Innovative mechanisms to protect rights of communities affected by largescale development projects

Mecanismos innovadores para proteger derechos de comunidades afectadas por grandes proyectos de desarrollo

Sheyder Daniela Pinilla Hernández¹

Abstract

This article discusses alternative mechanisms available for the protection of rights of communities affected by large-scale development projects. It begins examining an accountability mechanism to control large-scale development projects financed by the Inter-American Development Bank throughout Latin America. Based on a case study of the outcome of the class action mechanism for the protection of individual rights of residents in communities affected by the Doña Juana landfill in Bogotá, it identifies shortcomings and opportunities. To conclude, it explores the potential of holding international funding agencies co-responsible for mitigating and repairing the rights of communities affected by development projects financed by them.

Keywords

Development projects; comprehensive reparations; compensation mechanisms; Environmental rights; Colombia.

Resumen

_

¹ Universidad Católica de Colombia. ORCID: https://orcid.org/0000-0002-8336-4955 Correo: sdpinilla16@ucatolica.edu.co

Este artículo analiza los mecanismos alternativos disponibles para la protección de los derechos de comunidades afectadas por proyectos de desarrollo a gran escala. Comienza examinando un mecanismo de rendición de cuentas para controlar proyectos de desarrollo a gran escala financiados por el Banco Interamericano de Desarrollo en toda América Latina. A partir de un estudio de caso del resultado del mecanismo de acción de grupo para la protección de los derechos individuales de los habitantes de las comunidades afectadas por el relleno sanitario de Doña Juana en Bogotá, se identifican falencias y oportunidades. Para concluir, explora el potencial de co-responsabilizar a las agencias internacionales de financiamiento en la mitigación y reparación de los derechos de las comunidades afectadas por los proyectos de desarrollo que financian.

Palabras clave

Proyectos de desarrollo; reparaciones integrales; mecanismos de compensación; Derecho ambiental; Colombia.

Introduction

The following article intends to show how the accountability mechanisms established for the control of large-scale development projects financed by the Inter-American Development Bank throughout Latin America have had a great impact in supporting the reparation of both collective and individual rights of citizens affected by projects of this nature. In Colombia other mechanisms, such as the constitutional class actions, have been used to repair individual rights affected by large scale development projects. However, as the discussion in this article will show, this legal mechanism has significant limitations to protect and repair damages caused by large projects that affect multiple dimensions the life of neighboring communities violating not only individual but also social and collective rights. So, it is worth comparing this long standing legal mechanism for the protection of individual rights of residents in

communities affected by this type of projects, with this innovative mechanism that is now being implemented in many countries in Latin America where the Inter-American Development Bank (IDB) is financing this type of projects.

Generally known by its acronym in Spanish MICI (*Mecanismo independiente* de *Consulta e Investigación*), it functions as an Independent Consultation and Investigation Mechanism. The MICI plays a fundamental role in this context since it offers parameters to protect not only individual but also collective rights of residents in communities affected by large scale development projects financed by multilateral funding agencies such as IDB in harmony with the Colombian legal system.

1. The development of class actions in Colombia as a compensation mechanism

In Colombia, class actions have a constitutional status. They have been used for almost three decades as an important mechanism to protect individual rights of groups that have suffered harm.

In the Colombian legal system today, there are various constitutional actions. In this material case we will focus on the class action mechanism, a major contribution included in the Constitution for the materialization of the ends of the State. In principle this mechanism gives access to citizens affected in their rights and in the face of damages, to claim different forms of compensation from those parties responsible for their cause. This class action mechanism was originally established in article 88 of the Political Constitution and is regulated by Law 472 of 1998. It applies when damages or harm are caused to a plural number of persons, and it allows in principle to protect individual rights and the reparation of damages to the victims, and a special procedure is required. However, this normative procedure is not preferential and will not always prevail over substantial law concerning

guarantees for the defense of individual rights to the plural number of persons and the application of principles of publicity, economy, speed, and efficiency.

