

Lessons from Four Decades of Infrastructure Project Related Conflicts in Latin America and the Caribbean

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Abstract

This paper examines infrastructure project related conflicts and their consequences in Latin America and the Caribbean (LAC). The countries of LAC face a critical challenge of how to meet demands for infrastructure to supply energy, water, sanitation, transport, and communication services. If social and environmental sustainability aspects of infrastructure projects are neglected, the risks of conflict and failure increase. Through 32 interviews with sustainability officers of major LAC firms and the documentation and analysis of 200 conflicted projects across six sectors in LAC, we researched the extent to which projects have been affected by environmental and social conflicts, how the nature of such conflicts evolved over the last four decades, the strategies in dealing with conflicts, and their material implications for companies and countries. Our analysis provides substantive evidence on major drivers of conflict in infrastructure projects being insufficient planning on behalf of state and regional authorities, as well as the institutional capacity of the country the project is located in. Other dominant drivers of conflict we found are lack of sufficient community benefits provided by the project, reduced access to resources, lack of adequate consultation, and pollution and environmental degradation. Our work identifies the specific negative outcomes and pathways that were associated with these drivers, the resulting problems in infrastructure projects, and the effectiveness of company actions after a conflict has erupted. We conclude with recommendations for regional and local governments, project developers as well as project financiers.

1. The Approach of the Study

Though the knowledge concerning social and environmental conflicts has considerably improved over the last decade, especially in the field of mining related conflicts¹, there are still white spots, especially when it comes to other infrastructures. Hence, a study to investigate the nature and consequences of conflict in infrastructure projects in Latin America and the Caribbean (LAC) was commissioned by the Inter-American Development Bank (IDB) and the Deutsche Gesellschaft für Internationale Zusammenarbeit GmbH (GIZ) in 2016. This paper is based on the results of this study and summarizes its major findings.

The study followed a hybrid quantitative and qualitative research approach to collect and analyze data. 32 interviews were conducted with 42 sustainability experts involved in the development of infrastructure in LAC. Then, a database of 200 conflict-affected infrastructure projects across six sectors was created to assess the nature and drivers of conflicts, the companies' response to conflicts, and the material implications for projects, companies, and societies.¹

The project database was developed to represent the diverse range of infrastructure in LAC over the last 40 years. The database includes projects from the waste, water, urban development, energy, transportation, and resource extraction infrastructure sectors, across 20 countries (Figure 1). The selection includes LAC countries that have had the highest rate of infrastructure and economic development, such as Brazil, Mexico, Chile, Argentina, and Colombia, and those rich in natural resources with high rates of urbanization and potential for economic development, such as Bolivia, Ecuador, and Peru. With the goal of evaluating whether the nature of infrastructure conflicts has changed over the years, the database includes projects developed from the 1980s until today.

¹ The 200 project database was populated with publicly-available data.

