



GLOBAL ECONOMIC GOVERNANCE INITIATIVE

The effectiveness of the safeguards in place for three highway projects in Bolivia

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ABSTRACT

Bolivia has seen a surge of highway construction in the last few years, jumping from an average of 1.7 percent of GDP from 2009 through 2013 to 2.8 percent in 2015 and 3.6 percent in 2016. This paper analyzes the environmental and social safeguards active in the management of these projects, both from the national government and the development banks involved in financing and overseeing them. It incorporates document review, site visits, and stakeholder interviews and focus groups to assess the effectiveness of safeguard policies in three recent highway projects: La Paz - Oruro (financed by the Development Bank of Latin America), San Buenaventura - Ixiamas (financed by the World Bank), and Montero - Yapacaní (financed by the Inter-American Development Bank). It finds that by and large, safeguards have not adequately prevented or mitigated *social* impacts of highway projects, particularly those associated with working conditions. It makes several recommendations to development banks operating in Bolivia, particularly regarding the importance of institutional capacity building programs in partnership with the national government.

This working paper is part of the Safeguarding Sustainable Development project, a collaboration between the Boston University Global Development Policy Center, FLACSO-Ecuador, Universidad del Pacifico, Lima; and INESAD, La Paz. It is supported by the John D. and Catherine T. MacArthur Foundation, the Charles Stewart Mott Foundation, and the Rockefeller Brothers Fund. More information about the project can be found at <http://www.bu.edu/gdp/development-banks-in-the-andean-amazon/>



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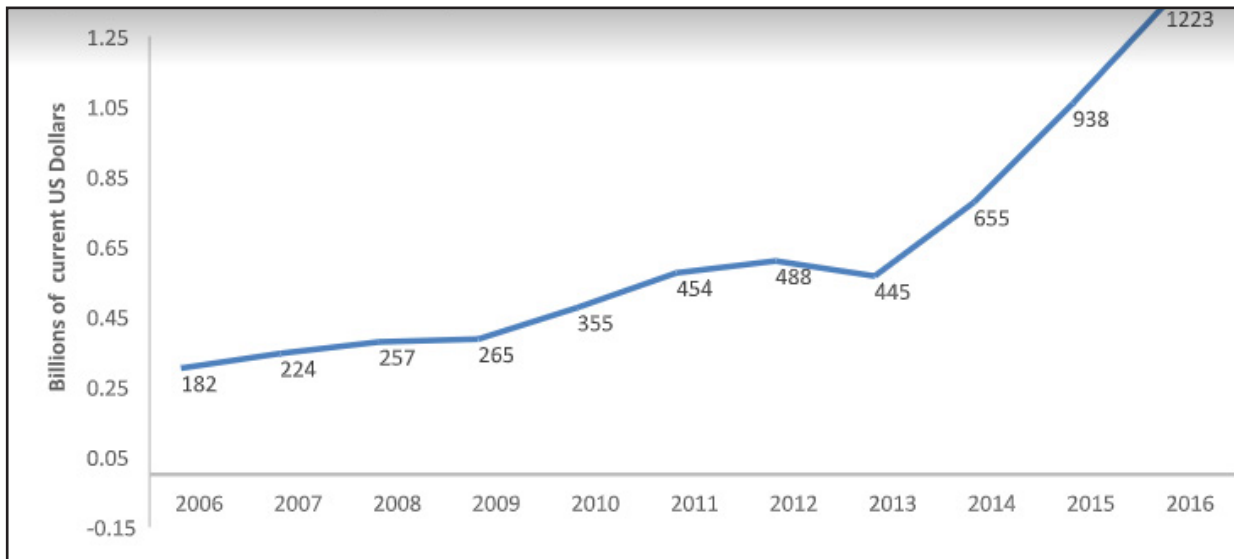


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Introduction

According to the Bolivian Highway Administrator (ABC), the Bolivian central government entity in charge of managing highways, 4,030 km of highways were built over a ten-year period (2006-2016) for a total investment of US\$5.5 billion (ABC, 2016a). During this period, the amount invested in highway infrastructure increased significantly (Figure 1), rising from US\$182 million in 2006 to US\$1.2 billion in 2016 (Ibid). In terms of percentage of GDP, highway investment more than doubled during the same period (Figure 2). At the end of 2016, ABC projected a continuation of this high level of investment through 2017 (ABC, 2016a).

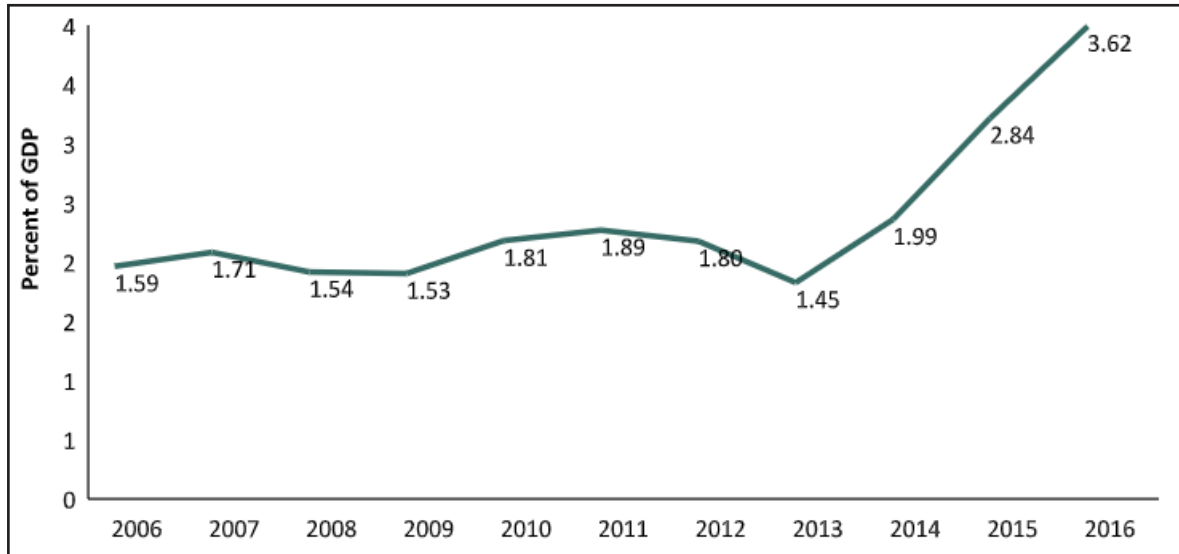
Figure 1: Investment in highways in Bolivia, 2006-2016



Source: Authors' calculations using data from ABC (2016).

Undoubtedly, highways play an important role in regional economic growth (Aschauer, 1990) and are integrally linked to a country's development. Nevertheless, without adequate safeguards, highway construction and improvement can generate significant social and environmental costs. In this study, safeguards are defined as "rules or institutions that grant the necessary functions to reach a minimum social and environmental standard. These rules or institutions can originate in the recipient country or with the investor" (Larsen & Ballesteros, 2014, p. 2).

Figure 2: Investment in highways in Bolivia as a % of GDP, 2006-2016



Source: Authors' calculations using data from ABC (2016) and the World Bank (2017).

The main objective of this study is to analyze and assess the effectiveness of safeguards. Effectiveness is measured with the following criteria, which are in line with the hierarchy of mitigation (avoiding, minimizing, restoring and/or offsetting harm) and the guidelines stipulated by the Cross-Sector Biodiversity initiative (CSBI), and led by Ekstrom et al. (2015). Specifically, this research considers safeguards effective if they have achieved the following:

- a. Correctly identifying all of the main social and environmental risks that the projects may cause (in the design and planning stage, prior to beginning work).
- b. Identifying effective measures to avoid, minimize restore, or offset these potential adverse effects (from the design stage, prior to beginning work).
- c. Ensuring the effective implementation of these measures (during the construction and operating stages of a project) to prevent social and/or environmental problems that delay the project and/or affect its social profitability in the future.

By applying these criteria, it is possible to identify when safeguards have not been effective. For example, if major social problems arise that have not been foreseen by the safeguards in place (but which would have been foreseeable based on previous experience on similar projects), it is clear that the project failed to identify and mitigate all important risks. The opposite may also occur. For example, safeguards may identify an environmental or social problem that is of little importance to, will have limited impact on, or is unlikely to occur in the local context, but regardless, the developer may rolling out costly processes with lengthy analysis and implementation times to cover perceived risks. In these cases, the benefits of safeguards may not offset the costs and as such, the safeguard has not been effectively applied.

Generally, if a project ends on-time and on-budget and with the quality stipulated in the design, and both the employees and communities are satisfied with the project, indications exist that the design, planning and application of safeguards have been adequate. The argument for evaluating the effectiveness

of safeguards based on the ability to fulfill deadlines, budget, initial quality and social (labor) satisfaction parameters is the following: if safeguards prevent, minimize, rectify or offset the adverse impacts that a project may cause, they will indirectly contribute to ensuring that the project is not subject to delays and as such, concludes on-time (without requiring increases in the budget) and satisfies the communities' expectations. Ineffectively applied safeguards can generate delays and excess costs given that the risks that could have been foreseen during due diligence were not identified and consequently, the effects could not be prevented, mitigated or offset. These effects, in general, lead to higher costs, delivery delays and social conflicts.

This research focuses on Bolivia and assesses the effectiveness of the safeguards on three highway projects (Map 1). To make comparisons and extract lessons that can be applied in future investment projects, we chose highway projects that are financed by different development banks. We chose a highway project financed by CAF (the Development Bank of Latin America), the divided highway connecting La Paz and Oruro (203 km); another financed by the World Bank, the San Buenaventura-Ixiamas highway (113.6 km); and finally, financed by the Inter-American Development Bank (IDB), the Montero-Yapacaní divided highway (69.7 km). Of these three highways, only the La Paz-Oruro Highway has been completed; for this reason, this research places specific emphasis on this case. The assessment of the safeguards in place for the other two highway projects is limited given that at the time that this study was written, toward the end of 2017, the Montero-Yapacaní Highway was under execution and work on the San Buenaventura-Ixiamas highway was paralyzed given that the construction company had abandoned the project and the contract was cancelled. Nevertheless, both projects provide important lessons on the use of safeguards.

It is important to note that during the time that this research was underway, the three highways mentioned were in different stages and situations but all three case studies share a common phenomenon: the contracts of the construction companies involved on all three projects were dissolved due to causes attributable to the contractor, whether tied to significant delays in the work schedule or to the contractor's decision to abandon the project. In each case, project abandonment generated significant social damages. Additionally, workers and sub-contractors were suddenly left jobless and the initial budget for the works had to be increased.

Map 1: Highway projects studied in Bolivia: (1) La Paz-Oruro Divided Highway, (2)



Source: MapaCarreteras.org with authors' notes, 2017.

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1. Methodology

The methodology used in this study is primarily qualitative. Relevant literature was reviewed, including national laws and the safeguards used by development banks. Development bank documents on the projects were reviewed, including Technical Studies; Social and Environment Reports (TESAs); Implementation Status reports; and Environmental Impact Reports, among others. News articles were also reviewed to find articles on the highway projects in question. In the case of the San Buenaventura-Ixiamas highway, the contract between the World Bank and the Bolivian State were also assessed to analyze the safeguards contained therein.

Although the authors sent a formal request to ABC to receive copies of the loan contracts between CAF and the national government to build the La Paz-Oruro divided highway, and those between IDB and the national government to build Montero-Yapacaní divided highway, no copies were provided. In the case of the Montero-Yapacaní highway, although no contract was available, it was possible to determine that safeguards had been activated for the project given that IDB had made this information public. In terms of the La Paz-Oruro divided highway, it was difficult to find information given that the CAF makes a limited amount of this information public.

Additionally, to obtain primary information, all three highway projects were visited and focus groups were held with community members and authorities in the municipalities close to the projects. The authors also conducted 21 semi-structured interviews with different stakeholders (executives from development banks, executives from construction companies, officials from national institutions, inhabitants of the area, etc.).

2. La Paz-Oruro Divided Highway

2.1. Project characteristics

Circa 1971, a paved highway was built between La Paz and Oruro. This road was built on paths that had been used by pre-Hispanic cultures, which were subsequently improved during the colonial and republican periods. This highway is 203 km long and its platform is 9 feet across (ABC, 2010a). The Paz-Oruro highway project entailed improving the old highway and building a roadway to run parallel to the existing structure to develop a divided highway with two lanes in each direction. Construction on the parallel roadway was prioritized for several reasons. First, the highway belongs to Route 1 of the Fundamental Road Network (RVF), which means that it is highly relevant highway in the country. Additionally, this roadway runs through cities with significant population density and economic activity. Finally, the volume of vehicle traffic on the highway is among the highest registered in the RVF, reaching 11,134 vehicles a day along both of its stretches (PCA & SGT, 2009).

The project's main objective is to promote economic and social development in the departments of La Paz and Oruro by improving physical infrastructure. Specifically, the project seeks to i) provide permanent and safe access to travel between the cities of La Paz and Oruro, ii) consolidate a transportation corridor within the Bolivian road system, iii) reduce travel times and increase road security, iv) reduce transportation costs, and v) integrate the northwest of Bolivia with the rest of the country and with neighboring countries such as Chile and Peru.

2.2. Review of processes that are relevant to ensuring the effective application of safeguards

The purpose of project development review was to gain a clear idea of the processes involved to subsequently identify where safeguards played, or could have played, an important role.