2. Origins of the MICI and its effectiveness in social and environmental rights protection

The Independent Consultation and Investigation Mechanism, generally known by its acronym in Spanish MICI, was created by the assembly of governors of the Inter-American Development Bank (IDB). Its main purpose is to endorse the IDB's image of transparency and co-responsibility when addressing violations of social and environmental rights related to development investment projects financed by the Bank. Above all, MICI was designed to reinforce IDB's accountability and reflect its commitment to respond to local communities that have complaints of harms related to the non-compliance with the Bank's social and environmental standards caused by large-scale development investments funded by the IDB. (MARQUEZ, 2017; Banco Interamericano de Desarrollo).

Since 2010 MICI has been widely publicized throughout Latin America and has been well received by different local communities in many countries of the region. Thanks to this mechanism, projects that would be in breach of several environmental and social standards have been adjusted to mitigate and compensate affected communities by the project owners. The MICI does not replace or detract from other legal mechanisms that have similar purposes, such as the class action. To the contrary, it complements and seeks to enhance co-responsibility with the IDB as a stakeholder in finding solutions through agreements to address complaints voiced by local communities and their claims requesting compensation and protection of the social and environmental rights (Banco Interamericano de Desarrollo, 2022).

The MICI is endowed with important attributes to make its effectiveness and responsibility to the community trustworthy. Among them:

- Its organization and scope of application
- A management model applicable in cases to be investigated in response to consultations
- Its communication, extension, and disclosure modules.

Among the MICI purposes in the short, medium, and long term are its commitment to continue providing innovative strategic communication initiatives between consultants and the mechanism, to create objective views that suit the interests of both the community and the IDB. The final objective is to ensure that both individual and collective rights are protected, and that win-win solutions are implemented.

Some important aspects concerning the use of the MICI are listed below:

- 1. Any person can use MICI in countries where an IDB project is located and is affecting or could potentially affect social and / or environmental rights in the future.
- 2. At any time, the applicant may use of MICI, both during its consultation phase and its compliance verification phase.
- 3. The applicant must have previously taken measures against the violation of his rights before arriving to MICI.
- 4. If an applicant activates MICI, an investigation will be carried out through a process that addresses the impact or prevention caused by non-compliance by the IDB, and a final report will be prepared with its respective conclusions, observances, and recommendations.

These characteristics help guide the analysis of MICI's scope. It responds to the need of reparation and protection of the violated collective rights of groups of people caused by large development projects, as is the case of the Doña Juana Sanitary Landfill (DJSL) in Bogotá that will be analyzed later in this article. If actions

or omissions derived from the execution of a future expansion phase of the project with IDB financing and it affects people residing in the neighboring properties, MICI may be the mechanism that will be activated initially in a consultation phase and, if necessary, in a subsequent compliance verification phase, to demand reparations from this multilateral financial entity that will be jointly responsible with the UAESP, the agency responsible for the project in Bogotá's administration.

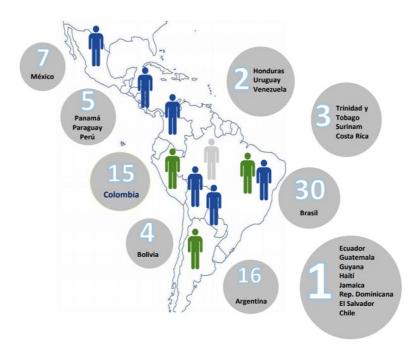
The possibility of resorting to this independent consultation and investigation mechanism named MICI allows the effective materialization of the IDB's coresponsibility in the reparation and compensation of social and environmental rights violated by large-scale development projects financed with multilateral funds. This is very helpful in ensuring the prevention, protection, and reparation of the rights of those affected, even when the main responsibility lies with the local IDB partner, in this case the UASEP as the direct responsible for the development project in question. In short, MICI offers a suitable action framework to protect the collective rights affected in this type of contexts.

3. Analysis of experiences with MICI in Colombia

The MICI is an independent accountability office for the IDB. Its mandate is to be an instance of last resort to serve and investigate claims from groups or communities in Latin America and the Caribbean that believe they have been affected by operations financed by the IDB and caused by non-compliance with operational policies. At the end of 2016, the MICI had received 111 complaints from most countries in Latin America, distributed as shown in figure 1:

Figure 1

MICI: Distribution of complaints received by country 2010 - 2016.