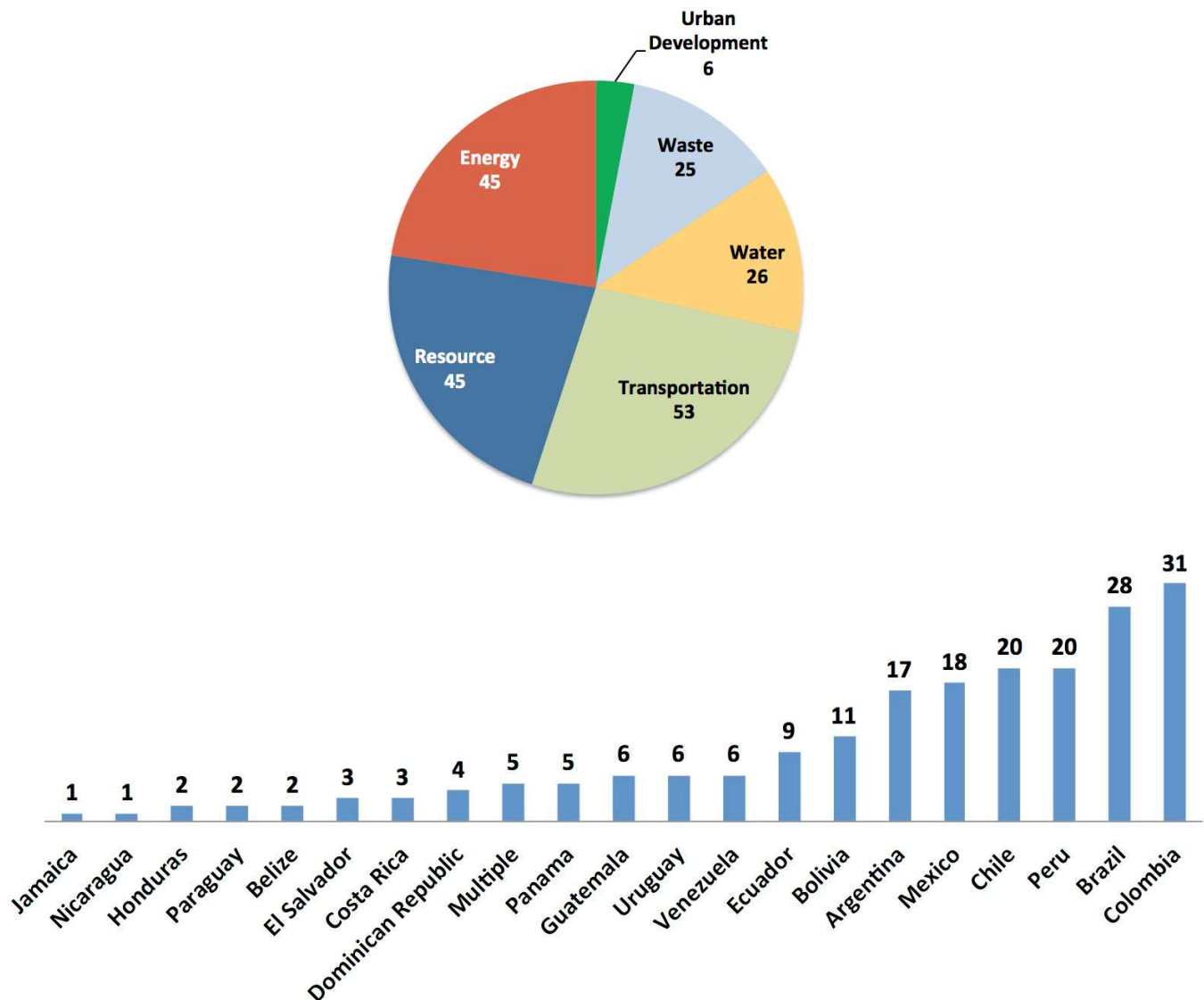


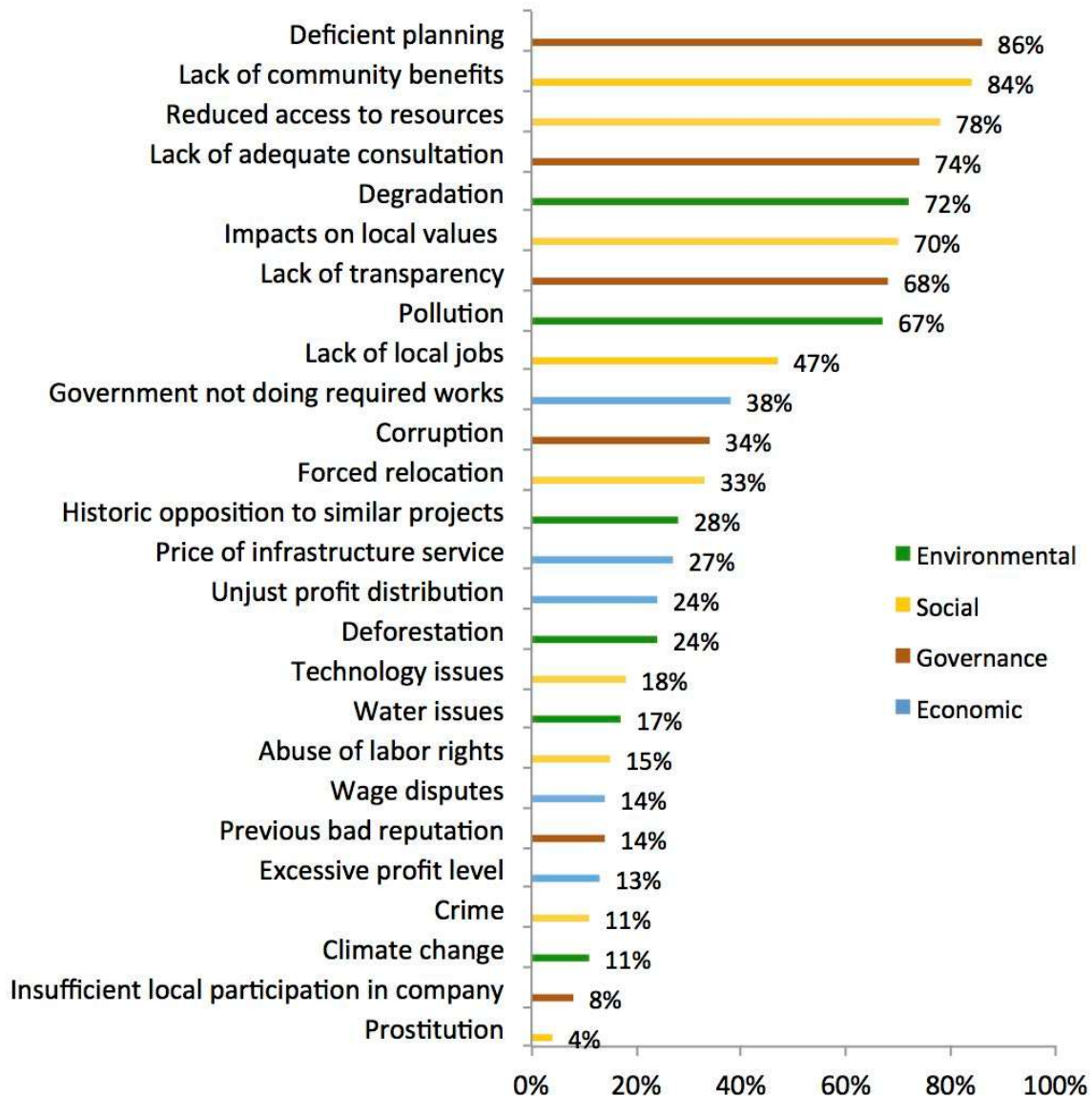
Figure 1. Project overview on sectors and countries.

2. The Four Categories of Conflict Drivers

The analysis of conflict drivers of the 200 projects demonstrates that the nature of conflict is multidimensional, and more dynamic than traditionally conceived by both firms and governments. Most conflicts materialize through the interaction of governance, social, environmental, and economic drivers over a long period. Several drivers of conflict are interrelated, and the emergence of one often causes a cascading effect that influences more drivers and can even exacerbate conflicts to violent confrontations. Overall, deficient planning, lack of community benefits, reduced access to resources, and lack of adequate consultation were the most prominent conflict drivers (Figure 2). In many cases, conflicts escalated because grievances and community concerns accumulated, going unresolved for many years. We

explain the major drivers in the four following clusters of governance, social, environmental, and economic drivers.

Figure 2. Drivers of conflict in all projects, listed in order of prominence.



2.1. Governance Drivers of Conflict

Deficient planning is the most dominant conflict driver in the governance category and overall. Deficient planning aggravated conflicts in 86% of cases in the database, and was reported by 74% of the interviewees as a conflict driver. Planning includes project type and site selection, and long-term strategies on how the region would develop after the project. In many cases,

conflicts escalated because government planning did not anticipate specific impacts or did not provide guidance for the implementation of infrastructure works.

Lack of adequate consultation (or just absence of consultation) was another major driver which led to conflicts in 74% of cases. This was a particularly significant conflict driver for populations which did not have the right to a formal consultation, or have acquired such right only very recently. In fact, conflicts escalated in almost 90% of cases involving indigenous peoples because potentially affected communities were not consulted about the project.

Lack of transparency in project-related information and at the decision making process led to conflicts in 68% of cases. The rights of local communities to access such information are increasingly supported by national laws throughout LAC. In spite of this, unwillingness of firms and governments to provide such information has increasingly led to conflicts.

55% of the interviewees also reported unrealistic expectations as a common conflict driver. These include (i) high expectations from the community, and/or (ii) high expectations from the government. Local communities are exposed to a wide variety of agents, ranging from government officials, international organizations and NGOs to company representatives. Lack of a single voice and a clear line of communication with the community, combined with lack of basic services in certain areas puts additional pressure on the developer. Local communities expect –in some cases due to political promises– that many different infrastructure services will be provided by the developer. These expectations are likely to generate frustration and discontent in the population, and in the worst case, project delays or cancellations.

2.2. Social Drivers of Conflict

Lack of community benefits led to conflicts in 84% of cases, making it the second strongest driver of conflict. Communities were concerned that they would have to endure the project's negative impacts without receiving adequate benefits as compensation. In large infrastructure projects this becomes a complex challenge, as such projects might affect ecosystems and communities tens of kilometers away. Reduced access to resources led to conflicts in 78% of cases. In most cases, local communities were concerned about losing access to agricultural and marine resources they depend on for their livelihoods and daily income.

Impacts on the traditional value system of local people (70% of cases) and lack of local jobs (47% of cases) are prominent, often interrelated conflict drivers. Many communities regard infrastructure as an opportunity for economic development and demand a sizable portion of project-related jobs to be allocated to them. However, some other communities oppose large infrastructures and are afraid that such projects would alter their way of life and degrade their traditions. In certain cases, a community was divided between those who wanted the project for its economic development opportunities and those who opposed the project for its impact on their traditional way of life.

Forced relocation of people led to conflicts in 33% of cases. Especially in countries with significant indigenous populations without legally protected land rights, the land expropriation and relocation process remains a major hurdle for firms. In many cases the relocation process initially did not seem challenging, but later led to significant conflicts.

Another major issue is unplanned migration. As a result of large developments, in particular the creation of new job opportunities, groups of people move to the project area to seek jobs or to occupy land in order to request compensation as if they were long-time residents. This rent seeking behavior becomes more and more frequent and makes it very difficult to implement just and fair compensation schemes. The sudden inflation of affected people in the region makes it much costlier to acquire the land rights and manage the resettlements in a fair way.

2.3. Environmental Drivers of Conflict

Degradation of ecosystems (72% of cases) and pollution (67% of cases) are the most prominent environmental conflict drivers in the database. Furthermore, communities strongly oppose projects that they believe might cause damage similar to the damage of comparable projects elsewhere, even in other countries or continents. Our analysis shows that 28% of projects faced historically motivated community opposition.