On July 21, 2009, a TESA was contracted to the joint venture between PCA Ingenieros y Consultores SA-SGT for a total of US\$1.1 million. The TESA included the technical project as well as the environmental impact assessment (EIA) in the design. CAF provided 100% of the loan needed for this study (ABC, 2009). Less the 3 months later, on October 6, the TESA was delivered (PCA & SGT, 2009).

On September 22, 2009, prior to the completion of the TESA, CAF approved a loan for US\$250 million to finance 80% of the cost of project execution, including construction and supervision (CAF, 2009). This means that CAF granted the loan prior to approving the TESA that, among other things, identifies environmental and social risks. On March 9, 2010, ABC awarded the contract to build the divided highway to three joint ventures for total of US\$247.6 million for an expected duration of 37.7 months. Segment I (Senkata-Mantecani) was awarded to Santa Fe y Asociados; Segment II (Mantecani-Lequepampa) to Brabol; and Segment III (Lequepampa-Oruro) to Cartellone Constructores Civiles-Ciabol (ABC, 2010c).

According to the information provided by a former executive at Brabol, work began officially on October 30, 2010 (El Diario, 2010). More than one year later, on November 3, 2011, ABC decided to rescind the contract signed with Brabol and executed the guarantees after finding that the company had only advanced 2% of the projects during the period in question (La Razon, 2011). According to this former executive, the main reasons behind this slow advance included i) ABC's delay in releasing rights to the roadway and ii) the increase in oil prices, which led prices for asphalt and steel to rise considerably. After three months, Segment II was awarded to the Spanish company Corsán Corviam for US\$107.3 million; contract duration was set at 27 months (ABC, 2012).

In October 2014 and January 2015, when the project was in its final stages, the Sindicato Mixto de Choferes de Omnibuses de La Paz (the bus drivers' union of La Paz) and the International Chamber for Heavy Transportation of El Alto publicly voiced complaints that the entire highway was marked by potholes, inadequate signage, and precarious asphalt, which was not made to withstand heavy transportation (Erbol-digital, 2014; Erbol-digital, 2015). The complaints about deficient signage denote a lack of effective communication between highway users and highway executors (company, government and bank) and also reveal the poor communication between government entities to improve signage with user input. These deficiencies could have been prevented by adequately applying the safeguards of CAF regarding the participation of citizens and affected communities. The complaints about the precarious nature of the asphalt, which arose in the early stages of the project, were evidence that the technical quality of highway development was poor; this issue could have been remediated through open and transparent discussions between CAF and ABC, the supervisor and contractor, to plan for the possibility of an increase in asphalt prices.

On February 1, 2015, President Evo Morales inaugurated the highway (La Razon, 2015). In terms of the duration of the execution that was set at the beginning of the contract, the delivery of the highway – which did not include the “Definitive Reception” of the highway – suffered a delay of approximately one year. According to official minutes signed by the contractors and ABC, the definitive reception of Segments I and III took place on August 22 and 25 respectively, which reflected delays of 2 years and 4 months, respectively (ABC, 2017b; ABC, 2017c).

According to the agreement, after definitive reception, the construction companies are responsible for performing periodic maintenance on the highways for the following 5 years (ABC, 2010a; ABC, 2010b). Nevertheless, it is uncertain which entity is responsible for maintaining Segment II given that the company in charge, Corsán Corviam, left the country at the beginning of April 2017 without having concluded maintenance (this company also abandoned work on the San Buenaventura-Ixiamas highway, another case included in this research).

In terms of additional programs that were executed after the works concluded, CAF, in conjunction with other organizations, worked on the PASOS program. This program seeks to increase the number of opportunities that traditional economic activities offer to the communities located near the highway to promote social and economic inclusion (CAF, 2017a). According to CAF – Development Bank of Latin America, to date, this program has offered a number of workshops to different sectors. As a result, inclusive businesses have been generated that benefit 900 families (CAF, 2017a).

During fieldwork, a group of hotel and restaurant owners from the town of Tholar were interviewed. The old highway had passed through the area but the new divided highway system is located further from the town, which has caused a drop in the demand for its services. These owners indicated that they were beneficiaries of the inclusive program offered by CAF. To increase the demand for these companies' products and services, and to increase revenues, CAF hired various specialists to give workshops to business owners to improve their service and attract more clients. Nevertheless, the conclusion of this group of businessmen was that they were grateful for the program but that it might be more efficient for CAF to use its resources to finance visible signage to indicate that by taking a short detour of a few meters, drivers could find Tholar and its restaurants and hotels. The owners wanted to use their own resources to erect this signage, but they were forbidden from doing so given that it would be situated in the highway's right of way. The conversations with the group of businessmen made it clear (as has been evident on other occasions) that all main stakeholders must be included at the beginning of the process to delineate a set of mitigation measures that address the needs of affected groups.

2.3. Main problems with effective implementation of safeguards

Given that this highway is in the Bolivian highlands, far from protected areas or primary forests, the problems that the project experiences are primarily social. This section identifies the main conflicts and social problems caused by the construction of the La Paz-Oruro divided highway and the failure to enact adequate safeguards. For every problem identified, the study describes the safeguards set by CAF- Development Bank of Latin America and national regulations and analyzes their shortcomings to garner lessons to be applied on future projects. It is important to note that in this case, special emphasis is placed on the role of national regulations given that, in its first safeguard, CAF states that "all the projects financed by CAF are aligned with the national legislation of the country in which the project is executed" and that it only "requests that additional precautions be taken ... in cases where it is deemed necessary" (CAF, 2010, p.17).

2.3.1. HIGHWAY DESIGN AND ENVIRONMENTAL IMPACT ASSESSMENT

One of the problems that caused various adverse social impacts arose in the project's initial stage. According to an executive from CAF, the highway design was not based on the desire to maximize users' benefits and instead was curtailed to meet a pre-established budget. To work within the margins of the public budget that had been stipulated, costs or fees were transferred to private actors. The original design, which was not implemented, was not submitted to CAF for consideration but the executives at this institution have indicated that the project's initial cost, according to the initial design, was approximately US\$400 million. Nevertheless, given that the country had never attempted to build projects of this scope, several elements of the highway that were destined to mitigate socio-environmental risks were eliminated. During subsequent stages, it became clear that with the right financing, it would have been possible to build a highway without shortcomings.

Additionally, as mentioned in the chronology of events, the TESA, a technical document of more than 1,700 pages, was drawn up in only three months. According to an engineer who specializes in supervision, construction and maintenance of highways in Latin America, it takes between 9 to 15 months to develop a final design for a project of this length and complexity. The TESA plays a major role because it provides the final technical design for the highway (geometric and geotechnical design, drainage, works of art, etc.); this design informs the Environmental Impact Study (IEA), which identifies potential environmental and social risks at an early stage. The objective is to take measures to prevent and mitigate impacts. Given that the design was developed in only three months, it is plausible that various factors were not designed, planned or submitted for consideration to CAF, which granted a loan prior to receiving the TESA. Next, we will briefly describe the two main problems that led to efforts to fast-track the development of the TESA.

First, not all of the material supply sources were identified by the TESA. These materials include gravel, sand, rocks and essential aggregates, and identifying their source is critical for highway projects given that they are the main sources for materials. The material that is extracted from these sources is used in the base layer, sub-base layer, asphalt layer and in the concrete for bridges, drainage and

walkways. The TESA identifies deposits to prevent delays during the highway construction process.

During the La Paz-Oruro highway project, the contractors could not use the majority of the supply pits identified in the TESA because local residents and the municipal authorities opposed this measure or demanded large sums of money and/or civil works in exchange. During the early stage of the project, the potential risks identified did not include the possibility of active opposition because the stakeholders were only marginally involved in planning. These social demands could not be met and the companies were forced to seek out alternative sources of materials and to negotiate resource exploitation with local residents and municipal authorities. It is pertinent to note that, during the public consultations, held from September 12-29 of 2009, only 3 of the 18 population groups participated (PCA & SGT, 2009).

The second problem was that only a few interchanges, which are locally referred to as returns or “monkey ears,” were in place. These structures are indispensable to provide safe access and exit points to the community. According to experts, the number of returns and interchanges along the highway is insufficient. Consequently, highway users are forced to drive in the wrong direction when they wish to enter or exit certain communities, which is highly risky. According to the executive at CAF, the original design anticipated building around 40 interchanges every 5 kms (approx.) Nevertheless, the number of interchanges was cut back. Additionally, several of the entry points to interchanges were poorly designed. For example, the curve of the overpass located at the point of entry of the municipality of Patacamaya is too tight, which causes accidents. We use Patacamaya as a case in point given that it is at the intersection of the country’s main highway and the international highway to Arica (Chile). This interchange constitutes one of the most important commercial centers in Bolivia for product import and export and the majority of traffic is comprised of heavy vehicles. According to the municipal authorities of San Buenaventura, authorities from the sub-government of Ixiamas and sub-contractors, the number of accidents has increased so much¹ in the last few years that the authorities of Patacamaya have requested a new hospital. In tables 1 and 2 of this document, it is evident that Patacamaya topped the list for accident frequency along the highway for two consecutive years. The main heavy traffic and the tight curve in the overpass led the number of accidents in Patacamaya to reach one of the highest levels reported for any community near the highway. It seems that the push to reduce public costs increased private costs and put users’ lives at risk.

¹ To show the increase in accidents as reported during the interview process, the authors asked the Bolivian Police for access to data on the number of accidents that occurred in 2008-2016. Nevertheless, the authors only received data from 2015-2016, which showed a decrease in accidents in Patacamaya from 50 to 42. The authorities and sub-contractors contend that an increase has been an increase in comparison to previous years.

Table 1: Events and accidents on the La Paz-Oruro divided highway by community, 2015

Type	Ayo Ayo	Belén	Calamarca	Caracollo	El Tholar	Konani	Lahuachaca	Panduro	Patacamaya	Quemalla	Sica Sica	Tolar	Vila Vila	Total
Pedestrian knocked over	-	-	-	1	-	-	-	-	-	-	-	-	-	1
Pedestrian run over	1	3	2	7	-	1	1	-	10	1	2	-	1	29
Livestock run over	-	-	-	-	-	-	-	-	1	-	-	1	-	2
Passenger fallen	1	-	-	1	-	-	-	-	-	-	-	-	-	2
Crash against fixed objects	3	-	-	2	-	1	2	1	3	2	2	1	-	17
Crash involving a vehicle detained on the highway	-	-	-	2	-	-	2	-	3	-	-	-	-	7
Crash involving parked vehicles	-	-	-	2	-	-	-	-	-	-	-	-	-	2
Collision	2	1	3	22	-	5	4	-	21	2	4	3	-	67
Road run-off	-	-	-	1	-	-	1	-	-	-	-	-	-	2
Vehicles fallen in ditches	3	3	1	12	2	1	-	1	3	1	1	1	-	29
Rollover	6	4	-	19	1	1	-	-	9	-	2	6	2	50
Total	16	11	6	69	3	9	10	2	50	6	11	12	3	208

Source: Bolivian Police, General Command, 2017.

Table 2: Incidents and accidents on the La Paz-Oruro Divided Highway by communities in 2016

List	Ayo Ayo	Belén	Calamarca	Caracollo	El Tholar	Konani	Lahuachaca	Panduro	Patacamaya	Sica Sica	Total
Run over	2	-	-	5	-	-	3	1	6	2	19
Passenger dislodged	-	-	-	-	-	-	-	-	-	1	1
Crash	-	-	4	7	-	2	2	-	8	2	25
Collision	2	-	1	8	-	2	1	-	13	1	28
Drunk driving	-	-	-	1	-	1	-	-	2	-	4
Skidding	-	-	-	-	1	-	-	-	-	-	1
Falling from a precipice	-	-	-	1	1	-	-	-	-	-	2
Falling into a ditch	3	-	2	6	-	1	-	-	4	3	19
Traffic incident	1	-	-	-	-	-	-	-	-	-	1
Rollover	1	1	3	20	1	2	1	2	9	5	45
Total	9	1	10	48	3	8	7	3	42	14	145

Source: Bolivian Police, General Command, 2017.

National regulations (Law 1333 on the Environment of April 27, 1992) indicates the factors that must be identified prior to executing a public work. Regulations also sets guidelines on how to proceed during the process to identify and predict impacts. Additionally, the Partial Regulations of Law 3507 of the Bolivian Highway Administrator attributes the competence for establishing and implementing measures to «[...] prevent, mitigate or reduce negative impacts caused by the environment or by the execution of roadworks in the Fundamental Road Network [...] in the design, construction and maintenance stages on all projects» (Art. 4). Nevertheless, the national legal framework does not indicate the minimum period within which these studies must be conducted and does not specify the penalties that will be applied if an EIA is not conducted and the design for the project fails to consider the wellbeing of all concerned while minimizing damages if existing general guidelines are not observed.

The second safeguard put in place by CAF places emphasis on the assessment of environmental and social impacts, risks and opportunities and states that “At the start of the cycle of operations, CAF conducts a process to review and complement the environmental assessment and engages in oversight to ensure that measures to manage difficulties and opportunities are designed, identified and applied to generate environmental and social development” (CAF, 2010, p. 17). Nevertheless, as is the case with the rest of CAF’s safeguards, this safeguard provides no details on the procedures that should be followed during implementation and fails to indicate which requirements must be met. It is possible that this information is provided in specific guides or in the environmental and social management system of CAF, neither of which were available to the authors. It is also not clear, in the case of the La Paz-Oruro Highway, if CAF complemented the environmental assessment at some level or if it asked ABC to fulfill certain points in the design and impact identification stages. The specifics of the requirements set forth by CAF are included in the contract signed by ABC and CAF but this document is not public.