Based on Marquez, V. (2016).

Brazil, Argentina and Colombia are the three countries which have been most active in using the MICI during this period.

In Colombia, between December 2014 and January 2021, there have been 21 development projects financed by the IDB in which MICI has been activated. MICI has addressed this cases in its role as an independent third party, in an objective, impartial and transparent manner, favoring collaboration between the applicant, the owner of the investment project, the borrower and the administration of the IDB Group.

Among the cases to reported in Colombia, it is worth highlighting those that have had especially negative effects and caused serious conflicts between the development projects financed by the IDB and the affected social groups or communities. Among these claims are the following:

- a) 4G Highway Cocoa Route (MICI-CII-CO-2019-0152)
- b) Ituango Hydroelectric Plant (MICI-CII-CO-2018-0133)
- c) First line of the Bogotá metro (MICI-BID-CO-2021-0174)
- d) Porce III hydroelectric plant (MICI-CO-2015-0096)

Most requests in these cases began with the appointment of a representative before the MICI, generally a person who was part of the affected community or group. Under the current policy, civil society organizations cannot act as direct applicants, although they can advise and represent applicants before MICI (Inter-American Development Bank, 2022).

Finally, regarding the main achievements of the MICI in the cases addressed in Colombia, it is noteworthy that they have served to clarify doubts and take measures based on the findings of the investigations. These range from studying the financing of the projects to providing the necessary additional information with the support of the affected communities. Thus, it has been possible to establish the reparation of the violated rights, this being one of the main benefits offered by the MICI.

4. Case study: The class action filed against "Doña de Juana Sanitary landfill in Bogotá".

For the inhabitants near the Doña Juana landfill, the filing of the class action in 1999 was a very helpful mechanism to have a fair hearing before the justice system. This allowed them to ask for the protections of their rights affected by the environmental emergency that damaged their health and living conditions of their families and neighbors (BERMUDEZ, 2007; CAMARGO, 2009; LÓPEZ & NIETO, 2015; TORRES & IREGUI, 2017; 2020).

In case on a new phase of expansion of the landfill project in which IDB is involved providing financial resources for its development, the MICI complements other existing means to protect and repair social and environmental rights. It is a beneficial consultation and research mechanism to address complaints by local community affected by development investment projects, which is aligned with the IDB's interest in accomplishing its mission and preserving its good image. Therefore, the expansion of the "Doña Juana Landfill" project is a relevant framework to contrast and compare the benefits of the MICI with the ongoing outcomes of the abovementioned class action filed in 1999 (CARREÑO & QUIROGA, 2013; QUINTERO, 2016: LÓPEZ, MACA & GORDILLO, 2017; Observatorio Ambiental de Bogotá, 2017; MARÍN & ESTRADA, 2019; MOLANO, 2019).

In 2012, Colombia's State Council ruled the class action in favor of the communities surrounding the Dona Juana landfill and ordered a monetary reparation to compensate the damages caused by the collapse of the landfill and the resulting public health emergency in the sector. However, these compensation measures were not effective to comprehensively repair the damage caused to the community in terms of affectations to rights such as family privacy, recreation, a healthy environment, and public health.

- ... the third section of the Council of State, in an order dated November 1, 2012, declared the Capital District responsible for the environmental catastrophe caused by the overflow and collapse of the Doña Juana landfill and ordered it to pay COP \$227,44 milliards in compensation for moral damage and affectation of the constitutional rights to family intimacy and to recreation and the use of free time. Likewise, the sentence ordered the following measures to ensure non-repetition:
- 1. Adopt a technical regulation that guarantees safe management of sanitary landfills, applying the advances that science currently offers.

