, WB | Provided and installed diesel plants |
| United States | Consorcio LAMI--Motor Columbus Nelloiter | COFEGAR | prime contractor (See above) built access roads |
| Switzerland | Consorcio LAMI -- International Engineering Escher Weis | WB, IDB IDB | prime contractor (see above) installed turbines |
| Mexico and Guatemala | ICA | IDB | provided labor for heavy construction built turbine house |
| India | Shoke Waltman | COGEFAR | COGEFAR subcontractor, built a release tunnel |
| Portugal | SOREFOMER | IDB, WB | Installed headworks |
| Canada | Lavalin (Lamarre Valois, Int.) | BID, Canadian gov't | Developed plans for Chixoy river restoration and development, integrated rural development. |

Source: Johnson 2005, pp. 10-11

²⁴ Except where noted, contracts are with INDE which received funds from sources listed in Table 1.

References

- Aguirre, Monti. 2004. Guatemalan government agrees to reparations talks after dam occupation. *World Rivers Review (IRN)* 19 (5): 1, 15.
- Arias, Arturo. 1990. Changing Indian identity: Guatemala's violent transition to modernity. In Carol Smith, ed. *Guatemalan Indians and the State, 1540 to 1988*. Austin: University of Texas Press.
- Batres, I. Garrido, Mario Estuardo and Raul Eduardo Najera Hernandez, compilers. 2000. Breve Estudio de la Comunidad de Rio Negro, Rapinal, Baja Vera Paz. Centro de Estudios y Educacion Popular Padre Hermodenes Lopez
- Berman, Marshall. 1982. *All that is Solid Melts into Air*. New York: Penguin
- Brockett, Charles D. 1988. *Land, Power, and Poverty: Agrarian Transformation and Political Conflict in Central America*. Boston: Allen & Unwin.
- Cernea, Michael M. 2001. Development Economics, Sociology, and Displacement: A Vexing Dilemma under Interdisciplinary Dialogue. Paper prepared for the Workshop "Moving Targets: Displacement, Impoverishment and Development Processes" Cornell University, November 9-10.
- COHRE (Center on Housing Rights and Evictions). 2004. Continuing the Struggle for Justice and Accountability in Guatemala: Making Reparations a Reality in the Chixoy Dam Case. Mission Report.
- Colajacomo, Jaroslave. 1999. The Chixoy Dam: The Maya Achi' Genocide: The Story of Forced Resettlement. World Commission on Dams, Contributing Paper prepared for Thematic Review 1.2 (Dams, Indigenous People and Vulnerable Ethnic Minorities.)
- Comisión para el Esclarecimiento Histórico. 2004. Conclusiones y recomendaciones: Guatemala memoria del silencio. Guatemala City: F&G Editores.
- Cowen, M.P. and R.W. Shenton. 1996. *Doctrines of Development*. London and New York: Routledge.
- Escobar, Arturo. 2001. Culture sits in places: reflections on globalism and subaltern strategies of localization. *Political Geography* 20: 139-174.
- Fox Jonathan A. and L. David Brown, eds. 1998. *The Struggle for Accountability: the World Bank, NGOs, and Grassroots Movements*. Cambridge, Mass. : MIT Press, c1998.
- Gellert, Paul, and Barbara Lynch. 2003. Megaprojects as displacements. *International Social Sciences Journal* 55 (1, March): 15-26.

Goldman, Michael. 2001. The birth of a discipline: producing authoritative green knowledge, World Bank style. *Ethnography* 2 (2): 191-217.

Goldman, Michael. 2005. *Imperial Nature: The World Bank and Stuggles for Social Justice in the Age of Globalization*. New Haven: Yale University Press.

Grandin, Greg. 2004. *The Last Colonial Massacre: Latin America in the Cold War*. Chicago: University of Chicago Press.

Hildyard, Nicolas. 2005. Holding funders and companies to account—litigation and standards. Paper presented to American Anthropological Assn. Annual Meeting. Washington DC. December

Hirschman, Albert O. *Development Projects Observed*. Washington, DC: Brookings Institution.

Hirschman, Albert O. 1998. *Crossing boundaries: selected writings*. New York : Zone Books.

Human Rights Office, Archdiocese of Guatemala. 1999. Guatemala, never again! [Guatemala, nunca mas], Recovery of Historical Memory Project. Maryknoll, NY: Orbis

INDE (Instituto Nacional de Electrificacion). 1991. Informe de evaluacion ex-post proyecto hid. Pueblo-Viejo Quixal. August. Unpublished report.