Similar findings emerged in the interviews. 45% of interviewees reported that a community historically opposed to certain infrastructure usually includes three aspects: The first one is opposition against a certain project typology; bad practices during the last decades in projects such as hydropower or mining often affect the community's perception about these projects. Past environmental disasters, or the fear that such projects would affect their livelihoods (e.g. risk of water contamination in a fishing area), are common preconceived ideas that trigger

conflicts. The second aspect is opposition against development in a certain area; the approval of local communities becomes complicated when projects are sited in areas where previous projects have created an adverse effect, even if the new project includes all necessary measures to avoid similar impacts. The third aspect is opposition against a certain developer. Communities are likely to oppose a specific company, especially when developing an area's ecological and cultural value is at stake. This opposition may come from the distrust on the developer coming from past failures in other projects or locations, an effect aggravated lately by social media. Opposition can also be reinforced when a foreign developer faces distrust of local communities that are in principle against international ownership of their infrastructure and resources.

2.4. Economic Drivers of Conflict

In 38% of cases conflicts escalated because the government did not implement the works it had to do as part of the project agreement. Such works can include the construction of specific project components, development of new institutions, or providing community engagement initiatives. Unjust profit distribution led to conflicts in 24% of cases. In these cases, local communities and governments complained about project profits being distributed to more urbanized regions.

The price of infrastructure service (27% of cases) and excessive profit level (13% of cases) were also common economic drivers of conflict. Local communities and stakeholders often alleged that projects were overpriced and that the infrastructure service (such as provision of energy or water) cost its users too much. These issues were particularly prominent in urban transportation and water projects in the database. Many BRT and subway projects were delayed because of such conflicts, whereas many water privatizations failed because people considered access to water to be a right and not a service that can be priced as high as the full cost of processing and transporting the water.

3. Consequences of Conflict

The consequences of conflicts range from delays and cost overruns to project cancellations. They entail non-technical risks and time and budget overruns that can damage the business case and the operational model of infrastructure firms heavily, yet such impacts are regularly underestimated or not considered at all. The potential for unexpected impacts increases rapidly when developing projects in urban centers. Disruptions in urban environments may delay

project activities in multiple ways and cause a cascading effect, introducing more delays and overruns. The potential for project activities to unexpectedly affect nearby communities is also far greater in the city.

3.1. Consequences of Conflict at the Project Level

Project delays (81% of cases) and cost overruns (58% of cases) were the most common conflict consequences at the project level. The average publicly reported delay was approximately 5 years. Similarly, the average publicly reported cost overrun is US\$1,170 million, or 69.2% of the average original budget. It should be noted that our research identified delays or cost overruns only in cases where these were quantified in a source. It is highly likely that many more, if not all projects had delays and cost overruns that were not quantified or mentioned in publicly available sources.

Intervention from an independent expert, to help ameliorate or explain the conflict was observed in 57% of cases. Both developers and project opponents asked for expert reviews. The consequences of such reviews can be negative in terms of bad press coverage and modifications if the experts highlight any mistakes, but also positive if the experts conclude that the developer had done nothing wrong.

Project redesign (42% of cases) was also a prominent conflict consequence in the database. Such modifications create high additional costs for the project, while they also come with delays, as some project activities have to be postponed in order for the firm to implement the modifications. In many cases where a project redesign was required, independent experts evaluated the updated proposal as a much better alternative. This creates a strong link between the deficient planning driver and the request for redesign.

In most cases when a project redesign was required, experts argued that conflicts could have been avoided had the government and the developer agreed to develop the project in another location or in a way that incorporated community concerns into the design. Finally, 18% of projects were cancelled outright because of conflicts. Figure 3 summarizes the consequences of conflict at the project level.

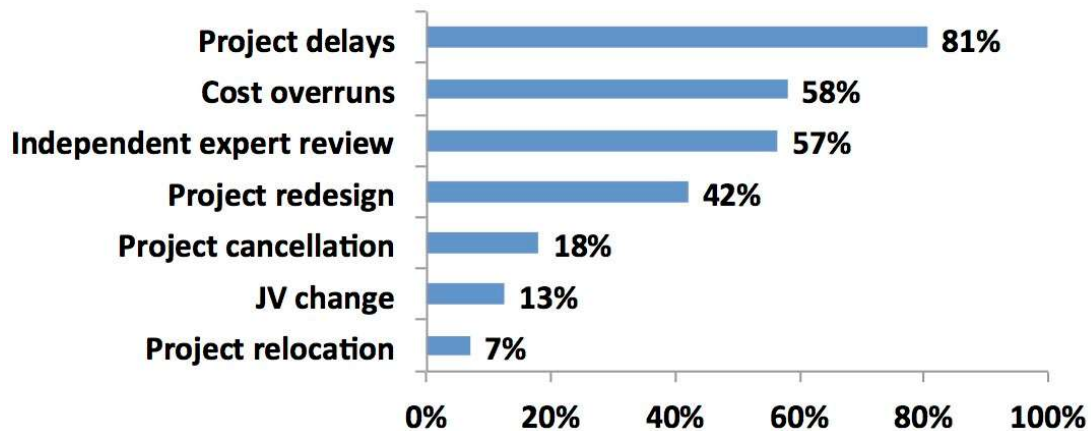


Figure 3. Summary of consequences of conflict at the project level.

3.2. Consequences of Conflict for Project Sponsors

Conflicts have significant impacts for project sponsors and operators. Reputational damage was observed in 95% of cases. Impaired reputation affects credibility and can harm investors and developers while developing similar projects in the future, as evidenced by the importance of the historically motivated opposition and previous bad reputation. In many cases, a newspaper or online article alleging that the infrastructure firm has violated or is ready to violate the law is enough to spark or intensify conflicts. Nowadays, communities have ample access to information, and social media enable them to mobilize and demonstrate their opposition to projects rapidly in ways unheard of in past decades. NGOs are also able to easily organize online campaigns against projects that quickly attract international attention.

Redress payments and fines were observed in 30% and 20% of cases, respectively. Fines and redress payments were often a result of violations of environmental and consultation law and failures to conduct necessary environmental impact studies. Finally, amendment of the concession and imprisonment were penalties observed in 27% and 5% of cases, respectively. The imprisonment consequence was directly linked with fines in many cases, as it was imposed due to contract irregularities and corruption. 42% of the interviewees reported that reputational damage is usually among the most significant consequences of conflict for companies. Figure 4 summarizes the consequences of conflict for project sponsors.

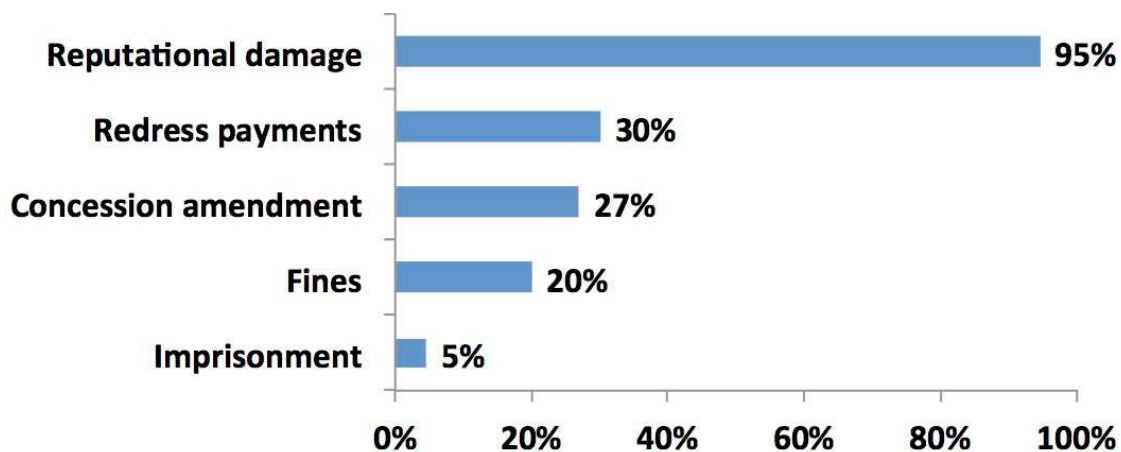


Figure 4. Summary of consequences of conflict for project sponsors.