2. Send a copy of the conviction to the National Agency for Legal Defense of the State so that, within the framework of its powers and whenever it deems it necessary, it disseminates its content." (LÓPEZ et al., 2015)

At present, the Council of State's ruling on the class action filed by the community gave them expectations of being repaired with the disbursement of resources, though the process has dragged on for years. However, the Ombudsman's Office has spoken out by saying that what is argued in the ruling will be paid on time and indicated that by February 2018, compensation has been paid to 1,294 people out of the total 1,472 beneficiaries recognized in the ruling.

The disbursement of the above-mentioned resources resulting from the class action process of the RSDJ case is expected to benefit two groups of people who were recognized both in the ruling of the Council of State and by the Ombudsman's Office. However, the Ombudsman stated that:

The Fund for the Defense of the Rights and Collective Interests of the Ombudsman, in charge of these payments (Public Law 472, art.71, literal e), has indicated the difficulties that undetermined groups represent in practice, as in the case of the Doña Juana dump, as a result of failures in characterization of claimants, but not of individually identified people (MARIN & ESTRADA, 2019, p.172).

Even though it has been an extenuating process, the entity is working on the process and when it is completely finished, payments will be made in full to all interested parties through the administrative act that is issued.

Once the Council of State's ruling is fully complied, the next step is to examine the current state of the Doña Juana sanitary landfill project. In this regard, the CONPES on the financing of the expansion of the RSDJ indicates that:

The costs correspond to the value projected in CONPES 3874, which establishes that for the extension of the useful life of existing landfills, a value of \$667,200 million pesos is estimated. Of which about 25% will be used for the improvement works of the Doña Juana landfill (LÓPEZ, 2019, p.58)

Though a large investment was estimated for the expansion of the RSDJ by the IDB, which is the financier of the project, there is still a dispute as to whether this should be done or not, since there are still many problems. Among them, the future impact of the expansion of the site on the surrounding communities and the related environmental damages. Also, increases in the population that will produce more waste and may possibly raise the cost of the maintenance of public spaces and streets. Bearing in mind all of these potential problems and conflicts, the MICI of the IDB Group as an independent consultation and investigation mechanism, may be a helpful alternative to prevent possible non-compliance and affect the surrounding communities of the future project.

Over the years, the Doña Juana landfill has been in operation, managing the garbage and waste of the Bogota's citizens. The idea of a project expansion would extend its useful life, but this undoubtedly poses serious problems for its closest neighbors. "[RSDJ] is located next to Ciudad Bolívar, Mochuelo Alto and Bajo. Bad odors and the proliferation of vectors seriously affect people's health, especially in relation to respiratory diseases."(Corporación Autónoma Regional De Cundinamarca, 2017).

Consequently, if the project to expand the RSDJ is possible, its affectation would generate negative effects on the rights of the surrounding community. Although there is already a history of landslides that gave rise to a group action filed by the community and a ruling by the Council of State ordering the repair of those

affected, the Regional Autonomous Corporation (RAC) and other entities under study have seen remote the possibility of a possible expansion. On the other hand, the Ombudsman's Office has pointed out some of the consequences for people's health that such expansion would bring:

Health problems of environmental origin are so intensified that they become a wide-ranging problem, derived mainly from the high degree of exposure of the population, which brings with it consequences such as respiratory conditions, skin problems, diseases transmitted by vectors and due to food, chemical poisoning, psychological problems due to odors, acute illnesses, occupational and professional illnesses, permanent limitations and decreased lung capacity (CHITIVA, 2021).

Within the framework of the political Constitution, the State must guarantee the development of a sanitary landfill project for the management of solid waste. This is of utmost importance for the territorial management of each district administration, the responsibility that this project entails is of great importance. However, it should be noted that it can potentially create serious consequences, starting with environmental problems that may endanger the health of people. In this regard, the CAR has expressed

Despite what is established in the environmental license, (Resolution CAR 1351 of 2014, article 23), which explicitly stipulated the condition that once phase 2 was completed in 2022, the RSDJ should not be expanded or further optimized, UAESP (Unidad Administrativa Especial de Servicios Públicos) subscribed contract No. UAESP CM 13 2018 to consult about the optimization of areas of old landfill deposit (RAMOS, 2020)

Given that there are more negative consequences than positive ones, no solutions have been found to the problems generated by the expansion of the landfill.