2. 3. 2. ADVERSE EFFECTS RELATED TO DIFFICULTIES IN EXTRACTING MATERIALS FROM SUPPLY PITS

Aggregates are fundamental materials in the process to build highways. Nevertheless, and despite their importance, if the construction company finds it difficult to extract these materials from supply pits, problems arise for different groups that are associated with the project. This can lead to delays and generate financial losses for the construction company, which may be forced to abandon the project. Consequently, employees, sub-contractors and suppliers on the project are left jobless and without payment for goods and services rendered. All of these problems can also cause delays and lead to budget over-runs while generating discontent in the communities and labor force. In the case of the La Paz-Oruro highway, President Evo Morales, on the day of the project’s inauguration (February 1, 2015), indicated that the project had been delayed because municipalities and communities had made it difficult to access supply pits (Vice Presidency of the Plurinational State of Bolivia, 2015).

The delays in the process to extract materials were generated primarily by the defects of and contradictions between the legal frameworks at the national and municipal levels. First, the Regulations of Law 3425 to Exploit Aggregates indicates that the administration and regulation of these materials fall to the municipalities in coordination with peasant organizations and communities along the river (Art. 3 y 4). The law also indicates that municipal governments can obtain income as compensation for aggregate exploitation (Art. 25). Nevertheless, this law is not clear and does not provide parameters that the municipalities can follow when conceding material from supply pits. Additionally, this regulation contradicts stipulations in the Regulation of Law 3507, Creation of the Bolivian Highway Administrator, which indicates that “deposits, borrow pits, watershed or quarries for aggregates ... which will be used to obtain aggregates ... that concessionaires require to build, conserve, maintain, improve or rehabilitate the Fundamental Road Network, on the part of the State, can be freely used by the same” (Art. 26).

CAF did not take additional measures to strengthen national regulations although there is a clear contradiction between the norms and despite the fact that two of the safeguards stipulated by CAF give it the tools to assist in resolving this impasse. The first safeguard of CAF indicates that additional measures should be taken if necessary to support national regulations and the fourth safeguard promotes investment to strengthen institutions (CAF, 2010).

2. 3. 3. SCARCE INCENTIVES TO COMPLY WITH REVEGETATION

The Environmental Manual of ABC (2010d) and the project’s TESA (PCA and SGT, 2009) indicate that if the supply pits and embankments were initially covered with vegetation, the area must be revegetated after work is completed. Nevertheless, an environmental specialist from Sante Fe indicated that in theory, revegetation processes are inexpensive and simple to implement but in practice, they are not executed for a variety of reasons. In Bolivia, it is difficult to obtain seeds for native plants to plant. This process requires qualified personnel with specific knowledge of the species and the ecosystem. Construction companies do not earmark resources for these activities. In this context, although contractual obligations exist, affected areas are generally not revegetated. Nevertheless, by applying CAF’s fourth safeguard, which strengthens institutions, it would have been possible to invoke the contractor, via contractual condition, to hire qualified personnel to revegetate in accordance with the timeframes required for seedling growth. Image 1 shows that along the La Paz- Oruro highway, in the supply pit close to Calamarca, the construction company only revegetated 10% of the affected area.

Photo 1: Borrow pit in Calamarca where little revegetation work was done



Source: Fieldwork by authors, 2017.

2. 3. 4. DEFICIENT SIGNAGE

During fieldwork, the researchers found evidence that signage was deficient along the highway. Different issues exist with regard to signage. In various cases, signage along the highway is contradictory. For example, sign posts indicate “no passing” but horizontal signage uses a dotted line, indicating the contrary. Vertical signage also fails to correctly state the distance to the next town or to indicate which road should be taken to enter the next community or town, which is evidence that government institutions (ABC) are ineffective in this regard. This aspect was not adequately considered by CAF (fourth safeguard, institutional support) and this may have contributed to accidents (Tables 1 and 2). Additionally, along the highway there is ample vertical signage (approximately every 2 kilometers) stating that “roaming cattle” can be found in the area. Nevertheless, in many cases this signage is imprecise given that at the same locations, Jersey barriers are in place to prevent cattle from crossing. According to highway accident registries, the number of cases of livestock being hit is low (Table 3). In sum, signage is deficient and must be prioritized.

Table 3: Incidents and accidents along the La Paz-Oruro Divided Highway by incident type 2015

List	La Paz	Oruro	Total
Person knocked over	-	1	1
Pedestrian run over	19	10	29
Livestock run over	2	-	2
Passenger falls out of vehicle	1	1	2
Crash involving a fixed object	13	4	17
Crash involving a detained vehicle	5	2	7
Crash involving a parked vehicle	-	2	2
Collision	43	24	67
Vehicle falls from a precipice	1	1	2
Vehicle falls in a ditch	16	13	29
Roll over	27	23	50
Total	127	81	208

Source: Bolivian Police, Commander General, 2017.

Road signage is not explicitly addressed in the safeguards of CAF as it constitutes a road safety issue. Nevertheless, as road signage can have a negative impact, this study proposes that the safeguards of CAF evaluate and comment on road signage given that it affects the safety of communities and users. Pedestrian and user safety are social problems and as such, should be explicitly included in the safeguards.

2. 3. 5. PREMATURE DETERIORATION OF THE PAVEMENT

In 2011, oil prices rose significantly and consequently, asphalt prices also posted considerable increases worldwide (Hammond, 2011). This meant that it was no longer financially feasible for the contractors to pave the highway with the asphalt specified in the contract. Although state procurement systems in the majority of countries include mechanisms to adjust prices for materials that have a significant impact on the budget and which may fluctuate due to *force majeure* (rather than to parties to a contract, whether contracting party or contractor), CAF has no mechanisms for price adjustments to address this exogenous adverse situation. Additionally, there is no mechanism of this kind in Bolivian government regulations (Supreme Decree No. 0181, in effect since 2009).

Because neither Bolivian procurement regulations nor the safeguards/policies of CAF include clauses regarding readjusting prices that have been affected by events of *force majeure*, all of the highway construction companies were negatively affected by the increase in oil prices. This led to problems for various actors. The company that was more than likely the most affected was Brabol, which was in charge of Segment II. According to the Superintendent of Santa Fe, this company, after ABC refused to take steps to make the project viable, decided that it would be better to dissolve the contract, lose its guarantee (US\$12 million) and exit. After abandoning the project, Brabol left behind a debt of approximately US\$415 thousand with various microbusinesses and 230 employees (Jornadanet, 2012).

The legal options to address this problem were as follows: a) obtain authorization to modify the contracts by adding a clause that introduces a formula to readjust unit prices for materials or b) ask the judge in the civil matter to declare that the agreements in the contract are excessively onerous. Nevertheless, neither of these options was applied.

The other companies, Santa Fe, Cartellone and Corsán Corviam, apparently reached an unofficial agreement and changed the asphalt requirements in the contract to allow for lower cost and quality materials. According to the minutes for the definitive reception of Segment 1, at the time of provisional reception, 36% of the surface presented unacceptable flaws in the pavement. The potholes caused by this problem adversely affect highway users, particularly those driving heavy transportation. The poor state of the highway led users to stage various protests, which denotes a lack of transparency and a failure to sufficiently involve stakeholders in project development and in decision-making process.

2.3.6. CULTURAL HERITAGE MANAGEMENT

There are various shortcomings in the way that national regulations and safeguards apply cultural heritage management. This project had proceeded according to plan until archaeological remains were discovered. Generally speaking, CAF and other development banks have room to work more effectively to safeguard cultural heritage.

In August 2012, when Corsán Corviam was moving topsoil, it reported having found archaeological remains close to the community of Sica Sica (ACUDE S.R.L., 2013). According to official reports (Ministry of Cultures and Tourism, 2013; ACUDE S.R.L., 2013), the importance of the findings during the supervision stage led to the decision to request an archaeological recovery process. This outcome was considered successful because national regulations were applied when the authority responsible for supervision reported the discovery of an archaeological object, piece or remains during the process to excavate or remove topsoil to build roads (Rules for Archaeological Excavations, January 6, 1958, Art. 49; Law 530 of Cultural Heritage of May 23, 2014, Art. 52).

It is pertinent to note that the mechanisms of CAF to safeguard cultural heritage played no role in this experience. Although the ninth safeguard of CAF refers to protecting cultural heritage during the initial stage of a project (CAF, 2010, p. 18), the bank has no norms that establish a mechanism to monitor works and ensure that the findings are duly reported. In any case, this experience was an exception given that it received a great deal of attention from the media. Nevertheless, most archeological findings in Bolivia never receive this degree of attention and as such, cultural heritage is often not safeguarded as legally stipulated.

Three main obstacles have led to this problem. First, the Archaeology and Museum Unit (UDAM), which is in charge of supervising cultural heritage and granting authorization for all infrastructure projects (not just roads), uses its own funds to cover costs. Second, it does not have enough personnel to conduct all necessary tasks. Finally, the construction companies and supervisory entities have few incentives to report findings because UDAM visits can cause significant project delays. Future infrastructure projects could benefit if development banks were to choose to collaborate with the UDAM to address these three aspects. It would be worthwhile for banks to provide this support given that UDAM works independently from ABC, the development banks and construction companies to safeguard cultural heritage. Of the three banks analyzed in this study, CAF is in a privileged position to provide this support, which is explicitly addressed in its fourth safeguard (strengthening institutions).

3. San Buenaventura-Ixiamas Highway

3.1. Project Profile

The objective of the project is to improve the existing San Buenaventura – Ixiamas highway. This highway was built at the beginning of the 1970s but transit had always been restricted during the rainy season (Llosa, 2011). The improvement project included paving the highway and developing drainage projects, bridges and retaining walls. The highway segment is 113.6 km long and is located in the department of La Paz in the municipalities of San Buenaventura and Ixiamas. This stretch belongs to Route 16 of the Fundamental Road Network, which connects the main capitals and departmental cities.

According to the World Bank plan, the project had 3 components but this study only focused on the first: improving the segment of the national highways F-16 connecting San Buenaventura with Ixiamas. The main objectives of this component were to ensure that the highway could be used year-round (*Plurinational State of Bolivia and International Development Association*, 2011). Additionally, the project hoped to facilitate commercialization routes for sugar, cacao and agroforestry products (*The World Bank*, 2011a). Although it is possible that the highway will experience induced effects or indirect impacts stemming from the ease of transportation, it is important to note that the San Buena Aventura sugar plant, which is located next to the highway, was planned and executed prior to highway improvement.

Pre-investment studies began in 2007 with an investment of US\$635.7 thousand and financing from CAF for 70% of the total while the Prefecture of La Paz provided the other 30% (ABC, 2007). Subsequently, other studies were conducted. On November 1, 2010, ABC awarded the study for Social Assessment and Plan Development for Indigenous Peoples in the Project Area to P.C.A. Ingenieros Consultores S.A. (the same company that was hired to develop the TESA of the La Paz-Oruro highway) for US\$120.8 thousand over a period of 90 days (ABC, 2010f).

On May 5, 2011, the World Bank approved a loan for US\$103.5 million to execute the project. In principle, when the loan was approved, it was estimated that the project would take 5 years to implement (*The World Bank*, 2011). On September 2, 2013, ABC awarded the Spanish company Acciona Ingeniería S.A. the contract to conduct socio-environmental technical supervision of works for US\$5.5 million (ABC, 2013). On October 28, 2014, the contract to improve the San Buenaventura-Ixiamas highway was awarded to Corsán Corviam S.A. for a total of US\$135 million over an expected period of 43.4 months (ABC, 2014).

Almost four years after the loan was approved, on May 26, 2015, work began on the highway (*Página Siete*, 2015). Nevertheless, around two years later, in April 2017, the Spanish company abandoned the project leaving more than 400 workers (direct and indirect) without jobs and in some cases without pay (*Página Siete*, 2017). In the last report published by the World Bank (*The World Bank*, 2017a) to which the authors had access, the Bank indicates that it was in the process of discussing with the client how to best proceed given the situation.

The following section explains the safeguards applied to the San Buenaventura-Ixiamas highway. Subsequently, the main adverse impact that the project generated will be discussed. Lastly, the study will evaluate the effectiveness of project's safeguards and briefly review the Social and Environmental Framework of the World Bank, which replaced the existing safeguards in August 2018.

3. 2. The World Bank's current safeguards and their application to the project

The main objective of the World Bank safeguards that were in place during the project's execution was to identify, prevent and minimize social and environmental damages (*The World Bank*, 2017b). The due diligence conducted by the bank, or by its environmental and social consultant, determined which safeguards to activate. During the construction of the San Buenaventura-Ixiamas highway, five safeguards were activated: OP 4.01 (Environmental Safeguards), OP 4.04 (Natural Habitats), OP 4.36 (Forests), OP 4.10 (Indigenous Peoples), and OP 4.12 (Involuntary Resettlement) (*The World Bank*, 2011b). The text below describes the actions that were taken with regard to these safeguards.