3.3. National Consequences of Infrastructure Related Conflicts

In many cases, conflicts were detrimental to the country's economy in terms of forgone royalties and lost development opportunities from cancelled projects, losses that might be felt in its economy for decades. Conflicts might also escalate to the point where presidents resign and government administrations change, or might result in considerable political damage that facilitates such a change in the immediate future.

Loss of productivity (22% of cases) and lack of development (20% of cases) were the most frequent consequences of conflict at the national level. Most projects in the database had general development and growth as a key objective. When projects are delayed or cancelled, these benefits often do not materialize. Loss of foreign investment (17% of cases) was an equally important consequence, as many of the regions traditionally lack investments in infrastructure and public services. Change of government was observed in 2% of cases. Conflicts also resulted in political damages that weakened governments. In some cases, the opposition gained a political advantage for upcoming elections through conflictive projects. Interviewees reported loss of productivity (19%), lack of development (13%), and loss of foreign investment (13%) as frequent national consequences of conflict. Figure 5 summarizes the national consequences of conflict.

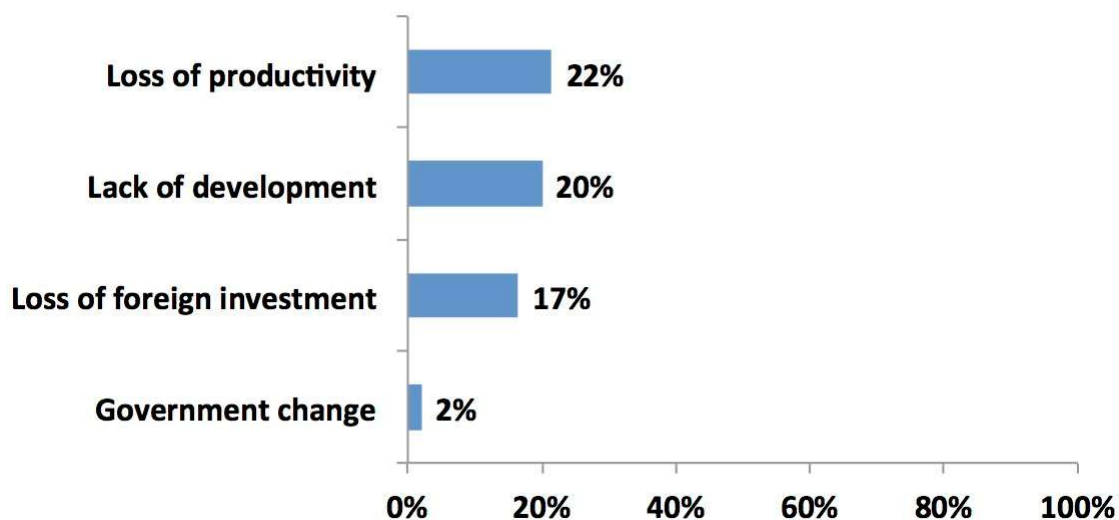


Figure 5. Summary of national consequences of conflict.

4. Conflicts Are Not Addressed Systematically by the Companies

Our analysis shows that firms may spend a lot of time and effort in addressing conflicts. However, several interviewees mentioned that several firms are hesitant to invest upfront and address conflicts in advance. In 86% of cases firms took action to address conflicts, whereas in 14% of cases firms remained unresponsive to conflicts. The specific circumstances of whether and how companies decide to address a conflict differ, but the overarching strategies can be grouped in three categories: general company actions, provision of community benefits, and provision of environmental benefits.

4.1. General Company Actions

In 91% of cases, firms addressed conflicts merely with press statements. Such statements expressed various opinions on why the conflicts had escalated, and whether the firms developing the projects were responsible for such conflicts. In cases where projects clearly resulted in environmental and social impacts, firms in general demonstrated a willingness to address and evaluate the case. When the conflict was about the lack of compliance with environmental law, consultation requirements, or community benefits, evaluating the response of the company became increasingly complex. In most cases the national government is responsible for ensuring compliance with such laws, while in some cases such laws did not exist in the respective country. Firms often argued that they complied with all relevant laws as required by the environmental impact assessment (EIA) process. In cases where the EIA process was deficient, most firms did demonstrate a willingness to implement necessary

modifications. Furthermore, executives stated that political groups take advantage of local communities to promote their interests and gain political advantage by fueling conflicts.

Although lack of adequate consultation or no consultation was a major conflict driver, with many firms not demonstrating a willingness to consult with communities once conflicts escalated. In 69% of cases firms did conduct a consultation process as a response, but often a lot of damage had already been done in terms of delays and cost overruns. The interviewees reported that the requirements for consultation vary according to the country under analysis. In most cases, the government is responsible for conducting consultation. But due to lack of expertise or resources, governments often delegate the responsibility to the developer. According to experts in conflict resolution, unrealistic project timelines often derail the consultation process. Contractual agreements or political agendas accelerate the timeframe for the projects, leaving insufficient time for engaging stakeholders meaningfully.

Furthermore, communities regard the issue of transparency as more critical than many firms do. Although firms may begin the community engagement process with best intentions in mind, lack of transparency and capacity to follow consultation good practices leads to conflicts. The ones who are in charge of negotiations with the communities often choose to 'transfer resources' (mostly monetary) rather than assessing the communities' real needs. Thus they miss the opportunity to provide more targeted interventions like specific training and investments which can create a much higher sense of ownership.ⁱⁱ Around 60% of the interviewees acknowledged the importance of a conflict management framework as a strategy to minimize conflicts. However, just one interviewee reported to have such a system beyond a conventional social responsibility plan.

An independent expert to provide an objective evaluation on ongoing conflicts was brought in to deal with conflicts in 39% of cases. Most project opponents in such cases did regard a third party intervention as objective and meaningful, especially when experts were members of international financial institutions (IFIs) or reputable international organizations. Independent experts stated that some firms are aware of the consequences of conflict but are not always aware of community engagement and consultation best practices. This is indeed a complex process which often goes beyond the capabilities of individuals. To rely on a single consultant to do a variety of analyses is not enough. These processes need many people with different areas of expertise, that are experts on local communities, have good manners, and speak the local

language, as opposed to having technocrats that just communicate official positions and facts, which local people do not understand. ⁱⁱⁱ

Regulatory compliance was observed as a response in 46% of cases. However, the interviewees reported that complying with regulatory requirements is not enough to minimize conflicts. According to experts from the extractive sector complying with regulations in an effective manner merely represents about 20% of the total effort and commitment that their projects require to be on track.

In 16% of cases, infrastructure firms implemented initiatives that exceeded local regulatory requirements to manage conflicts (regulatory innovation). These initiatives range from conducting consultation when national law does not mandate it and directly involving communities during construction or operations, to implementing socio-environmental initiatives at unprecedented scale and working with government to update conflicting regulations. These actions usually required a significant amount of time and resources. For example, community engagement often included negotiation roundtables to decide on additional environmental and social initiatives over many months. In some cases, firms negotiated with communities over five to ten years to move the project forward.

Force was observed as a company response in 12% of cases. Such a response almost invariably resulted in negative consequences. Most firms used security forces not as a means to violently repress protests but to safeguard their properties, as conflicts often escalate to damage property within the project site.