However, a mechanism such as the IDB group's MICI could be implemented to reach an agreement on whether to continue with the project or to recommend other alternatives to the Doña Juana landfill.

Presently, these affectations continue to be discussed due to mistakes committed by past administrations. The possibility of implementing the MICI in the next expansion phase of the Doña Juana Landfill project, may help to prevent further conflicts and create clear institutional pathways for communities to find solutions for the mitigation and prevention of violation of their rights by this new phase of this project that will be financed by the IDB.

5. Results and discussion

The management of solid waste in Colombia is regulated in the Political Constitution of 1991 in its articles 1, 11, 49, 79, 80, 82, 88, 361 and 366, which establish the rights to public health, dignity human and environmental sanitation. In the Political Constitution there are various mechanisms that citizens can interpose for the non-violation of their rights, such as class action as a reparation mechanism. For the case in question, the follow-up that was made to the application of the comprehensive reparation standards in the class action of the Doña Juana landfill went back to 1999 when the inhabitants surrounding the RSDJ took legal action in response to the collapse of the RSDJ in 1997. Approximately 1,000,000 tons of garbage raised the landfill, causing a number of public health and environmental problems.

Article 88 of the Political Charter protects the rights to compensation for damage caused to a plural number of people. Law 472 of 1998 enshrines class actions as a mechanism to obtain compensation or reparation for violation of rights. Yet, this mechanism has limitations in the scope to meet or achieve its purpose, such as BERMUDEZ (2007, p. 148) points out:

Bringing together 20 people who want to be part of a judicial process to meet that requirement, with all that this implies in terms of time, resources and management, is not easy; much less the fact that a person decides to initiate the process on behalf of all those who were in the same circumstances in manner, time and place, where it deals with cases of indeterminate groups and the damages may end up being generalized to proceed with the payment of compensation.

The Council of State's decision concerning the class action was favorable towards the community, as it orders the reparation of damages caused and as well as measures that will guarantee non-repetition of violations of social and environmental rights. These reparation measures applied as a result of the class action aim to compensate non-pecuniary damages that amount to COP \$ \$227, 44 milliards, benefitting the members of the group that sued and the people who spoke after the sentence.

But as MARIN and ESTRADA (2019, p.109-128) highlight

.... the comprehensive reparation standards applied by the Council of State in 2012 in the case of the RSDJ, have not met the expected results. The follow-up between 2012 to 2018 shows that the compensation process has been delayed and compliance with the fundamental or collective rights of those affected was not guaranteed, nor were the rights to participation of these citizens indirectly motivated.

Having said the above, it is clear that class action faces considerable obstacles in a judicial process, so other alternatives can be sought when it comes to guaranteeing rights.

As for the issue in the RSDJ case, both environmental rights and public health rights have been affected by the limitations of class action. An example of this were the difficulties observed in the payment of compensation by the Ombudsman's Office, an entity that alleges the arduous task involved in recognizing all the victims in the process. On the other hand, the jurisprudence has also ruled saying that

Judicial processes, such as this class action, confuse the community, insofar as they consider that their rights as affected parties will be guaranteed, but this is not the case. They have to resort to guardianship to try to protect their fundamental rights and to order workshops to learn about health effects, learn about epidemics and vector control in public spaces and in homes (Supreme Court of Justice, 2017).

In this sense, class actions do not really respond to the social aims of reparation. They hardly lead to the materialization of the guarantees it offers. Therefore, the possibility of resorting to mechanisms such as the MICI is a good alternative due to the advantages that it offers, since many of the above limitations concerning class action do not apply to it. Among the advantages of MICI over class actions, the following can be listed:

- 1. Applications can be submitted by one or more people, they do not have a specific number, and the only requirement is that the person resides in the country where the project is presented.
- 2. Important recognition in its management of confidentiality at the request of the applicants.
- 3. Although it is not such a well-known mechanism in Latin America, it is easily accessible and requests can be answered in 4 languages
- 4. Various principles are complied with, such as efficiency and speed, since the terms are short compared to other mechanisms. In its final

recommendation report, conflict resolution is guaranteed and monitoring is carried out for 5 years to ensure compliance with the same.