Inter-American Development Bank. 1991. Management and Conservation of Renewable Natural Resources in the Upper Chixoy Valley. Loan Proposal (GU-0064).

International Rivers Network. 2002. Life Submerged - The Environmental Impacts of Guatemala's Chixoy Dam: This report describes the results of a two-month reconnaissance *PDF file*), April 2002.

International Rivers Network. 2005. Chixoy Dam, Guatemala. Summary of Major Findings. <http://www.irn.org/programs/chixoy/index.php?id=ChixoyLegacy.2005/03.findings.html>

Johnston, Barbara Rose. 2003. Trip Report, July 19-28. Visit to meet with community representatives and assist planning efforts to undertake a Consequential Damages/Community Needs Assessment of Chixoy Dam-Affected Communities.

Johnston, Barbara Rose. 2005. Chixoy Dam Legacy Issues Document Review: Chronology of Relevant Events and actions. Volume Two: Chronology of Relevant Events and Actions.

Johnston, Barbara Rose. 2005. Chixoy Dam Legacy Issues Study, Vol. 1 – 5. International Rivers Network. <http://www.irn.org/programs/chixoy/index.php?id=ChixoyLegacy.2005/03.findings.html>

- LAVALIN (Lammarre Valois International Limitee). 1981. Estudio de Desarrollo de la Cuenca del Rio Chixoy, Segunda Etapa. Metodologia para la Evaluacion "Ex-Post" del Impacto Economico y Social de la Central Hidroelectrica Pueblo Viejo-Quixal. Prepared for Instituto Nacional de Electrificacion (INDE). Guatemala, June.
- Levy, Karen. 2002. Life Submerged: The Environmental Impacts of Guatemala's Chixoy Dam. International Rivers Network. www.irn.org/programs/chixoy.pdf/0204.chixoyreport.pdf.
- Linder, Marc. 1994. Projecting capitalism: a history of the internationalization of the construction industry. Westport, CT: Greenwood Press
- McCully, Patrick. 2001. Silenced Rivers (enlarged and updated edition). London and New York: Zed
- Mitchell, Timothy. 2002. Rule of Experts: Egypt, Techno-Politics, Modernity. Berkeley: University of California Press
- Neuse, Steven M. 1996. David E. Lilienthal: the Journey of an American Liberal. Knoxville. University of Tennessee Press.
- Oliver-Smith, Anthony. 1991. Involuntary resettlement, resistance and political empowerment. *Journal of Refugee Studies* 4 (2): 132-149.
- Partridge, William L. 1983. Comparative analysis of BID Experience with Resettlement, based on Evaluations of the Arenal and Chixoy Projects. Consultancy report to the Banco Interamericano de Desarrollo [IBD]. December
- Pacux, Comunidad de. 199?. Propuesta de la Comunidad de Pacux al Banco Mundial. Unpublished document.
- Rights Action/Derechos en Accion. 2002. Proposal: Reparations Study and Action Plan for the Chixoy Dam Reparations Campaign. Unpublished ms.
- Robbins, Paul. 2002. Letter to the editor: Obstacles to a First World political ecology? Looking near without looking up. *Environment and Planning A* 34: 15009-1513.
- Sanford, Victoria. 2003. Buried Secrets: Truth and Human Rights in Guatemala. New York: Palgrave MacMillan
- Sanford, Victoria. 2004. Violencia y genocidio en Guatemala. 2nd ed. Colonia Centro America, Guatemala: F&G, Editores
- Thorp, Rosemary, Corinne Caumartin and George Gray-Molina. 2006. Inequality, ethnicity, political mobilization and political violence in Latin America: the cases of Bolivia, Guatemala, and Peru. *Bulletin of Latin American Research* 25 (4): 453-480.

Trudeau, Robert and Lars Schoultz. 1986. Guatemala. In Morris J. Blachman et al., eds. *Confronting Revolution: Security through Diplomacy in Central America*. NY: Pantheon.

Witness for Peace. 1996. A People Dammed - The Impact of the World Bank Chixoy Hydroelectric Project in Guatemala.

Wolfenson, James. 1996. Letter to Paul Scire, Executive Director, Witness for Peace and Owen Lammers, Executive Director, International Rivers Network. September 27.