Given that the highway runs next to the Madidi National Park, the forests and natural habitats safeguards were activated. Although the project did not pass through the park's buffer zones, the bank considered all impacts given that the park is considered one of the largest

protected and biodiverse areas in the world (*The World Bank*, 2011b). As such, the bank examined how to best mitigate the indirect environmental impacts associated with improving the highway and determine how the project could affect deforestation in the area, which represents the “induced future” of a project (Llosa, 2011). The bank also considered the risks of an increase in migration and resettlement to this area due to highway work. Within the Prevention and Mitigation Program (PPM) presented by ABC, in accordance with the bank’s guidelines, the different tasks and actions that the contractor should undertake during project execution to conserve the environment, prevent and/or mitigate adverse socio-environmental impacts and strengthen positive impacts (ABC, 2011a) were identified and defined. The Application Plan and Environmental Follow-Up (PASA) were directed at ensuring that the measures proposed in the PPM were correctly and adequately applied.

The principles established in the bank’s safeguards for indigenous people were followed to cover the social aspect. In the project area, there are two indigenous peoples: the Takanas, with approximately 3,000 members and the Esse Ejja, with a total of 1,700 (Oetting, 2012). The Plan for Indigenous Peoples established guidelines to involve these communities and ensure their participation in project implementation to generate benefits while mitigating potential adverse impacts on their culture and identity (PCA & ABC, 2011a; PCA & ABC, 2011b). The public consultations that took place were characterized by respect for Bolivian ethnic-cultural diversity (PCA & ABC, 2011). Experts in international conservation, who have a great deal of experience in the area and with these indigenous peoples, have confirmed that the principles established to safeguard indigenous peoples were adequately applied.

An additional safeguard on involuntary resettlement was also used to address the social aspects. A Resettlement and Compensation Plan for Affected Populations (ABC, 2011b) was developed that contained an assessment of the current legal structure for indemnity or compensation for people who were displaced by the project. A 40-meter stretch of right of way was liberated on each side of the highway in rural areas and 20 meters wide in urban areas. Consequently, a total of 70 homes and other structures were relocated and 230 land owners were affected by losses of crops, trees and enclosures (ABC, 2011b). Four (4) kiosks that sell sweets very close to the school at San Buenaventura, at the point where the highway begins, were displaced. These street vendors continued to engage in the same economic activity but experienced a change of venue when they had to move to the market.

It is pertinent to note that there are differences between national regulations and the requirements of the Operating Policy 4.12 of the World Bank, particularly with regard to the recognition of indemnity for land and structures that have no property titles or deficient titling. National regulations stipulate that if a person is settled on land as a squatter and not an owner, he or she is considered an illegal occupant with no rights. In contrast, the bank’s policy recognizes the investment in a home even if the structure has been built on untitled land if the person has lived there for at least a year. The bank also classifies people living in these conditions as more vulnerable than others, contending that these individuals lack titles because the conditions are not propitious to formal ownership.

During this project, ABC adopted the bank’s safeguard and followed its policy by recognizing the structures that were built on untitled lands (ABC, 2011b) given that according to Law 1168 (SAFCO), loan agreements grant the force of law to all of the terms in the loan contract, including safeguards. The safeguards are anchored by the following premise: if there is a difference (not a contradiction) between national regulations and the safeguard, the most demanding measure that benefits the communities and/or workers will be adopted.

3. 3. Construction company abandons the project: main adverse impact

At the end of April 2017, work on the San Buenaventura – Ixiamas highway was abruptly interrupted after the Spanish company Corsan-Corviam exited the country. This section reviews the main events that occurred after the company exited and describes the adverse effects that the incident generated.

According to residents and authorities of Ixiamas and San Buenaventura, prior to the end of March 2017, the company paid all of its direct workers and began to send its engineers away, which generated suspicions about the project's continuity. Nevertheless, neither Acciona, the supervisor, nor ABC took action. At the end of March, the remaining high-level employees at the construction company left the country and the project. A few days later, at the beginning of April, local authorities informed the national press that the company had left the country (Agencia de Noticias Fides, 2017). On April 22, 2017, ABC officially recognized that it had rescinded the contract with the Spanish company (*Página Siete*, 2017b).

Corsán Corviam's sudden departure deprived hundreds of direct workers of social benefits and a source of work (no labor reinsertion project was undertaken) while another hundred sub-contractors (indirect workers) and suppliers were left without pay and/or with large unpaid debts. A group of around 20 representatives from the affected area organized after the project was abandoned to travel to La Paz to meet with ABC and the World Bank and air their complaints. Nevertheless, their efforts were fruitless. The World Bank, through one of its officials, stated that it had no contractual liability with the sub-contractors, indirect workers, or other people that were affected by the company's abandonment. In general, the bank does not intervene at this level because it has no legal oversight in this area. According to the bank, Corsan-Corviam is subject to contractual liability in this case and ABC is responsible for following up to ensure that the company responds accordingly to ensure that the necessary measures are taken to provide just compensation.

On April 25, 2017, Vice President Álvaro García Linera, during the inauguration of the potable water system in San Buenaventura, indicated that the government, with the World Bank, would analyze the possibility of awarding the abandoned project to one of the companies that had lost the bid during the first tender to build the highway to reduce delay (La Razón, 2017b). Nevertheless, by the end of 2017, this authority had made no further announcements in this regard and the government had offered no information on the steps that would be taken.

On July 5, 2017, Corsán Corviam officially declared bankruptcy, which exacerbated the concerns and uncertainty surrounding who would pay all the indirect works and sub-contractors (*Página Siete*, 2017c). By the end of December 2017, it was still not clear what would happen to the project. When the fieldwork for this study was conducted in July 2017, it was found that no one in the area had received information on the project's future. There was no information on how the funds from the guarantees would be used or if people would be paid what they were owed. Neither ABC nor the World Bank have mechanisms to determine which part of these funds can be used to cover sub-contractors and affected workers.

The company's exit affected more than just indirect workers, sub-contractors and suppliers. In fact, this abandonment left the residents of San Buenaventura and Ixiamas and highway users worse off than before the start of the project. During fieldwork, this study found that only 7 km of the planned 113.6 km had been paved. The rest of the work, including the embankment, ran the risk of being completely lost with time due to wind and rain. According to the former superintendent of Santa Fe, residents in the area fear that travel along the highway will be even more complicated during rainy season. The fact that material had been extracted from the banks of the river that the highway passed through led to worry that it would be more difficult to cross the river. When the project was conceived, the river levels were low because it was not the rainy season (Image 2). Nevertheless, even when these water levels were low, it was evident that some heavy trucks had a difficult time crossing the rivers (Image 3).

Image 2: One of the rivers that crosses the highway, July 2017



Source: Fieldwork conducted by the authors, 2017.

Image 3: Truck prior to crossing one of the rivers, July 2017



Source: Fieldwork conducted by the authors, 2017.



In December 2017, six months after fieldwork began, the residents' fears were confirmed. Local authorities reported that the embankment had been quickly destroyed when the rainy season began. This made it practically impossible, particularly for heavy transportation, to travel along the San Buenaventura-Ixiamas highway (Image 4). In January 2018, the highway's conditions were even more deplorable (Image 5).

Image 4: Rapid destruction of the embankment during rainy season, December 2017



Source: Photo published by Senator Yerko Nunez on his Facebook page.

Image 5: Highway after rains, January 2018



Source: Photos published by Senator Yerko Nunez on his Facebook page.

3. 4. The World Bank's New Social and Environmental Framework

The World Bank's safeguards were replaced in 2018 by the Social and Environmental Framework approved in August 2016 after an extensive review of the old safeguards (*The World Bank*, 2016). In general, the World Bank's new safeguards place more emphasis on national social and environmental frameworks and on the institutional capacities of governments that receive loans. The objective is to build sustainable institutions that are more efficient. A positive aspect of this new framework is that, unlike the current safeguards, it drives improvements in labor conditions and promotes fair, non-discriminatory treatment and equal opportunities for workers (*The World Bank*, 2016). Additionally, it ensures that workers have a mechanism to present complaints to report incidents that adversely affect their labor rights. Without a doubt, this is a laudable advance.

If this new framework had been in effect during the execution of the San Buenaventura-Ixiamas highway, indirect workers, suppliers and sub-contractors would have been safeguarded by the financial entity and as such, in the position to receive compensation after the company abandoned the project. At the very least, they would have been able to present their complaints through a World Bank mechanism (which has not been possible up to this point). Additionally, as executive officers at the Bank mentioned "... more than likely, mitigation measures would have been in place that may have allowed for a more in-depth look at contracting with other sub-contractors. It is probable that better mechanisms for control would have been in place." Given that the new framework will be in effect in 2018, it will most likely be used to monitor the project moving forward.

4. Montero-Yapacaní Divided Highway

4. 1. Project Profile

This project consists of building an additional stretch of roadway to rehabilitate the existing road in the sub-segment Montero-Papacani, which is 69.7 km long and part of the "Cristal Mayu-Montero" highway (which connects the departments of Santa Cruz and Cochabamba). According to the project's profile, the traffic levels along this sub-stretch are very high, between 5,500 and 8,800 vehicles per day in 2011 and projections indicate that traffic flows will be between 14,000 and 22,200 in 2037 (BID, n.d.). This context led the government to prioritize expanding this road to a divided highway design. In mid-August 2017, the project had advanced 13% and conclusion was set for December 2019.

The project's objectives include reducing transportation costs and travel times; reducing highway maintenance costs; and consolidating the country's main transportation corridor (BID, 2011; Connal s.r.l., 2012).

According to the financial audit, the project has 3 components (Delta Consult Ltda., 2015). Component 1, with a budget of US\$116.21 million, covers works, road safety and technical and environmental supervision. Component 2, with a budget of US\$5.34 million, covers social viability. Finally, the third component, with a budget of US\$1.45 million, consists of an administration project.

On December 3, 2010, the Identification Study (EI) and the Technical, Economic, Social and Environmental Study (TESA) were awarded to Connal s.r.l. to build all of the Cristal Mayu-Montero highway. This study was delivered in March 2012 (Connal s.r.l., 2012) and respected the time frames and steps required for a document of this scope and importance. Several months later, on December 21, 2012, IDB loan contract No. 2786/BL-BO was signed between the Plurinational State of Bolivia and the Inter-American Development Bank for US\$122 million. It is important to note that unlike the La Paz-Oruro Highway, where CAF signed a loan contract prior to the conclusion of the TESA, in this case the TESA was delivered first. Local governments contributed US\$1 million to cover part of the costs of the social viability component, which includes costs of replacement, mitigation and compensation for liberating the right of way among other steps (Delta Consult Ltda., 2015).

Next, on September 21, 2013, ABC awarded the project to a Mexican company, Tradeco (*Página Siete*, 2013). The date and exact amount of this award is unknown given that the documentation is not available through SICOES (State Procurement System). The reasons for delays in project initiation are also unknown. Nevertheless, according to IDB's Follow-Up and Assessment Plan, the project was set to last 5 years.

In October 2015, 16 months after work began, ABC found that the project had advanced only 3% and rescinded the contract with Tradeco, which was charged US\$16.4 million against the contract compliance guarantee (ABC, 2015). Next, after a long tender process, on November 8, 2016, the project was awarded to a Chinese company, *Sinohydro Corporation Limited*, for US\$92.5 million; the execution period was set for 37 months (ABC, 2016). In mid-August 2017, more than 4 years after work began, the project had advanced approximately 13%. Delivery was set for December 9, 2019.

4. 2. IDB Safeguards

In 2006, IDB approved a new environmental and compliance safeguard policy, whose main objective was to strengthen the entity's commitment and capacity for environment sustainability (BID, 2006b). These safeguards place emphasis on identifying environmental and social challenges and opportunities in advance. Additionally, the policy promotes developing early and permanent relations with the communities affected by the project and seeks their support prior to loan approval. In total, IDB has 17 safeguards. IDB activates the safeguards that match the project's characteristics.

4.2.1. APPLICATION OF THE SAFEGUARDS FOR THE MONTERO-YAPACANÍ HIGHWAY

The Montero-Yapacaní project was classified by IDB as a Category B project. These are defined as projects that "can cause mainly localized negative and short-term environmental impacts, including associated social impacts, and for which effective mitigation measures are available" (IDB, 2006). According to the profile of the project developed by IDB, the area located along the sub-stretch has vegetation cover, which consists primarily of grazing and planting areas (IDB, 2012); it does not go through areas that are either sensitive or protected areas or pristine natural habitats.

Regarding social impacts, both the supervisory entity and IDB indicated that there are no indigenous peoples in the area (BID, 2012). Nevertheless, it was found that street vendors worked along the right-of-way of the sub-stretch. This commercial sector is composed primarily of low-income women who are considered vulnerable. The population that is settled near the highway often blocked the right-of-way, which would require involuntary resettlement and economic displacement (IADB, 2012). Nevertheless, it seems that this process generated no major problems. The layout of the highway was reviewed and later modified to reduce the effect on homes and structures in the right of way. From the initial stage of the project, the focus was on preventing impacts. This modification reduced the number of affected homes that had originally been identified by 1,000 (IDB, n.d.). On January 22, 2017, the authorities announced that approximately 92% of the route had been liberated and identified 450 affected parties with an associated cost of approximately US\$4.3 million for compensation or replacement (El Deber, 2017).