Even though MICI is a recent mechanism, it offers to guarantee collective rights of the communities covered by the constitution, with the aim of contributing to the accountability and effectiveness of the multilateral banks such as IDB financing projects in Latin America.

This type of mechanism began to emerge in the 90s as a response from the Multilateral Development Banks (MDBs) to claims concerning the negative consequences that their projects could be causing in populations and communities. Given that the MDBs generally enjoy immunity from national courts and tribunals, the mechanisms were proposed as a non-judicial option to give recourse to people potentially affected by projects financed by these institutions". (Inter-American Development Bank, 2022)

In adopting the restorative measures in the face of the evidence of an injury to fundamental rights such as family privacy, recreation, and use of free time, as well as other damages to legal assets of the environment in the case regarding the RSDJ, the IDB Group indicates that

Over time, several mechanisms, including the MICI, incorporated a second function, conflict resolution, which offers the parties to a complaint (complainants, borrowers and MDBs) the opportunity to reach a consensual solution to the subject matter of the complaint, from a dialogue process facilitated by experts. More recently, the MDBs have explicitly included an advisory function, aimed at ensuring that the mechanisms distill the lessons that emerge from the cases they manage

in order to contribute to institutional learning" (Banco Interamericano de Desarrollo, 2021).

Given the impact that may occur in the projects financed by the IDB in compliance with these investments, mechanisms such as the MICI are expected to prevent or repair damages. Through its concepts and reports, the claims of the affected communities are documented, and although these are not binding within the national and international legal system, they represent an effective means for the application of safeguards for the benefit of the communities negatively affected by the projects. Investment for development.

It is uncertain that the expansion of the RSDJ may be the most suitable solution to solve the problem of solid waste management of Bogotá. Entities such as the CAR and the Ombudsman's Office have spoken out in this regard. Consequently, the UAESP is considering other technical alternatives. In any case, the alternative that is finally implemented will require financing from the international multilateral bank and therefore the possibility of putting into operation a mechanism such as the MICI will remain open to prevent from the planning stage conflicts with the communities in the area of influence of the projects.

6. Conclusions.

International standards consider not only the protection of individual rights as class actions do, but also the protection of collective rights and the requirement of compliance with the obligations of the State in relation to their protection with individuals who seek to find channels services that provide a guarantee in the name of their rights.

It is key to understand that class actions are a mechanism to remedy individual rights. However, collective rights such as the comprehensive protection of the family

and the right to a healthy environment require social inclusion and community participation in decisions that may affect them. It is State's duty to prevent and control environmental deterioration factors, to protect the integrity of public space and its destination for common use. Since the legal scope of class actions leave this rights unprotected, there is a clear need to implement innovative forms of protection and compensation of these rights, such as the MICI.

In the case of Doña Juana, the scarce interaction or omission between the operators of the landfill and those affected by it created the conflictive environment that has existed for more than 30 years. Presently, the compliance of reparation and non-repetition measures ordered as a result of a class action are still pending. This undermines the public's trust in institutions operating large development projects as well as in the legal mechanisms to redress their violated rights. Also, it reveals the limitations of class actions.

Finally, the case of the RSDJ, in the event of a project expansion which would require international loans, offers the opportunity to apply and implement innovative mechanisms such as the MICI in the medium or short term. Even though the MICI is a relatively new mechanism, it can efficiently manage conflict resolution in contrast with other mechanisms, such as class action. It is also a worthy example of how multilateral development banks can help to mitigate and prevent possible damage caused to communities by the large-scale projects they finance. Furthermore, even though the recommendations issued by the MICI are not binding in the Colombian legal system, they are an effective sanction to encourage the culture due diligence by project operators their financiers.

7. References

Banco Interamericano de Desarrollo. (2017). Mecanismo independiente de consulta e investigación (MICI). Informe de verificación de la observancia. http://idbdocs.iadb.org/wsdocs/getdocument.aspx?docnum=40872612

- Banco Interamericano de Desarrollo. (2021). Oficina de Evaluación y Supervisión.