Then, in 19% of cases, firms decided that abandoning the project would be their better option. In particular, in 3% of cases firms had to file for bankruptcy as a response to ongoing conflicts. In these cases, firms had already suffered a substantial amount of economic damage because of conflicts. Finally, in 14% of cases firms took no action to avoid or address conflicts. In fact, some infrastructure firm executives have stated that mitigating conflicts in advance is often more time-consuming and expensive than dealing with potential issues as they arise. Figure 6 summarizes the general company actions.

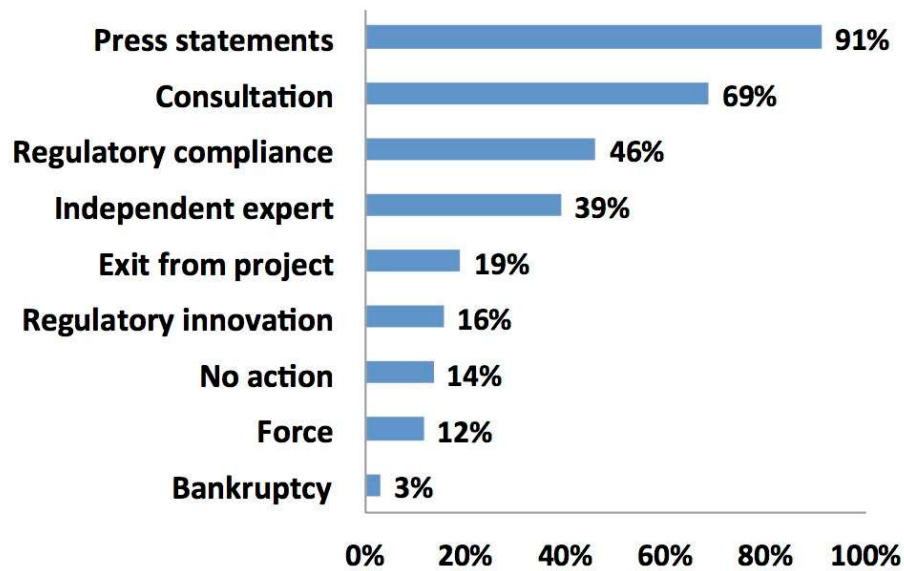


Figure 6.
of general
actions.

Summary
company

5. Conflicts Affect Each Infrastructure Sector Differently

In general, although all six infrastructure sectors have seen conflicts, resource, energy, and transportation projects have been more conflictive. As shown in Figure 7, a higher percentage of conflicts escalated to high and extreme levels in projects within these three sectors.

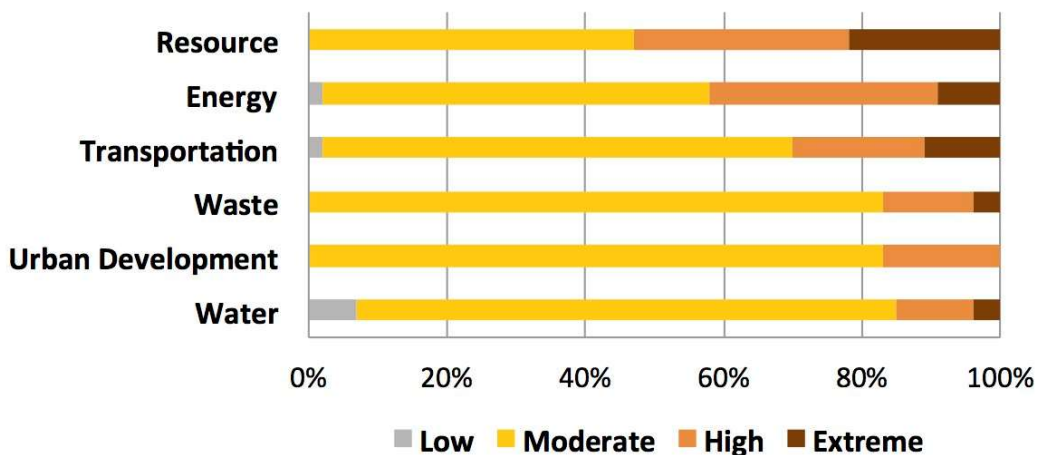


Figure 7. Conflict escalation per sector.

6. Projects Are Vulnerable to Conflicts Early On

Conflicts can arise or escalate during all phases of a project's life cycle. However, our analysis shows that projects face more conflicts during the earliest phases (Figure 8). In fact, multiple projects included in the database faced conflicts as early as when they were announced.

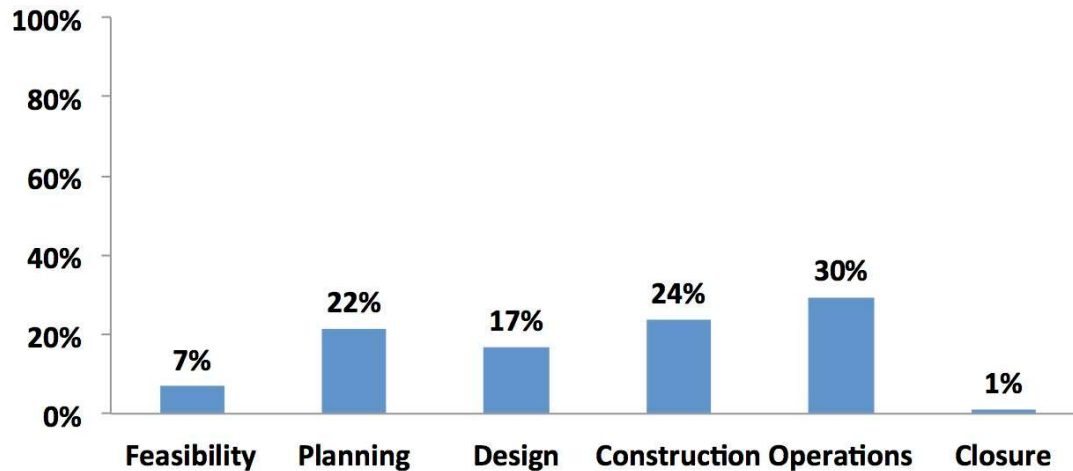


Figure 8. Timing of conflict in project cycle.

The point of time in the project cycle at which conflicts emerge has shifted over the last decades. As is shown in Figure 9, projects developed until the 1990s faced most conflicts during the later project phases. More recent projects have faced conflicts earlier in the project cycle. This might be partly explained by the fact that communities did not always have the explicit right to be informed about projects in advance. In fact, these older projects made countries and organizations adopt better standards. For instance, access to project related information and the free, prior, and informed consent of communities have become legally recognized requirements in multiple LAC countries recently.^{iv}