The extraction of construction materials (aggregates), unlike in the case of the La Paz-Oruro highway, presented no risk from the outset (BID, 2012) because in the initial stage, it was determined that the materials would come from the Yapacaní and Surutu Rivers, both located near the project. The fact that the area's topography was basically flat meant that less material and land removal would be needed to stabilize the slopes.

Based on these characteristics, IDB activated 7 safeguards for the project (BID, n.d; BID, 2006; IADB, 2012). Two general safeguards were

activated: B.01 (Bank Policy), which stipulates that the bank only finances project that fulfill the directives of its environmental policy; and B.02 (National Legislation and Regulation), which requires the lender to guarantee the operation by complying with national legislation and with the environmental obligations established by Multilateral Environmental Agreements (AAM). In the initial stages of the project, three additional safeguards were activated: B.03 (Pre-assessment and Classification), stipulating that all of the operations financed by the Bank must be pre-assessed and classified according to their environmental impacts; B.05 (Requirements for Environmental Assessment), requiring compliance of specific standards when conducting the EIA; and B.06 (Consultations) stipulates that affected parties must be consulted and establishes mechanisms to ensure the equitable participation of vulnerable groups. To fulfill all of the previous safeguards, two final safeguards were activated: B.07 (Supervision and Compliance), indicating that the bank would monitor all of the requirements of the safeguards stipulated in the loan agreement; and B.17 (Procurement), which determines the oversight provisions that must be applied when procuring goods and services in projects financed by the bank, the same which will be included in specific loan contracts to safeguard environmental responsibility (IDB, n.d.).

One of IDB's safeguards that was not activated for this project but perhaps should have been considered was B.4 (Other Risk Factors), which contemplates, among other points, the management capacity of the executing agencies. With regard to the previous cases studies from Bolivia included in this study (La Paz-Oruro highway and the San Buenaventura-Ixiamas highway), evidence suggests that the executing agency (ABC) and national regulations were flawed and that these defects eventually put the successful execution of road projects at risk. In the case of the Montero-Yapacaní highway segment, ABC dissolved the contract with the first construction company, Tradeco, which is evidence that the tender and the process to award contracts to construction companies was flawed. This research has not investigated this point further because the process is not directly related to safeguards. Nevertheless, given the negative consequences that local workers and the community suffer once a company abandons a project, this study contends that it would be pertinent to assess both risk factors and the shortcomings of the tender process in a future study.

In terms of monitoring the safeguards that were applied to the project, the Bank regularly sends specialists to visit and assess the project. According to the Follow-Up and Assessment Plan (IDB, n.d., 2) for this road segment, the bank's specialists visited the project four times per year during the 5 years that project construction was set to last; a budget of US\$60,000 was set aside for this purpose. Although this document only describes the technical aspects of field visits, such as monitoring product delivery (for example, kilometers built), when the project was visited in July 2017, the project supervisor reported that the bank's specialists also supervised social and environmental aspects during inspection. During the last review of the application of safeguards, IDB, in its Follow-Up and Assessment Plan, indicated that ABC was obligated to send a Final Report within 60 days of the definitive reception of the project. This report, among a myriad of other points, was to include an assessment of work in terms of socio-environmental aspects.

4.2.2. ASSESSMENT OF SAFEGUARDS BY IDB

The Office of Assessment and Supervision (OVE) of IDB conducts an on-going review of IDB's safeguards to ensure improvement. When this study was conducted, IDB's assessment of safeguards was in full swing, in accordance with the design stage described by Watkins *et al.* (2015). OVE's final report (BID, 2017) to which the authors had access, indicates in greater detail the methodology that IDB used to assess its safeguards. The assessment proposed in this report proposes conducting case studies in Brazil, Peru, Paraguay, Nicaragua, Haiti and Uruguay. The main objective stipulated by this report is to inform the Directors and Administration at IDB and IDB Invest about the utility of the safeguards and the efficacy with which they are applied. The results of the assessment, as such, will be fundamental to establishing the partial or complete processes that will be used to review IDB's safeguards. IDB also has an on-going interest in improving the interpretation or implementation of its policies. The last guide published by IDB (Kvam, 2017) describes ten main elements that the consultation with interested parties should include.

4. 3. Limitations of IDB's Environmental Policy

During research and fieldwork, the authors spoke with various stakeholders with experience in executing, supervising and overseeing various road projects with financing from different development banks. The majority agree that IDB is among the banks that takes the application of social and environmental safeguards most seriously. Perhaps part of IDB's success is that from the outset, it defines project components and allots an economic amount to each in its budgets. Other positive factors include supervision and monitoring of the projects executed by IDB. Nevertheless, within its efforts to fulfill its safeguards and national regulations, according to the analysis of the Montero-Yapacaní case, IDB has some limitations. Next, the report identifies and describes two of these limitations.

4. 3. 1. PRIORITIZING ENVIRONMENTAL ASPECTS AT THE COST OF LABOR ASPECTS

This section confirms the conclusions of Rodolfo Tello (2017), a social specialist from IDB, who indicates that the application of IDB's safeguards tends to prioritize environmental issues over social aspects. To execute work in one of the areas of the Montero-Yapacaní highway project, 50 trees in the area of the right of way had to be removed. According to the project's supervisor, to accomplish this, IDB stipulated that the species of each of the trees had to be identified; a report had to be written; and the animals that lived in these trees had to be moved to other areas. Additionally, in January 2017, after the company Sinohydro was accused of razing 7 hectares without authorization (ATB digital, 2017), the highway supervision area (under ABC), following national regulations and IDB's safeguards, proceeded to fine the company US\$10,000 for failing to comply with the instructions issued by the supervisory entity. Additionally, this entity demanded that the company reforest the affected area (Image 7).

It is important to note that the authors have no evidence that IDB's safeguards influenced the decision to apply this sanction given that the fine was imposed by ABC. It is also pertinent to note that although it is important to ensure the integrity of ecosystems and sanction violations, even if the fine is minimal, as it is in this case, it is also fundamental to apply the same severity when dealing with non-compliance of social and labor conditions. Next, the report provides further detail on the social problems on the project.

During fieldwork, one of the main social problems that was identified was the doubly negative impact that this project has had on Bolivian workers. First, when the company Tradeco abandoned the project when the contract was dissolved, many workers were not paid. Although no precise information is available on the number of workers who were affected, it has been determined that the majority of these workers did not receive the salaries owed them and have come to accept that they will never be paid. According to the owner of an area restaurant, the workers prefer not to file complaints or speak to authorities because they feel that doing so may put the job source provided by the Chinese company Sinohydro at risk. As such, it was not possible to talk with Tradeco's employees directly during fieldwork.

Image 7: Area razed by the company, which is currently being reforested



Source: Fieldwork by the authors, 2017.

The second negative effect for this group of people stems from the treatment it receives from the Chinese company. Workers receive Bol\$15 per day (approximately USD 2) to cover food costs given that according to the project's supervisor, the company offers neither breakfast nor lunch on the work site. This means that workers must use the Bol\$15 provided to cover the cost of three meals a day. It is important to note that this amount barely covers one meal a day and, given the physical effort that the majority of workers exert at the work site, this is far from sufficient. Additionally, although the company maintains a camp site for Chinese workers, no housing is provided for Bolivian workers. Finally, it is general knowledge in the community that the company requires workers to work more than 8 hours a day. As such, the community calls them "negreros," a derogatory term used to describe jobs conditions that border on slavery.

In practice, before the supervisory arm of the Ministry of Labor can intervene, at least one formal complaint must be received. Nevertheless, this entity has not, to date, received any complaints from Bolivian workers, who fear that the construction company will engage in reprisals. When the study was conducted, IDB's safeguards failed to consider the labor aspect and there were no plans to change the safeguards. Nevertheless, according to the IDB executive who was interviewed, although the bank has no labor safeguards, it visited the project monthly and made observations on various labor issues regarding meals and worker treatment. Additionally, IDB was working to disseminate information on the bank's safeguards in Mandarin to prevent communication problems with the Chinese company.

Although these methods placed pressure on construction companies and contributed to improving labor conditions, the bank should place more emphasis on social issues and add labor aspects to its safeguards and policies. Additionally, adequate mechanisms to communicate with workers could play an important role by allowing workers to express their complaints (anonymously) without worrying about losing their jobs. The bank could stipulate that a complaint mechanism be instituted as part of the contract management process, which involves all of the project's executing bodies (ABC, supervision and contractor) and phases; this mechanism can also contemplate a mechanism to address complaints.

IDB has an Independent Consultation Mechanism (MICI), which is an independent administrative process that the bank uses to address and investigate complaints from individuals and communities that claim that one of the projects financed by the bank has caused damage due to a lack of compliance with bank policies. Once the MICI is activated, the project is halted until the problem is solved. The fact that the bank has a quasi-external mechanism of this kind is favorable; nevertheless, its effectiveness is not clear given that activation does not always mean that all adverse impacts will be mitigated, minimized or offset. In effect, the only thing that the mechanism guarantees is that an investigation will be conducted. In the case of the Montero-Yapacaní highway, even if the MICI were activated, there is no guarantee that an investigation would be conducted given that the conflict is labor-related and as such, not included in the current safeguards.

To exemplify how MICI works, this study presents a case other than the three cases studied in this research: the Rurrenabaque-San Buenaventura bridge. The MICI was activated for this project given that some believed that the consultation process had not been handled properly and better alternatives existed to build the highway. The project was halted immediately but while the bank was studying possible solutions, the Bolivian government decided to finance the project with its own resources without resolving the social problems identified.

In general, given that IDB follows its safeguards and can rely on mechanisms for external assessment such as MICI, it can stop financing some projects with higher environmental and social risks. A senior expert on transportation issues at IDB commented that projects marked by environmental and social difficulties are subsequently financed by banks with lower standards. Currently, IDB only finances highway rehabilitation or maintenance projects in Bolivia. It does not finance any projects to open highways, which represent greater environmental and social risks. Nevertheless, when IDB stops financing projects that imply more risk, it opens the door to banks with lower standards and higher appetites for risk. This situation coincides with the observations of Humphrey (2016, i), who pointed out that the safeguards “work mainly to protect multi-lateral development projects from criticism and have very little impact on the majority of projects that are not financed by multi-lateral development banks.” This denotes a need to apply a holistic and strategic vision of sustainable development that transcends each project and the national government must implement environmental, social and labor policies that are separate from those of the bank that finances the work, which highlights the need to strengthen national institutions. Multilateral banks can elevate national standards; demand that national regulations be followed; and strengthen national capacities.

4. 3. 2. ACTORS ON THE PROJECT HAVE A WEAK UNDERSTANDING /EXPLANATION OF THE SAFEGUARDS IN PLACE

Safeguards and principles of sustainability for financing must be contextualized and explained to the actors to ensure comprehension and implementation. Sometimes, contractors or supervisors fail to understand that safeguards are principles of sustainability; this leads to limited application. For example, IDB reproached Connal s.r.l., the company in charge of TESA, for not actively considering the safeguard on gender equity² in its analysis of female merchants who were working in the right of way (Socio-environment Manager and Administration, Connal s.r.l. Interviewed, personal communication, June 27, 2017). Connal s.r.l. argued that it was not relevant to focus on gender given that the highway affects men and women in the same way and IDB did not offer any guidelines to implement its operating policy for gender to ensure the viability of executing the principles of the safeguards (Manager of Socio-Environmental and Administration, Connal s.r.l. Interviewed, personal communication, June 27, 2017). During fieldwork, the study found that highway construction did not have a disproportionate effect on female merchants given that their stands could be moved a few meters during and after projects. Nevertheless, this group, which was predominantly women, needed a gender focus that was aligned with the bank’s operating guidelines. This, however, was not the case.

The Bank’s Operating Policy indicates that one of the benefits that highway works are expected to generate for neighboring populations is gender equity. This means that both men and women can benefit from the works and the employment opportunities that are generated.

² Política Operativa de Igualdad de Género en el Desarrollo- OP 761.

Although male manual labor is employed predominantly in the construction sector, it is important for banks, as part of their safeguards, promote female manual labor while recognizing the limitations of these incentives vis a vis the nature of the work to be performed. The physical effort that is needed to work on highway construction or improvement is rigorous; as such, the majority of the jobs offered are better suited to men. Nevertheless, the bank can also insist that a minimum percentage of women be employed (for example, 10 %) and promote additional programs for social inclusion that promote generate equity and women's empowerment.

Shortcomings in the implementation process and the fact that the supervisory entity and IDB differed in their interpretations of the operating policy for gender equity shows the need for actors to receive better explanations of the safeguards and the bank's subsequent operating policies. Connal s.r.l felt that its ability to promote women's inclusion in a sector dominated by male manual labor was limited and IDB failed to explore and explain to Connal s.r.l. that other options to incorporate the female work force were available on the project and to instruct the company about other projects that it could promote.

5. Analysis of the effectiveness of safeguards

This section focuses on evaluating the effectiveness of safeguards based on the criteria stipulated in the introduction. It conducts a separate analysis of the safeguards' performance on the three highway projects studied and concludes by making general comparisons. It is important to note that the assessment of safeguards on the San Buenaventura-Ixiamas and Montero-Yapacaní project is limited given that the construction work on these projects had yet to conclude when this study was completed.