 Evaluación del Mecanismo independiente de consulta e investigación (MICI).

 https://publications.iadb.org/publications/spanish/document/Evaluacion-del-Mecanismo-Independiente-de-Consulta-e-Investigacion-MICI-2021.pdf
- Banco Interamericano de Desarrollo. (2022). MICI-Independent Investigation and Consultation Mechanism. https://www.iadb.org/en/mici/mici-independent-consultation-and-investigation-mechanism
- BERMÚDEZ, Martín (2007). *La acción de grupo: normativa y aplicación en Colombia*. Editorial Universidad del Rosario, Colombia.
- CARREÑO, Johana & QUIROGA, Sandra (2013). Análisis de la capacidad de resiliencia social de los habitantes de Mochuelo Alto y Mochuelo Bajo frente al Relleno Sanitario Doña Juana. Retrieved from:

 http://hdl.handle.net/10654/9314. Consultado el: 12.03.2021
- Corporación Autónoma Regional de Cundinamarca. (2017). Afectación a la cuenca media del rio Tunjuelo y otros impactos del Relleno Sanitario Doña Juana. Recuperado de: http://oaica.car.gov.co/vercaso2.php?id=94
- Corte Suprema de Justicia (2017). STC15985-2017, Sala Civil. Recuperado de: www.cortesuprema.gov.co>uploads>relatorias>tutelas>BDIC2017
- CHITIVA, Sandra. (2021) Analisis desde el modelo deductivo de la fragilidad del Relleno Sanitario Doña Juana. Recuperado de:

 https://repository.ucatolica.edu.co/bitstream/10983/26560/1/ART%C3%8DCU

 LO%20DE%20INVESTIGACION%20-%20SMCHG.pdf

- LOPEZ, Carlos & NIETO, María (2015). "La acción de grupo Como mecanismo de reparación de daños individuales por perjuicios ambientales", *Revista de Derecho Público*, 34, http://dx.doi.org/10.15425/redepub.34.2015.26. Consulta: 22.05.2021
- Observatorio Ambiental de Bogotá (OAB). (2017). Disposición de Residuos en el relleno Sanitario Doña Juana DRRSDJ. Fecha de consulta: 21 de agosto de 2017. Retrieved from: https://oab.ambientebogota.gov.co/indicadores/? id=37
- MARIN GALEANO, Mayda Soraya &, ESTRADA GOMEZ, María Camila., (2019). Seguimiento a la aplicación de los estándares de reparación integral en la acción de grupo del relleno sanitario Doña Juana, *Revista Ratio Juris*, 14 (29) 109-128.
- MARQUEZ, Victoria. (2016). Mecanismo independiente de consulta e investigación (MICI) Retrieved from;

 https://www.ambienteysociedad.org.co/wp-content/uploads/2016/12/MICI-PPT_Taller_IAMS-CSOs_Colombia-.4.pdf
- MOLANO CAMARGO, Frank. (2019). El relleno sanitario Doña Juana en Bogotá: la producción política de un paisaje toxico, 1988-2019". *Historia critica,* 74, 127-149, recuperado de: https://revistas.uniandes.edu.co/doi/pdf/10.7440/histcrit74.2019.06
- RAMOS GUTIERREZ, Pedro (2020). Una tecnología equivocada, el problema del Relleno Sanitario de Doña Juana, *Periódico UNAL* Recuperado de:

 http://unperiodico.unal.edu.co/pages/detail/una-tecnologia-equivocada-el-problema-del-relleno-sanitario-dona-juana/

- TORRES VILLAREAL Maria Lucia & IREGUI PARRA, Paola Marcela. (2017). Las modificaciones legislativas a las acciones populares en Colombia: ¿avance o retroceso? *Revista de Derecho*, 48, 131-162.
- TORRES VILLAREAL María Lucia & IREGUI PARRA, Paola Marcela. (2020) *Las acciones constitucionales: reflexiones sobre sus avances y retos.* Bogotá: Editorial Universidad del Rosario.