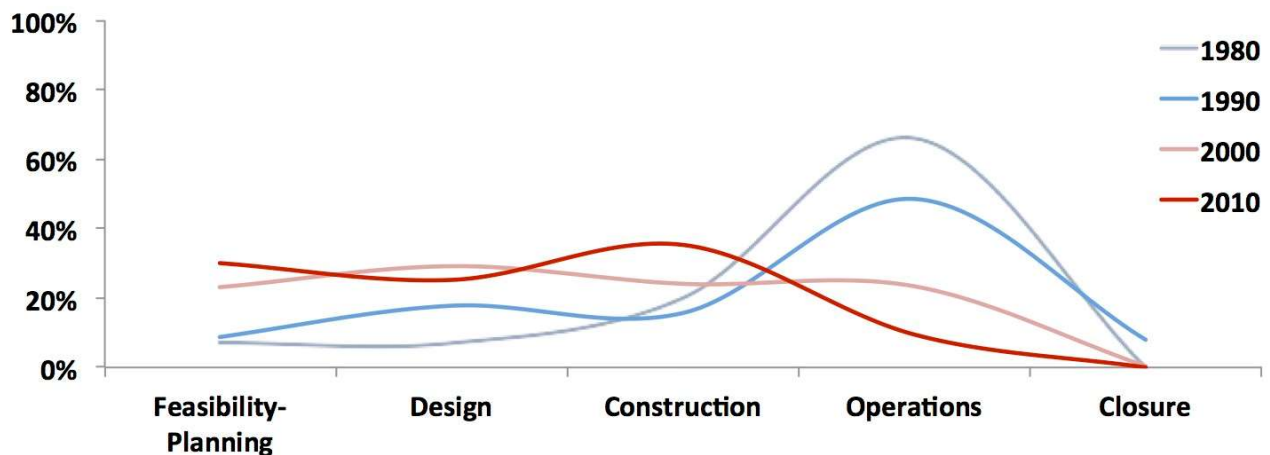


Figure 9. Timing of conflict in project cycle per decade, 1980 – today.

7. Lack of Upstream Planning Is a Dominant Driver of Conflict

Deficient planning is the most dominant conflict driver. The location of projects, in particular, is a factor that can lead to widespread conflicts. Several interviewees pointed out the risk of deficient upstream planning which prevents the selection of better project sites and often hinders a long-term stable and sustainable development of a region. Projects are sited within pristine natural environments even when the law forbids this, or are planned around a region that has seen many conflictive projects. Unclear land rights exacerbate disputes about the significant land use change infrastructure projects entail and can lead to conflicts. If there are upstream plans which guide the siting of projects then they usually do not properly account for the significance of conflicts that can arise during the land expropriation process, as indigenous peoples have unclear land ownership rights to a substantial percentage of land in the LAC region.

Furthermore, the lack of such long-term planning of successive governments has left some regions rich in natural resources without adequate investments. Communities in these regions often constitute the country's poorest segments. As such, disrupting projects is regarded as an opportunity to mandate long-overdue investments in infrastructure and public services that were promised but that never materialized.

The lack of upstream planning heavily affects the willingness of companies to invest or engage in a region: Companies need to make sure that their projects are not going to create protests that result in delays and cost overruns. But the best instrument for this is early regional level planning, which is beyond their scope as it is a government responsibility. Thus, it is important that governments fulfill their responsibility to plan at that scale. It is not only the best way to protect their national and cultural heritage and fulfill their social commitment, but also a good way to facilitate and attract infrastructure investments.

The impacts of deficient planning can be illustrated by national priority projects. Governments often promote infrastructure projects as being of national interest, often as part of political campaigns during election periods. Because of the expectations arising from such projects in terms of jobs, benefits for local communities, and investments in public services, they become more controversial. Especially in cases where firms and governments are not able to implement the initiatives and benefits which were promised, national priority projects lead to intense conflicts. Through the review of the projects in the database we observed that in some national priority cases, authorities approved site selections and EIAs that may not have been in full compliance with national laws and regulations. In many cases, governments also disregarded

community concerns and opposition in order to move the project forward as fast as possible. Although these projects were promoted as a significant opportunity for development, a common perception seems to exist among communities that they will not receive enough benefits from such projects. In most cases, government authorities did not manage to adequately explain how communities and stakeholders would benefit beyond the provision of jobs.

8. The Institutional Capacity of Countries is Important to Contain a Conflict

One prominent hypothesis is that conflicts tend to escalate to violent confrontations more easily and result in substantial consequences more often in countries that lack the institutional capacity to manage them effectively. To test this relationship, we used various indicators that reflect a country's institutional capacity. These were the World Justice Project's Rule of Law Index, GDP per capita, the Human Development Index (HDI), the Economist Intelligence Unit's Democracy Index, and the World Resource Institute's Environmental Democracy Index. The indicator that provided the most significant results is the Rule of Law Index, which we present here.

We reviewed the indicator score for each country represented in our database and ranked them accordingly. Then we compared the Rule of Law indicator with the severity of conflict escalation in each country. The most severe conflicts were observed in countries with the lowest Rule of Law indicator ranks (Figure 10). Therefore, there is a correlation between countries with lower institutional capacity and governance, and the magnitude of conflict escalation. In societies where transparency, access to justice, and community participation are ensured and laws are adequate and enforced, local communities are less likely to resort to violence and disrupt projects. In countries with higher levels of institutional development, more stringent environmental management laws and requirements for participatory project designs encourage firms to proactively address community concerns and resolve conflicts through communication and collaboration.

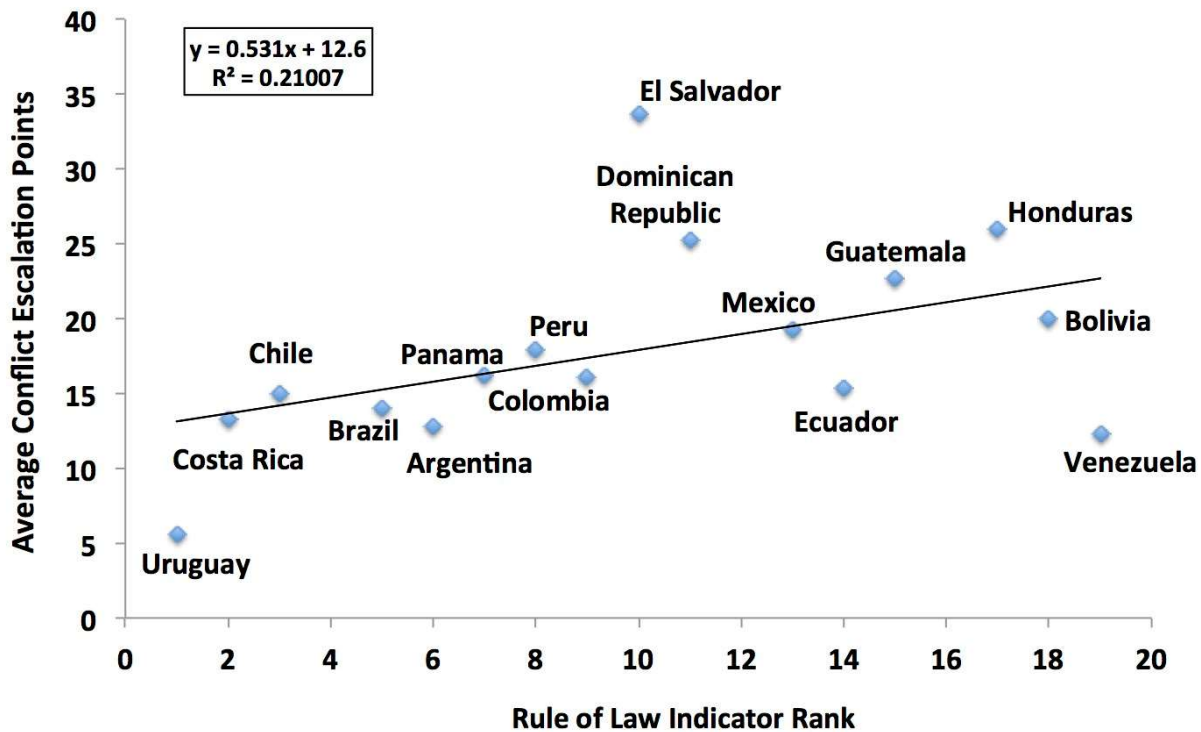


Figure 10. Institutional capacity and conflict escalation.