5. 1. Effectiveness of CAF

On the La Paz-Oruro highway project, the safeguards did not complement national regulations by identifying environmental and social risks in the project's initial stages. Given that CAF was the same institution that financed the pre-feasibility and construction studies, a precious opportunity was lost to implement a mitigation hierarchy. In the pre-investment stage, where the project's TESA was designed and formulated, the safeguards did not specify the rules or steps to follow to ensure that all environmental and social risks were well identified and contingency measures were included. Little attention and care were put into the design; the TESA was developed in only 3 months and CAF signed a loan contract with the Bolivian government before this document was delivered.

In later stages, the safeguards of CAF failed to demand that additional measures be taken to mitigate or minimize adverse social and environmental aspects. For example, the contradiction that exists in Bolivian regulations with regard to extraction and exploitation of material was not considered by CAF or clarified through the application of its safeguards. This contradiction could have been resolved by employing the safeguard to strengthen institutions. Signage (road and pedestrian) was not considered in the safeguards, as is often the case among development banks. Nevertheless, given that deficient signage induces negative impacts and institutions in Bolivia are weak in terms of road safety, effective implementation of safeguards can provide guidelines to mitigate this impact.

The asphalt used on the La Paz-Oruro highway was of poor quality given that no mechanisms were in place to ensure quality under adverse external conditions. CAF had no mechanism to adjust prices to prevent the problems generated by price increases for petroleum and failed to facilitate transparent inter-sector dialogue to explore solutions. Control over exogenous variables and the quality of the asphalt is not incorporated into bank safeguards, which consider these aspects technical. Nevertheless, given that this had a negative impact on various stakeholders, effective safeguards would have identified these risks and proposed measures to prevent adverse impacts, such as the dissolution of Brabol's contract and the damages suffered by workers, supplier and subcontractors.

In terms of cultural heritage, despite the fact that the experience was positive, it was observed CAF safeguards had no relation to excavation that took place. The studied identified deficiencies in national mechanisms for recovery that CAF could have helped improve given

its explicit focus on strengthening institutions. Lastly, CAF safeguards were not effective in terms of reinforcing the application of some of the environmental mitigation measures stipulated in ABC's Environmental Manual, including the revegetation of affected areas.

The definitive reception of the project was delayed. Two segments of the project (segments I and III) were delayed 2 years and 4 months respectively; the contract for Segment II was dissolved in April 2017 and no definitive reception took place. If the safeguards had been effective, many of the factors that caused these delays would have been identified early and as such, could have prevented and/or minimized. In this scenario, the work would have been delivered on the date scheduled at the beginning of the process or at the very least, with only a minor delay. Based on this analysis, it may credibly be argued that in general, the effectiveness of CAF safeguards on the La Paz-Oruro highway was low.

5. 2. Effectiveness of the World Bank Safeguards

On the San Buenaventura-Ixiamas road project, the bank's safeguards and national regulations were effective in environmental terms given that no material environmental damages were reported as pending action at the end of 2017. Additionally, given that this project consists of improving the highway and not opening a new route, little additional deforestation is expected. The main adverse effects that a highway can have on forests is generated at the time the road is built. Image 6 shows that in this case, the highway already existed and the vegetation next to the highway is not part of a primary forest.

In terms of indigenous populations, the safeguards have been effective to date given that these communities have been protected from adverse impacts. The company's decision to abandon the project has not had a significant effect on these peoples. This argument is based on the field study and on the opinion of specialists in international conservation who have extensive experience working with indigenous peoples in this area. Nevertheless, low-income groups in the area, who could be classified as vulnerable according to socio-economic indicators, do not receive the same protection and attention as indigenous groups.

The World Bank understood this reality and the complexity of indigenous peoples in the area. According to the Bank, some indigenous peoples are more vulnerable than others and each case must be evaluated separately. The two peoples that live in the project area, according to the Bank, are not vulnerable. The Takanas are not a vulnerable people because they are economically solvent and various members hold either professional or technical careers. The Esse Ejja are an indigenous community that, despite internal problems (such as alcoholism and adolescent pregnancies), cannot, according to an IDB official, be considered vulnerable to the effects of highway paving. Specialists in International Conservation came to the same conclusion.

Additionally, given that this project involves an existing highway, the adverse effects that an improvement project can generate are limited given that the majority of negative impacts materialize by the time the road is opened, which in this case, was several decades ago. Additionally, as indicated by the specialists in international conservation, the majority of the land is titled and land conflicts are minimal. In this context, no major migrations are expected that could negatively impact indigenous peoples. Lastly, International Conservation specialists believe the project is positive for neighboring communities (including indigenous peoples) because more than likely, highway improvements will consolidate and improve the productive conditions of these groups.

The World Bank's safeguards were less effective in preventing, minimizing and compensating for the negative impacts on communities that were generated by Corsan-Corviam's abandonment. The safeguards do not guarantee that the rights of and obligations with workers are met and there is no labor reinsertion mechanism in place to assist the workers who were fired. Without a doubt, at the end of 2017, the largest adverse impact on the project was associated with the construction company's decision to abandon the projects and the safe-

guards failed to provide either solutions or guarantees to address this problem. As described in the previous section, this abandonment left, without prior notice, hundreds of families without income and sub-contractors in debt. Abandonment also worsened transportation conditions on the highway, which has no adequate signage on the stretches that are only partially complete.

Image 6: Existing San Buenaventura-Ixiamas Highway



Sources: Authors' fieldwork, 2017.

The social safeguards that were activated for the project guaranteed respect for the rights of indigenous peoples and compensation for residents that had built homes or infrastructure in the right of way. Nevertheless, other social groups that were affected were left completely unprotected, including the local workforce. The safeguards in place failed to oversee the labor conditions of local workers or protect the right to work of contractors, suppliers and workers.

5. 3. Effectiveness of IDB safeguards

On the project to improve and build the Montero-Yapacaní highway, the majority of the main risks were duly identified in the initial stage in the TESA. These studies found that there were no indigenous communities in the area and that the impacts would be minimal given that, like the San Buenaventura-Ixiamas highway, the project did not consist of opening a new road.

When this research was completed, the project was already in full-swing. As such, it was not possible to do a complete assessment of the safeguards' effectiveness. Nevertheless, during fieldwork one of the limitations of the application of IDB safeguards was evident: although environmental aspects had been addressed, social issues (especially labor) were not touched upon; this lack of focus on labor issues may have been attributable to the fact that no bank safeguards for this aspect are in place. Similar to the World Bank project, the largest adverse impact of this project was the lack of protection for workers after the first company abandoned the project and during the operating stage of the new company.

5. 4. Comparison of the effectiveness of the safeguards of CAF, the World Bank and IDB

Comparing the three projects through the end of 2017, it is evident that the safeguards of the three banks studied have weaknesses. Table 4 summarizes this analysis.

Table 4: Analysis of the effectiveness of the safeguards of CAF, the World Bank and IDB on three road projects

Criteria to assess the safeguards	CAF: La Paz-Oruro	World Bank: San Buenaventura-Ixiamas	IDB: Montero-Yapacaní
Identification of the main environmental and social risks (during the design and planning stage).	<p>The TESA was conducted over 3 months. There was not enough time to identify the main risks. The design that was put together during this short period induced a negative impact for highway users.</p> <p>Labor risks were not identified given that the safeguards in place do not contemplate this aspect.</p>	<p>The time allotted for the EIA was adequate (between six and twelve months according to experts.)</p> <p>No labor risks were identified given that the safeguards do not contemplate this aspect.</p>	<p>The time allotted for the TESA was adequate. IDB reviewed the TESA's content. No labor risks were identified given that the safeguards do not contemplate this aspect.</p>
Measures to prevent, minimize, restore or compensate (during the design or planning stage).	<p>The actions proposed in the TESA do not include measures to address risks stemming from delays on the project (i.e. problems extracting aggregates; potential increases in the prices of materials; inadequate signage; etc.). Although these are primarily technical aspects that are not covered by the safeguards per se, they are factors that can affect the project's environmental and social performance.</p>	<p>In accordance with the stipulations of the safeguards for the project, the Prevention and Mitigation Program was developed to conserve the environment; a Resettlement and Compensation Plan for Affected Populations was developed along with a Plan for Indigenous Populations.</p> <p>No contingency measures were taken to handle issues with workers and sub-contractors.</p>	<p>Within the TESA, the necessary measures were taken to minimize, prevent and compensate for the main environmental and social damages caused by the project. No contingency measures were implemented for workers and sub-contractors.</p>
Effective implementation of these measures	<p>The main risks found were technical and no contingency measures were in place; as such, it was not possible to evaluate implementation. There was no attempt to protect the rights of the workforce because labor aspects were not contemplated in the safeguards.</p>	<p>The Plan for Social and Environmental Actions was created to ensure that the measures proposed in the Prevention and Mitigation Program were properly applied. This entails contractual measures for compliance.</p>	<p>IDB's team visits the project at least once every two months to monitor the effective implementation of its safeguards.</p>

Source: Developed by the authors, 2017.

To complement the analysis of the safeguards, Table 5 provides a list of the safeguards that were activated for each project and analyzes the strengths and limitations of both the safeguards and their application.

Table 5: Strengths and Limitations of the safeguards activated by the different banks on each project

CAF: La Paz-Oruro	World Bank: San Buenaventura-Ixiamas	IDB: Montero-Yapacaní
<p>CAF seemingly automatically activated its 14 safeguards for all of the projects.</p>	<p>Five (5) safeguards were activated: OP 4.01. Environmental Assessment OP 4.04. Natural Habitats OP 4.36. Forests OP 4.10. Indigenous Peoples OP 4.12. Involuntary Resettlement</p> <p>With selective activation, the World Bank focuses its efforts on the risks identified on each project.</p>	<p>Seven (7) safeguards were activated: B.01. Bank Policies and Regulation B.02. National Legislation B.03. Pre-assessment and classification B.05. Requirements for environmental assessment B.06. Consultation B.07. Supervision and compliance B.17. Procurement</p> <p>With select activation, IDB concentrates its efforts on the specific risks identified on each project.</p>
Strengths		
<p>The safeguards used by the three banks act as a mechanism to ensure that national regulations are fulfilled.</p>		
<p>CAF's fundamental premise is compliance of national regulations. If the adequate mechanisms are activated, with this vision CAF has the potential to strengthen compliance with national laws and contribute to improving the capacities of state institutions. CAF has a specific safeguard to strengthen institutions (safeguard IV).</p>	<p>Transparency: the World Bank provides detailed information on all of the safeguards it currently activates on each project. Additionally, for the San Buenaventura-Ixiamas project, the Bank made important documents public, including the plan for indigenous peoples, the resettlement plan and the financing contract between the Bank and the State among others.</p>	<p>Transparency: IDB provides detailed information on all of its safeguards and indicates which are activated on each project. Additionally, for the Montero-Yapacaní project, IDB made important documents public, including the project profile; the loan proposal; technical, economic, social and environmental studies (TESA) and financial reports among others.</p> <p>Resettlement: IDB safeguards complement national regulations. Unlike national regulations, IDB safeguards recognized untitled land and infrastructure.</p>
<p>CAF's general principles have to potential to offer more flexibility to adopt measures that prevent, minimize and compensate for adverse impacts.</p>	<p>Teams of specialists are in place to monitor the project frequently and ensure that the safeguards and national regulations are applied.</p>	
Limitations		
<p>The safeguards in place during the execution of the three projects studied did not incorporate labor aspects. Nevertheless, both the World Bank and CAF have reviewed their safeguards and the new versions include labor issues. IDB is in the process of evaluating its safeguards for subsequent revision.</p>		
<p>Lack of transparency: CAF does not make detailed information on its safeguards public. It also does not provide basic information on the project or the EIA.</p>	<p>The requirements of the World Bank and IDB are specified in the application of their safeguards. If they are implemented without considering the context, processes may be delayed. This is not attractive to the client. A balance needs to exist between the application of safeguards and the project's planning and execution.</p>	

Source: Developed by the authors, 2017.

6. Conclusions and recommendations

Highways are important to a country's development in that they allow both people and merchandise to move from one point to another within feasible time frames and at competitive prices, which contributes to economic growth. In general, the main objective of building or improving a highway is to reduce travel times and increase safety. To achieve this objective and at the same time prevent, mitigate and/or minimize social or environmental damages on a road project, the development banks that finance these projects utilize safeguards. Nevertheless, safeguards do not always fulfill their objectives. In some cases, the safeguards are applied ineffectively because the development banks' focus is decontextualized. Government institutions in the country may also have shortcomings. This study assesses the effectiveness of these safeguards to provide lessons and to contribute to improving practices.