R= 47%, R²= 21%, P-value = 0.056.

In other countries the rights of communities are not legally protected, and communities feel that their concerns would not be heard through the conventional decision-making process and decide to disrupt project activities. This leads to different consequences depending on the country. Some countries regard the right of communities to protest as a fundamental right that should always be protected, while some others have a historical tendency of violently repressing protests.^v However, even countries that have enacted innovative environmental and consultation laws, such as Peru and Brazil, often lack the institutional capacity to effectively enforce them. This inevitably leads to the similar outcomes as in countries without such legal frameworks.

9. Recommendations

9.1. Recommendations for States and Governments

Ensure that national laws are comprehensive and universal.

Many projects, especially those promoted as being of national interest, faced violent conflicts because local communities alleged that national laws and regulations were sidestepped in

carrying out these projects. In such cases, local communities were also convinced that reporting law violations would be ineffective to safeguard their rights, and that developers would not be held accountable for inflicting environmental damage. Therefore, when access to the justice system was not clear, communities resorted to violent and disruptive expressions to voice their concerns.

Lack of transparency in the stages of project assessment, evaluation of alternatives, and permitting lead to biased and incoherent decisions, which erode trust and encourage opposition of the community. More important, this inevitably raises tensions that often lead to violent conflicts. Governments should explicitly commit themselves and demonstrate that projects will comply with all relevant national laws. Dysfunctional laws and regulations that prevent companies from developing projects efficiently must be modified and adapted so that they fit their original purpose of ensuring adequate environmental management and enhancing the quality of life of local communities.

Working collaboratively with development institutions, financiers, and project owners would help governments to identify laws, regulations, and policies that put obligations on firms which lead to suboptimal and unsustainable project designs in order to remove or clarify these laws and policies. Many laws and regulations were enacted at times where sustainability and comprehensive community engagement were not important considerations for project designs. Therefore, identifying and updating such regulations, and design and construction standards would enable governments to develop more sustainable projects, and engage communities more meaningfully.

Strategically develop institutional capacities to contain conflicts.

Our analysis shows that certain countries lack the institutional capacity to avoid and manage conflicts before they escalate to violent confrontations. There, conflicts tend to escalate more often and result in substantial consequences. Many interviewees reported that even countries with the highest institutional development often lack the technical and institutional capacity to enforce laws and regulations systematically, which inevitably also leads to significant conflicts.

Enhancing institutional capacity to manage conflicts proactively should be a top priority for governments. In countries with lower-than-average levels of institutional development, governments can work with financiers and development institutions to devise adequate

environmental management standards and identify effective regulatory reforms. For example, such reforms might include the integration of prior consultation into national law, as well as expanding upon what good practices are required for a proper consultation process. In countries with higher-than average levels of institutional development, governments can work with financiers and development institutions on enhancing their capabilities to enforce laws and regulations, and develop more participatory project design requirements.

Start planning at the regional level.

Deficient planning is the most dominant driver of conflicts in our research. Projects were often sited close to or within natural environments on which communities depend for their livelihoods. Alternative locations were rarely assessed in a transparent manner. Moreover, project designs often accounted only for the project's impacts within its immediate area of influence, but did not address the indirect impacts to other regional communities and the cumulative impacts from other projects nearby. Impact assessments many times were structured in order to get the project approved, rather than in a way to fully capture all impact dimensions.

Our analysis shows that when governments focus on long-term plans that transparently indicate how projects would help regional communities develop sustainably without affecting their traditional local values, projects are less likely to face conflicts. Effective government plans identify potential synergies between infrastructure, such as energy portfolio modernization, and national development goals, such as poverty alleviation. This helps to demonstrate how infrastructure assists regions alleviate poverty and inequality, rather than focusing on the provision of short-term jobs.

Many projects in the database faced strong opposition because they were sited in or close to areas of cultural significance, pristine ecosystems, or critical watersheds. Our research shows that government project planning methodologies that use more stringent technical criteria to avoid siting projects close to these areas are more effective in avoiding conflicts. Effective project evaluations considered alternative site locations with adequate buffer zones from such landscapes, while project designs included habitat protection and monitoring plans to preserve such buffers throughout operations and decommissioning. Furthermore, projects successful in mitigating conflicts included collaborative initiatives between community leaders and developers to identify and preserve historic, cultural, and archaeological resources within or close to the project site.

Implement stringent environmental and social regulations.

Environmental degradation, pollution, and impacts on the traditional value systems of local people have been among the most prominent conflict drivers throughout our analysis. Conflicts often escalated because of these drivers, as firms did not utilize stringent social and environmental safeguards to mitigate environmental and social impacts. Although EIA requirements differ from country to country, often they do not effectively address the wide range of social and environmental impacts to be mitigated or compensated when developing infrastructure projects. In general, more stringent safeguards that cover a wider range of social and environmental requirements are enforced when projects are funded by IFIs. Governments can focus on enhancing the applicable environmental and social regulatory requirements. This can be informed by IFI policies and other best practices that contribute to mitigation of conflicts.

Design fair systems for distribution of project benefits.

Lack of adequate community benefits led to conflicts in eight out of ten projects we studied. In many cases, local communities were not convinced that the proposed benefits would materialize, while in some other cases they were just not offered any benefits. In addition, most communities alleged that most of the project benefits were distributed to more developed regions, most likely close to the country's capital region, that did not have to endure any negative project impacts.

Ensuring that project benefit distribution systems allocate an adequate share of benefits to local communities is important in order to avoid conflicts. In projects successful in mitigating conflicts, project benefits go beyond the provision of jobs and cash payments, and include capacity building, training, and educational initiatives. Infrastructure firms are not responsible for how benefits are distributed in the country, but governments can request their assistance as a mediator with capacity building efforts to reach just agreements with local communities. This in turn would help establish a relationship based on trust and collaboration. Project benefit systems can also include programs to improve productivity at the community scale.

Our research shows that a particular effective way of generating benefits for the community is to work collaboratively with developers and local community leaders to identify community infrastructures that could be repaired and/or integrated into project designs to enhance connectivity to neighboring regions and reduce the cost of procuring and producing critical supplies. In some other cases, local communities are responsible for managing the distribution

of project benefits, but often lack the technical and institutional capacity to do so effectively. It is often difficult to evaluate who deserves to be compensated, which becomes even more complicated when compensation entails relocation to a new area. Our analysis shows that in such cases, collaborating with developers and community leaders on capacity-building efforts would help communities better manage the allocation of benefits.

Ensure that local communities can voice their concerns.

Many projects lacked communication channels and community engagement mechanisms for voicing, addressing, and integrating community concerns into project design and execution. Conflicts often escalated to violent confrontations because local communities were convinced that disrupting project activities would be the only way to make their concerns heard.

Community engagement initiatives that address community concerns and grievances in a systematic and transparent manner are effective in building trust and mutually beneficial long-term relationships. Communities are much less likely to disrupt project activities when they are regarded as an important agent in the decision making process.

9.2. Recommendations for Developers and Contractors

Develop sustainable projects to avoid conflicts.

Choosing the most suitable project location is not enough to avoid conflicts when the project is unsustainable, thus more likely to negatively affect local communities. On the other hand, high-quality sustainable projects are less likely to cause conflicts. Sustainable project designs that require fewer raw materials and resources during construction and operations, consume less energy, divert waste from landfills, and minimize greenhouse gas emissions are less likely to negatively affect local communities and ecosystems nearby and face conflicts.

Considering a life-cycle approach when planning new projects would help developers identify sustainability opportunities. Effective sustainability initiatives focus on reducing resource, water, and energy consumption and cover the entire life cycle of projects. For instance, materials could be sourced locally, from suppliers that follow sustainable procurement practices.

Establish a conflict management framework.

According to several interviewees, most infrastructure firms lack a comprehensive conflict management framework to be applied in advance to minimize risks when developing projects. This is becoming increasingly important, since conventional risk management frameworks are not enough to anticipate and mitigate conflicts and their dynamic consequences.

Moreover, even in cases where comprehensive environmental and social impact assessments were required, design solutions were often not implemented as planned. The lack of a comprehensive risk management framework makes it difficult to implement adaptive management plans to quickly mitigate social and environmental impacts. In most cases, firms have to manage environmental, social, or economic risks without a clearly defined action plan and are not able to prevent community grievances from escalating to violent confrontations.

Implement initiatives to expand the knowledge, skills, and capacity of community members.

Conflicts often escalated because local communities were convinced that their needs would be disregarded and projects would not help them develop sustainably. Our analysis showed that developers who holistically assess community needs, goals, and plans, and demonstrate how the project would provide better-quality jobs and contribute to long-term community competitiveness, are more successful in managing conflicts. As such, education and training programs that address community employment needs and improve the local skill base with an emphasis on minorities are more likely to mitigate future community opposition. Firms that help local workers develop skills and capacities to enhance long-term community competitiveness are equally more likely to establish a long-term positive relationship with communities. Project developers that design projects to enhance community competitiveness can demonstrate the positive impacts of the project for local communities most effectively.

Allocate time and resources to the consultation process.

Most interviewees mentioned that firms do not allocate enough time and resources when conducting consultation processes. In fact, firms often regard consultation as an insignificant requirement that needs to be done as fast as possible. Government authorities usually specify minimal requirements for consultation, but our analysis shows that firms that innovate and exceed these requirements are usually able to sustain much better relationships with communities. Both the interviews and the project case analyses show that the minimum

requirements for consultation often prevent community engagement from being most effective. In the wide majority of evaluated cases within the project database, firms that allocated enough time for consultation gained benefits in terms of minimized community opposition over the long term.

Focus on transparency to build an effective relationship with local communities.

The lack of trust between local communities, developers, infrastructure firms, and government officials is a significant driver of conflicts. At the same time, the evaluation of most project cases showed that communities did not always oppose project developments. In fact, they often considered them as a necessity, but wanted to be involved in the decision-making process. Furthermore, many communities explicitly stated that they did not initially oppose projects, but became critical of them when the communities were not included in the decision-making process and project information was not shared with them.

Therefore, building trust with local stakeholders and potentially affected communities through a formal consultation process should be the first priority of infrastructure firms, even when law does not mandate it. The most innovative strategies of successful firms in dealing with conflicts often focus on involving communities in the project. In these, communities are regularly invited to the project site to be informed about project activities. In some cases, communities participate in environmental management initiatives, such as water sampling or monitoring for pollution. Through these initiatives, communities feel themselves to be an integral part of the project and can act as project ambassadors to other communities.

9.3. Recommendations for Lenders and Investors

Apply regional planning toolkits to fill the planning gap.

Our analysis shows that although regional planning toolkits exist, governments, developers, and stakeholders often lack the institutional and technical capacity to implement them in infrastructure projects. The interviewees stated that in many cases, governments and developers are not aware of such planning toolkits. Organizing and cataloguing best practice planning and conflict management methodologies, tools, and strategies in a systematic manner, per infrastructure sector and project type, is the first step to ensure that these tools are made available to governments, developers, and infrastructure owners when developing new projects. This way, government officials and developers would be better prepared to conduct

comprehensive planning assessments, address conflicts proactively, and develop more sustainable projects.

Provide incentives for conflict management through funding mechanisms.

The interviews and project case analyses showed that governments and developers are not incentivized to use proactive risk management frameworks when planning and developing projects. In order to develop more sustainable and less conflictive project pipelines, lenders and investors can provide that incentive by tying the implementation of best practice planning and risk management strategies to funding mechanisms. Given that a substantial investment is required to cover the current infrastructure gap in LAC, introducing requirements for conflict management best practices in funding mechanisms is the first step to reduce risks for investors and developers, and ensure that infrastructure is developed in a way that minimizes the potential for conflicts to arise and escalate.

Establish monitoring over the whole project cycle.

Through the project case review, we observed that, in many cases, a lot of attention is put on environmental management and community engagement during feasibility and planning. However, these initiatives are often not implemented as planned during operations. On one hand, government officials often lack the resources to implement and monitor the required initiatives over the long term. On the other, developers and financiers currently do not allocate as much resources to the implementation phase, rather focusing on up-front construction costs. This introduces vulnerabilities to conflicts during operations, as firms are not best equipped to anticipate and mitigate conflicts in advance.

In our research, we found that projects supported by an IFI have less conflicts and more effective responses to conflicts. This can be explained in part by the IFI requirement for project monitoring during the repayment phase of a credit, which is the operation phase. In these cases, firms develop comprehensive maintenance and monitoring plans in advance of construction. Preparing for complexities during operations early on helps developers ensure that enough resources are available and team members understand their responsibilities and account for potential shortfalls. From their side, financiers can ensure that enough resources are allocated for evaluations during operations, to allow for more effective long-term monitoring.

10. Conclusion

Conflicts continue to happen. The consequences of such conflicts are detrimental for firms, investors, and national governments. One out of five projects in the database were cancelled because of conflicts, while four out of five faced a delay. More than half of the projects declared a cost overrun. Each firm responds differently to conflicts, but those that take comprehensive action to anticipate and mitigate conflicts in advance are more likely to face less significant consequences and to implement their projects to the end. On the other hand, firms that fail to consider the significance of conflicts or choose to remain unresponsive to conflicts when they arise usually face substantial consequences and are more likely to see their projects cancelled or abandoned.

Yet, even if certain sectors have accumulated knowledge and best practices, and multilateral institutions have expanded and refined their safeguard policies, the implementation of such practices in infrastructure overall is still limited. Unfortunately, still many firms choose to remain unresponsive to conflicts or do not respond adequately and on time.

Our research indicates that the value-add of solutions and best practices for preventing or addressing a conflict will be best illustrated once the cost of conflict is properly measured and quantified. Published sources rely on company disclosures of cost overruns that are limited and cover only a small part of the costs incurred in projects and the society through conflicts. The total cost of conflict is likely much higher, both in direct monetary impacts in projects, as well as through externalities in the society at large. After quantifying the cost of conflict, companies can match solutions to conflict drivers and identify the value add of each solution, e.g. cost of inaction minus the resources an organization needs to implement solutions.

In our work, we were able to identify company actions that help mitigate or contain the impact of conflicts. Nevertheless, the existence of solutions does not mean that these are always applied, nor does it mean that this knowledge exists at all decision-making levels. Indeed, most solutions are based on a continuous effort to collaborate, spread best practices, and align incentives in the infrastructure sector.

To conclude this work, we urge all decision makers to scale up initiatives and ramp up investments to prevent or avoid poorly planned projects that lead to conflicts. Our call to action

is for well-planned, sustainable infrastructure projects. The stakes are high, the impacts are real, and our decisions will affect the generations to come. Let's make the right ones.

ⁱ Rachel Davis and Daniel M. Franks. 2014. "Cost of Company-Community Conflict in the Extractives Sector." Corporate Social Responsibility Initiative Report No. 66. Cambridge, MA: Harvard Kennedy School.

ⁱⁱ Interview with sustainability practice leader at multinational consulting company.

ⁱⁱⁱ Interview with research scholar and conflict expert.

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