Based on the analysis of the information collected during fieldwork, in addition to interviews and a review of bibliographies and articles in the press, this study makes the following recommendations:

- Both ABC and the development banks that finance projects should put more resources, time and analysis into the design and planning stage. At the very least, more time and resources should be allotted to conducting studies such as the TESA. If the project's main social and environmental risks are identified early on, it will be possible to develop a plan for prevention, mitigation and/or compensation. The application of the safeguards can, in many cases, delay processes, forcing governments to seek out other forms of financing. As such, the banks need to minimize delays and demonstrate the benefits of using safeguards. Nevertheless, this does not mean that the banks must accelerate highly important processes, such as those involved in designing and assessing environmental and social impact. The banks' safeguards must place emphasis on this initial stage to apply the hierarchy of mitigation. If this stage is not carefully implemented, more environmental, social and labor incidents may arise. The benefits of conducting all studies adequately and within a prudent time frame in the initial stage are considerably greater than the associated costs.
- For all investment projects, it is advisable to identify and assess the impact that the project can generate for the vulnerable population in the area, with or without the existence of indigenous groups. In this context, the process to define vulnerable groups should not automatically assume that all indigenous groups are vulnerable and conversely, all groups that are not indigenous are not vulnerable. The analysis should be based on economic and social indicators and focus on how the group makes a living when defining the degree of vulnerability. It is necessary for the banks to use a definition of vulnerable groups that includes all disadvantaged groups (using the main dimensions according to the context) that run the greatest risk of being adversely affected by the project. A complete analysis of vulnerability, in addition to protecting the most sensitive groups, will head off social division and drive more efficient use of the project's resources.
- The labor aspect should be considered in the safeguards and be monitored adequately by the banks; this can be accomplished by hiring an external consultant if necessary. In the three cases studied, employees at the companies constituted one of the groups that was most affected by project outcomes. As such, the banks need to have safeguards that establish mechanisms for mitigation and compensation for workers in the case the construction company abandons the project. Sub-contractors and suppliers should be considered in contractual obligations and conditions should exist to ensure their adhesion to the safeguards in place. Labor safeguards exist,³ as well as best practices for their use, and their adoption by public investment banks should not be an issue.
- Additionally, in the labor aspect, safeguards need to ensure a good workplace environment and monitor compliance with national regulations. Safeguards need to be in place that require that the financing entity establish a mechanism for complaints and supervision that guarantees that workers' rights are respected (monitoring time on the job, days of rest, payment of decent wages, personal protection equipment, equal job opportunities, food/housing for workers). The study found that national

³ See for example Performance Rule 2 (ND 2) of the International Finance Corporation. <https://www.ifc.org/wps/wcm/connect/40f8d280498009a4a794f7336b93d75f/PS2%2BClean%2BSpanish.pdf?MOD=AJPERES> (visitado en Abril 2018).

oversight and supervision of projects is not enough. Accordingly, the banks need to ensure that an internal mechanism for complaints is implemented, meaning a mechanism where workers can lodge complaints about company abuses. The banks should demand reports on these abuses and the measures taken to resolve the situation. An anonymous internal complaint line could be useful for this purpose. The bank should also have the right to conduct a labor audit if it suspects that workers' rights are being violated.

- In the case of Bolivia, highway signage is the responsibility of government institutions. Nevertheless, as is evident in this study, there are major problems with road signs, which has led to accidents. As such, both signage and road and pedestrian safety must be considered in the process to mitigate risks. Adequate road signage is part of safeguarding the health of the community and should be considered.
- The banks need to implement and follow up on their safeguards to guarantee that stakeholders are adequately involved. In the three cases studied, there was no effective involvement of stakeholders, and particularly of communities, from the projects' outset. The community of Tholar on the La Paz-Oruro Highway was not involved in an active dialogue to explore solutions to the economic effects that the highway would have on the community. Highway users (La Paz-Oruro) had no option to levy opinions about problems with signage. Workers (direct and indirect) on the projects are important stakeholders who were not considered in the three case studies. In this context, the banks need to conduct supervision to ensure that the projects actively include all actors by first requiring an analysis of actors and next, developing a communications strategy with internal and external mechanisms for complaints.
- Bank safeguards should place more emphasis on strengthening national and local capacities with regard to conserving the country's cultural and archaeological heritage. Given that UDAM, the institution in charge of preserving and caring for cultural heritage, suffers from a series of deficiencies, the banks must work with this entity to improve mechanisms for recovery and collection of fortuitous finds. This study also recommends that the banks work with UDAM to ensure that the pieces/remains that are recovered are adequately stored.
- In some cases, this study found that although a bank may strive to ensure that its safeguards are strictly applied, this does not necessarily guarantee that the project's adverse impacts will be effectively prevented, minimized and mitigated. Strict and decontextualized application of safeguards can lead to considerable delays, which is not attractive to the national government. In these cases, delays lead the government to seek funding with a higher appetite for risk and fewer social and environmental constraints. As such, banks need to apply safeguards that consider the specific conditions of the national and local context without dragging out processes. This should be conducted in close coordination with the environmental and social divisions of the construction company in charge of executing the infrastructure project. This study recommends that banks focus on identifying gaps in and problems with national regulations to adapt their safeguards and complement the content of laws.
- Finally, the study recommends that the development banks publish all information related to the projects that they finance. Principles of transparency emphasize that safeguards and corporate governance measures must be effectively applied given that without this information, it is difficult to learn lessons and improve practices.

In summary, the safeguards applied by international banks that finance infrastructure projects should contemplate a balance between social, labor and environmental aspects. Additionally, a correct reading of the context is necessary so that all the processes involved in the application of safeguards are more efficient. Implementing safeguards from a desk far from the project, without knowledge of what is going on in the field, tends to delay the project and creates frustration among actors. As such, it is recommendable to identify the main environmental, social and labor risks that exist on each project and seek to complement, support or improve the provisions in national regulations. Specialists from the bank that are in charge of monitoring must visit the site to ensure adequate and contextualized implementation of the safeguards that back the principles of sustainability. The Bolivian regulatory framework for environmental, social and labor issues is, in general, robust, but requires more supervision to ensure compliance and the safeguards should fulfill this function.

Although safeguards do not represent an infallible framework for sustainability, they offer two main benefits: they support local regulations and expressly require financing entities to take social and environmental responsibility for the use (or misuse) of funds. Implementation of safeguards can be effective when it is contextualized; social actors are involved from the outset of project and in accordance with standards for transparency; clear mechanisms for participation are in place; and a hierarchy of mitigation is respected. In Bolivia, institutional capacity is weak and the case studies analyzed indicate that financing entities need to support local capacities.

References

- ABC. (2007). *Memoria Institucional: Gestión 2007*. La Paz: Administradora Boliviana de Carreteras.
- ABC. (2009). Documento Base de Contratación para la Contratación de Servicios de Consultoría. Licitación Pública Nacional N° 011/2009, Noviembre de 2009. CUCE 09-0291-00-167851-1-1. Construcción de la Doble Vía La Paz-Oruro. La Paz: Administradora Boliviana de Carreteras.
- ABC. (2010a). Documento Base de Contratación para la Contratación de Obras. Licitación Pública Nacional N° 011/2009. CUCE 10-0291-00-167851-1-2. Construcción de la Doble Vía La Paz-Oruro. La Paz: Administradora Boliviana de Carreteras.
- ABC. (2010b). Proceso de Contratación en Licitaciones Públicas. Revisión, Complementación y Validación del Diseño Final y Supervisión Técnica y Ambiental de la Construcción de la Doble Vía La Paz-Oruro. La Paz, 28 de enero de 2010. Resolución ABC/RPC/009/2010.
- ABC. (2010c). Proceso de Contratación en Licitaciones Públicas. Construcción de la Doble Vía La Paz-Oruro: Tramo I (Senkata-Mantecani), Tramo II (Mantecani-Lequepampa), Tramo III (Lequepampa-Oruro). La Paz, 09 de marzo de 2010. Resolución ABC/RPC//019/2010.
- ABC. (2010d). *Manual Ambiental para Carreteras, Metodologías y Especificaciones: Tomo 2*. La Paz: Administradora Boliviana de Carreteras y Corporación Andina de Fomento.
- ABC. (2010e). *Glosario de Términos Ambientales: Sector Carreteras*. La Paz: Administradora Boliviana de Carreteras y Corporación Andina de Fomento.
- ABC. (2010f). *ANPE/CI/037/2010*. Consultoría para la Elaboración de un Estudio de Evaluación Social y Elaboración de un Plan para los Pueblos Indígenas de la Zona del Proyecto: Carretera Ixiamas-San Buenaventura. La Paz, 01 de noviembre de 2010. Resolución ABC/RPA/142/2010.
- ABC. (2010g). Modelo de Documento Base de Contratación de Servicios de Consultoría. Consultoría para Elaboración de un Estudio de Evaluación Social y Elaboración de un Plan para los Pueblos Indígenas de la Zona del Proyecto: Carreteras Ixiamas-San Buenaventura. CUCE 10-0291-00-209913-1-1. La Paz: Administradora Boliviana de Carreteras.
- ABC. (2011a). *Estudio de Evaluación de Impacto Ambiental de la Carretera San Buenaventura-Ixiamas*. La Paz: Administradora Boliviana de Carreteras.
- ABC. (2011b). *Plan de Reasentamiento e Indemnización de Poblaciones Afectadas (PRIPA): Carretera San Buenaventura-Ixiamas*. La Paz: Administradora Boliviana de Carreteras.
- ABC. (2012). Proceso de Contratación en Licitaciones Públicas. Construcción de la Doble Vía La Paz-Oruro: Tramo II (Mantecani-Lequepampa) (Segunda Convocatoria). La Paz, 09 febrero de 2012. Resolución ABC/GRN/RPC/005/2012.
- ABC. (2013). Proceso de Contratación en Licitaciones Públicas. Concurso de Propuesta Internacional CPI N° 002/2011 “Servicios de la Consultoría para la Revisión, Validación y Complementación del Diseño y Supervisión Técnica Socioambiental de las Obras de Mejoramiento y Construcción del Tramo Carretero San Buenaventura-Ixiamas” (Primera Convocatoria). La Paz, 02 de septiembre de 2013.
- ABC. (2013b). Proceso de Contratación en Licitaciones Públicas. Resolución ABC/RPC/080/2013. Adjudicar Convocatoria Pública Internacional CPI-001/2013 “Supervisión Técnica y Ambiental de la Construcción del Tramo Doble Vía Cristal Mayu-Montero; Tramo I: Montero-Yapacaní” (Primera Convocatoria). La Paz, 02 Septiembre de 2013.
- ABC. (2014). Proceso de Contratación en Licitaciones Públicas. Mejoramiento y Construcción del Tramo Carretero San Buenaventura-Ixiamas Lote 1: Tramo I San Buenaventura-Tumupasa Incluye Variante y Acceso a Tumupasa (Avenida y Conexión Variante-Avenida); Lote 2: Tramo II Tumupasa-Ixiamas (Segunda Convocatoria). Licitación Pública Internacional LPI/015/2013. La Paz, 28 de octubre de 2014.
- ABC. (2015). ABC cobre boleta \$US 16,4 MM por resolución de contrato con Tradeco. En: ABC. Taken from <http://www.abc.gob.bo/abc->

ABC. (2016a). *Informe de Gestión 2016*. La Paz: Administradora Boliviana de Carreteras.

ABC. (2016b). Proceso de Contratación en Licitaciones Públicas. Licitación Pública Internacional LPI 003/2016-OFC “Contratación de la Construcción de la Doble Vía Montero-Yapacaní en la Ruta Santa Cruz-Cochabamba”. Resolución ABC/RPC/086/2016. La Paz, 08 de septiembre de 2016.

ABC. (2017a). *Informe INF/GLP/RTE/2017-0657*. Solicitud de Informe Escrito Pie No. 217/2017-2018 del Senador Yerko M. Nuñez Negrette.

ABC. (2017b). *Acta de Recepción Definitiva del Rubro de Pavimentación – Construcción de la Doble Vía La Paz – Oruro, Tramo I “Senkata – Matecani”*. La Paz: Administradora Boliviana de Carreteras.

ABC. (2017c). *Acta de Recepción Definitiva del Rubro de Pavimentación – Construcción de la Doble Vía La Paz – Oruro, Tramo III “Límite Departamental (Lequepampa) – Oruro (Rotanda del Casco)”*. La Paz: Administradora Boliviana de Carreteras.

ACUDE S.R.L. (2013). Proyecto “Rescate Arqueológico Campos de Aroma” Informe Final. Proyecto de la Doble Vía La Paz-Oruro. La Paz: ABC, Prointec-SGT.

Agencia de Noticias Fides. (2017). Alcalde de San Buenaventura denuncia que construcción de la vía a Ixiamas fue abandonada. En: *Agencia de Noticias Fides*. Taken from <http://www.noticiasfides.com/economia/alcalde-de-san-buenaventura-denuncia-abandono-de-la-construccion-de-carretera-a-ixiamas-376875>

Aschauer, D. (1990) Highway capacity and economic growth. *Economic Perspectives*, 14 (1), 14-24.

ATB digital (2017) ABC multará a la empresa china Sinohydro. En: *ATB digital*. Taken from <https://www.youtube.com/watch?v=7zHTQrlb6r4>

Banco Mundial. (2017). Indicadores del Desarrollo Mundial – Bolivia PIB (US\$ a precios actuales. Recuperado de: <https://datos.bancomundial.org/indicador/NY.GDP.MKTP.CD?locations=BO>

BID. (2006a). *Política de Medio Ambiente y Cumplimiento de Salvaguardias*. Banco Interamericano de Desarrollo.

BID. (2006b). BID aprueba nueva política de medio ambiente y cumplimiento de salvaguardias. En: *BID, Noticias - Comunicado de Prensa*. Taken from <http://www.iadb.org/es/noticias/comunicados-de-prensa/2006-01-19/bid-aprueba-nueva-politica-de-medio-ambiente-y-cumplimiento-de-salvaguardias,2643.html>

BID. (2012). Informe de Gestión Ambiental y Social (IGAS). Tramo de Doble Vía Montero Yapacaní BO-L1075. Banco Interamericano de Desarrollo.

BID.(2017). *Evaluación de Salvaguardias Ambientales y Sociales: Evaluación Corporativa*. Washington D. C.: Banco Interamericano de Desarrollo.

BID. (s.f.). Loan Proposal. Montero-Yapacaní Divided segment of the Santa Cruz-Cochabamba Highway. *Document BO-L1075*.

BID. (s.f.2). Plan de Seguimiento y Evaluación. Tramo de Doble Vía Montero-Yapacaní en la Ruta Santa Cruz-Cochabamba. Banco Interamericano de Desarrollo.

CAF. (2009). CAF aprueba crédito de USD 250 millones para la doble vía La Paz-Oruro. En: *CAF*. Taken from <https://www.caf.com/es/actualidad/noticias/2009/09/caf-aprueba-credito-de-usd-250-millones-para-doble-via-la-paz-oruro>

CAF. (2010). *Estrategia Ambiental de CAF*. Bogotá: Corporación Andina de Fomento.

CAF. (2017a). La Doble Vía Inclusiva: Corredor de Oportunidades. *Serie: Pasos para la Inclusión*. Corporación Andina de Fomento.

- CAF. (2017b). Más de 4.000 familias entre La Paz y Oruro se beneficiaron del proyecto “La doble Vía Inclusiva” En: CAF. Taken from <https://www.caf.com/es/actualidad/noticias/2017/07/mas-de-4000-familias-entre-la-paz-y-oruro-se-beneficiaron-del-proyecto-la-doble-via-inclusiva/>
- CFI, Corporación Internacional de Financiamiento. (2012) Normas de Desempeño. Taken from https://www.ifc.org/wps/wcm/connect/55d37e804a5b586a908b9f8969adcc27/PS_Spanish_2012_Full-Documents.pdf?MOD=AJPERES
- Connal s.r.l. (2011). *Diseñando una Carretera Segura y Ordenada. Proyecto: Estudio de Identificación (EI) y Estudio Técnico, Económico, Social y Ambiental (TESA) para la Construcción de la Carretera Doble Vía Cristal Mayu-Montero*. (Primera Audiencia de Consulta Pública). Cartilla Informativa. Administradora Boliviana de Carreteras y Banco Interamericano de Desarrollo.
- Connal s.r.l. (2012a) *Diseñando una Carretera Segura y Ordenada: Tramo 1 (Montero-Yapacaní)*. Segunda Cartilla Informativa. Administradora Boliviana de Carreteras y Banco Interamericano de Desarrollo.
- Connal s.r.l. (2012b). *Estudio de Identificación (EI) y el Estudio Técnico, Económico, Social y Ambiental para la Construcción de la Carretera Doble Vía “Cristal Mayu-Montero”*. La Paz: Administradora Boliviana de Carreteras.
- Delta Consult Ltda. (2015). *Informe de Auditoría Financiera: Primer Tramo de la Doble Vía Montero-Yapacaní en la Ruta Cochabamba-Santa Cruz. Contrato de Préstamo BID Nro. 2786/BL-BO*. La Paz: Administradora Boliviana de Carreteras.
- Eju.tv. (2015) Patacamaya: Mueren seis personas y otras 29 quedaron heridas en accidente de bus. En: Eju.tv. Taken from <http://eju.tv/2015/06/patacamaya-mueren-seis-personas-y-otras-29-quedaron-heridas-en-accidente-de-bus/>
- Eju.tv. (2017). ABC pide a Banco Mundial celeridad para licitar y continuar con la obra San Buenaventura-Ixiamas. En: Eju.tv. Taken from <http://eju.tv/2017/06/abc-pide-a-banco-mundial-celeridad-para-licitar-y-continuar-con-la-obra-san-buenaventura-ixiamas/>
- Ekstrom, J., Bennun, L. & Mitchell, R. (2015). *A cross-sector guide for implementing the Mitigation Hierarchy*. Cambridge: The Biodiversity Consultancy Ltd.
- El Deber. (2017). La ABC libera el 92% de la doble vía Montero-Yapacaní. Taken from <http://www.eldeber.com.bo/economia/La-ABC-libera-el-92-de-la-doble-via--Montero-Yapacaní-20170121-0051.html>
- El Diario. (2010). ABC inicia construcción de la Doble Vía La Paz-Oruro. Taken from http://www.eldiario.net/noticias/2010/2010_10/nt101030/3_06ecn.php
- Erbol-digital. (2014). Denuncian que hay baches en doble vía La Paz-Oruro. En: *Erbol-Digital*. Taken from http://www.erbol.com.bo/noticia/economia/06102014/denuncian_que_ya_hay_baches_en_doble_la_paz_oruro
- Erbol-digital. (2015). Transporte Pesado cuestiona la doble vía La Paz-Oruro. En: *Erbol-Digital*. Taken from http://www.erbol.com.bo/noticia/economia/29012015/transporte_pesado_cuestiona_la_doble_la_paz_oruro
- Hammond, E. (2011). Oil prices rises will hit road repairs. En: *Financial Times*. Taken from <https://www.ft.com/content/5c3498ca-5e2b-11e0-b1d8-00144feab49a?mhq5j=e2>
- Hampfrey, C. (2016). *Time for a new approach to environmental and social protection at multilateral development banks*. ODI Briefing paper.
- IADB .(2012). Safeguard Policy Filter Report. Segment Montero-Yapacaní from the double lane in the road Santa Cruz-Cochabamba. Inter American Development Bank.
- Jornadanet.com. (2012). Microempresarios de la doble vía bloquearán la carretera La Paz-Oruro. En: *Jornadanet.com*. Taken from <http://www.jornadanet.com/n.php?a=77709-1>
- Kvam, R. (2017). Consulta significativa con las partes interesadas. Banco Interamericano de Desarrollo.

La Razón. (2011). Inspeccionan obras de la doble vía La Paz-Oruro. En: *La Razón*. Taken from http://la-razon.com/index.php?_url=/economia/Inspeccionan-obras-doble-via-Paz-Oruro_0_1498050203.html

La Razón. (2015). Se inaugura hoy la primera doble vía interdepartamental en el país. En: *La Razón*. Taken from http://m.la-razon.com/economia/inaugura-primer-doble-interdepartamental-pais_0_2210178967.html

La Razon. (2017b). Gobierno analiza adjudicar carretera Ixiamas- San Buenaventura a firmas que perdieron puja con Corsán. En: *La Razon*. Taken from http://www.la-razon.com/economia/Ixiamas-San_Buenaventura-Gobierno-BM-licitacion-firmas-perdieron-Corsan_0_2697930226.html

La Razón. (2017a). Gobierno afirma que contratación de Corsán Corviam cumplió normas del Banco Mundial. En: *La Razón*. Taken from http://www.la-razon.com/economia/Gobierno-Corsan-Corviam-Banco-Mundial_0_2689531066.html

Larsen, G. y Ballesteros, A. (2014). *Striking the Balance: Ownership and Accountability in Social and Environmental Safeguards*. Washington DC: World Resources Institute.

Llosa, G. (2011) *Mitigación de Impactos Ambientales Potenciales, Principalmente Indirectos, Asociados al Proyecto del Mejoramiento del Camino San Buenaventura-Ixiamas. Reporte Final*. La Paz: Estado Plurinacional de Bolivia y Administradora Boliviana de Carreteras.

Ministerio de Culturas y Turismo. (2013a). Informe Técnico UDAM 209- Solicitud de autorización para el “Proyecto de Rescate Arqueológico Campos de Aroma”, comunidad de Belén de la provincia Aroma del Departamento de La Paz.

Ministerio de Culturas y Turismo. (2013b). Informe Técnico UDAM 243– Fiscalización del Proyecto de Rescate Arqueológico de Aroma, Municipio de Sica Sica.

Oetting, I. (2012). *Marco de Planificación para Pueblos Indígenas: Proyecto Desarrollo Territorial Comunitario Integrado para Comunidades Alejadas en la Amazonía (DETCAA)*. FUNDESNA.

Página Siete. (2013). Bolivia adjudica a firma mexicana tramo de vía interoceánica. Taken from <http://www.paginasiete.bo/economia/2013/9/21/bolivia-adjudica-firma-mexicana-tramo-interoceanica-999.html>

Página Siete. (2015). Inician obras de la vía San Buenaventura-Ixiamas. Taken from <http://www.paginasiete.bo/economia/2015/5/27/inician-obras-buenaventura--ixiamas-57933.html>

Página Siete. (2016). La ABC dice que ya se hubo recepción provisional de la doble vía La Paz-Oruro. Taken from <http://www.paginasiete.bo/economia/2016/1/21/dice-hubo-recepcion-provisional-doble-paz-oruro-84164.html>

Página Siete. (2017). Abandono de Corsán dejó impagos a más de 400 trabajadores. Taken from <http://www.paginasiete.bo/economia/2017/4/19/abandono-corsan-dejo-impagos-trabajadores-134831.html>

Página Siete. (2017b). Gobierno rescindió dos nuevos contratos con española Corsán. Taken from <http://www.paginasiete.bo/economia/2017/4/24/gobierno-rescendio-nuevos-contratos-espanola-corsan-135390.html>

Página Siete. (2017c). ABC: Se anuló contrato por incumplimiento de Corsán. Taken from <http://www.paginasiete.bo/economia/2017/4/23/abc-anulo-contrato-incumplimiento-corsan-135345.html>

Página Siete. (2017d). Isolux-Corsán en quiebra y contratistas en emergencia. Taken from <http://www.paginasiete.bo/economia/2017/7/5/isolux-corsan-quiebra-contratistas-emergencia-143459.html>

PCA y ABC. (2011a). Estudio de Evaluación Social y Elaboración de un Plan para los Pueblos Indígenas de la Zona del Proyecto: Carretera Ixiamas- San Buenaventura.

PCA y ABC. (2011b). Plan para Pueblos Indígenas, Estudio de Evaluación Social y Elaboración de un Plan para los Pueblos Indígenas en la Zona del Proyecto “San Buenaventura-Ixiamas.

PCA y SGT. (2009). *Estudio Técnico, Económico, Social y Ambiental (TESA) La Paz-Oruro: Estudio de Evaluación de Impacto Ambiental*. La Paz: Estado Plurinacional de Bolivia, Ministerio de Obras Públicas, Servicios y Viviendas y Administradora Boliviana de Carreteras.

Plurinational State of Bolivia and International Development Association. (2011). *Financing Agreement (National Roads and Infrastructure Project) between The Plurinational State of Bolivia and International Development Association. Credit Number 4923-BO*. May 17, 2011.

Tello, R. (2017). Cinco Desafíos en el Componente Social de los Estudios de Impacto Ambiental. En: *BID, Viva Sustainability*. Taken from <https://blogs.iadb.org/vivasustainability-en/2017/01/18/five-challenges-eias/>

The World Bank. (2011a). Project Appraisal document on a proposed credit in the amount of US\$109.5 million to the Plurinational State of Bolivia for the National Roads and Airport Infrastructure Project. *Report No. 59305-Bo*.

The World Bank. (2011b). Project Information Document (PID): Concept Stage. *Report No.: AB5757*.

The World Bank. (2016a). World Bank Board Approves New Environmental and Social Framework. En: *The World Bank*. Taken from <http://www.worldbank.org/en/news/press-release/2016/08/04/world-bank-board-approves-new-environmental-and-social-framework>

The World Bank. (2016b). *The World Bank Environmental and Social Framework*. Washington DC: The World Bank.

The World Bank. (2017a). *National Roads and Airport Infrastructure Project (P122007). Implementation Status & Results Report*. 16 June 2017.

The World Bank. (2017b). Environmental and Social Safeguards Policies. En: *The World Bank*. Taken from <http://www.worldbank.org/en/programs/environmental-and-social-policies-for-projects/brief/environmental-and-social-safeguards-policies>

Vicepresidencia del Estado Plurinacional de Bolivia. (2015). El presidente del Estado inaugura la Doble Vía La Paz-Oruro. En: *Vicepresidencia del Estado Plurinacional de Bolivia*. Accedido: 22 de abril de 2017. Taken from <https://www.vicepresidencia.gob.bo/El-presidente-del-Estado-inaugura>

Watkins, G., Atkinson, R., Canfield, E., Corrales, D., Dixon, J., Factor, S., Hardner, J., Hausman, H., Hawken, I., Huppman, R., Josse, C., Langstroth, R., Pilla, E., Quintero, J., Radford, G., Rees, C., Rice, D. y Villalba, A. (2015). Guía para evaluar y gestionar los impactos y riesgos para la biodiversidad en los proyectos respaldados por el Banco Interamericano de Desarrollo. *Nota Técnica N° IDB-TN-932*. Banco Interamericano de Desarrollo.

List of abbreviations

AAM	Multi-lateral Environmental Agreement
ABC	Bolivian Highway Administrator
BID	Inter-American Development Bank
CAF	Development Bank of Latin America (Andean Development Corporation)
	Inter-sectorial Biodiversity Initiative
CSBI	Environmental Impact Evaluation Study
EEIA	Identification Study
EI	Independent Consultation Mechanism and Research
MICI	Office of Evaluation and Oversight
OVE	Application Plan and Environmental Follow-Up
PASA	Program for Prevention and Mitigation
PPM	Fundamental Road Network
RVF	
SAFCO	Law for Government Administration and Control
SICOES	State Procurement System
TESA	Technical, Economic, Social and Environmental Assessment
UDAM	Archaeology and Museum Unit



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