

“Challenging the winds of injustice”:

analysis of the impacts of wind energy expansion on the land and human rights of the Fundo e Fecho de Pasto Communities in the state of Bahia (Brazil), through the lenses of energy justice and decolonial thinking

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Dr. Michael Klingler

vorgelegt von | *submitted by*
MBA Patrícia Galves Derolle Huber

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List of Acronyms and Abbreviations

AAFP	State Articulation of the Fundo e Fecho de Pasto / Articulação Estadual do Fundo e Fecho de Pasto
AATR	Association of Lawyers for Rural Workers in the State of Bahia / Ass. de Adv. de Trab. Rurais
ACHR	American Convention on Human Rights
BNDES	National Bank for Economic and Social Development / Banco Nacional do Desenvolvimento
BOKU	University of Natural Resources and Life Sciences from Vienna
CDA	Bahia's Agrarian Development Coordination / Coordenação de Desenvolvimento Agrário
CESPCT	State of Bahia Council for the Sustainability of Traditional Peoples and Communities / Conselho Estadual para a Sustentabilidade dos Povos e Comunidades Tradicionais
CPT	Pastoral Commission Land / Comissão Pastoral da Terra
FFP	Fundo e Fecho de Pasto
HRBA	Human Rights-Based Approach
IBGE	Brazilian Institute of Geography and Statistics
ILO	International Labor Organization
IRPAA	Bahia's Regional Institute for Agricultural Affairs / Inst. Regional da Pequena Agropecuária Apropriada
MPE-BA	State of Bahia Prosecutor's Office / Ministério Público do Estado da Bahia
NI	Normative Instruction / Instrução Normativa
O&M	Operation and Maintenance
PGE-BA	State of Bahia Attorney General / Promotoria Geral do Estado da Bahia
Port.	Portuguese
PROINFA	Program for Alternative Sources of Electric Energy
QAC	Qualitative Analysis Codebook
SDE	Bahia's Secretariat for Economic Development / Secretaria de Desenv. Econômico da Bahia
SDG	Sustainable Development Goals
SEPROMI	Bahia's Secretariat for Promotion of Racial Equality / Secretaria de Promoção da Igualdade Racial
STD	Sexually Transmitted Diseases
STF	Brazilian Supreme Court / Supremo Tribunal Federal
TES	Total Energy Supply
UDHR	Universal Declaration of Human Rights
UFBA	Federal University of Bahia
UN	United Nations
UNESCO	United Nations Educational, Scientific and Cultural Organization
UNFCCC	United Nations Framework Convention on Climate Change
UNGPBHR	United Nations Guiding Principles on Business and Human Rights
WG	Working Group

1. Introduction

Brazil has a high percentage of renewable sources in its Total Energy Supply (TES) when compared to the rest of the world,¹ as hydroelectric power is one of the country's main electricity sources. Yet, since Brazil's energy crisis in 2001,² caused by a lack of rainfall and therefore decreases in hydropower generation, there has been great political, economic and environmental support to foster other sources of renewable energies. After the creation of the Incentive Program for Alternative Sources of Electric Energy (PROINFA), the country has been moving towards ensuring national energy security and maintaining international environmental commitments to support climate change mitigation.³ In this context, the Brazilian Northeast region presents an enormous potential for renewable energy production, in particular from wind power and solar photovoltaic. This is shown by the Wind Atlas of the northeastern state of Bahia, which is an important publication from 2013 for the state government and the wind energy industry to plan and develop new wind energy projects. The study helped to establish Bahia as one of the most promising states for wind power generation in Brazil and it is widely used as a reference. According to the Atlas, the semi-arid region, which is characterized by low and irregular rainfall, high temperatures, and lack of water resources, presents ideal geo-physical conditions for wind power generation.⁴ Areas that offer high potential are framed as 'wind corridors' (Port. corredores de vento), which attract large investments for the establishment of wind energy facilities. However, a great share of these areas is located on 'vacant' state public lands (Port. terras devolutas),⁵ which have been historically occupied as communal lands by Traditional Communities,⁶ such as the Fundo e Fecho de Pasto.

¹ Ministério de Minas e Energia, *Plano Nacional de Energia 2050*, 15, accessed 23 September 2022, <https://www.epe.gov.br/sites-pt/publicacoes-dados-abertos/publicacoes/PublicacoesArquivos/publicacao-227/topico-563/Relatorio%20Final%20do%20PNE%202050.pdf>

² A. Filgueiras and T.M.V. e Silva, 'Wind Energy in Brazil—Present and Future', *Renewable and Sustainable Energy Reviews* 7, no. 5 (October 2003), 440–443, doi:10.1016/S1364-0321(03)00068-6

³ See Brazil's Nationally Determined Contributions (NDCs) at <https://unfccc.int/sites/default/files/NDC/2022-06/Updated%20-%20First%20NDC%20-%20%20FINAL%20-%20PDF.pdf>

⁴ Governo do Estado da Bahia, *Atlas Eólico*, 21, accessed 23 September 2022, <http://www.infraestrutura.ba.gov.br/arquivos/File/publicacoes/atlaseolicobahia2013.pdf>

⁵ A. Santos et al., *Dossiê: Energias Renováveis Na Bahia: Caminhos e Descaminhos*, 20 July 2022, 8, <https://www.dossienergiasrenovaveis.com.br/dossie.pdf>

⁶ According to Brazilian law, "Traditional Communities" refer to a group of people who share a common territory, ancestry, culture, and social organization and who rely on the utilization of natural resources for both their subsistence and the cultural reproduction. They interact with the environment in distinctive ways, and it is understood that they play a crucial part in preserving biodiversity and maintaining ecosystem services. The Brazilian Federal Constitution of 1988, the National Policy on Traditional Peoples and Communities (PNTC)

Over the years, the Traditional Communities of Fundo e Fecho de Pasto (FFP) built and reinforced their identity not only to exist as a community but also to resist injustices perpetrated against them. However, despite coexisting sustainably with these lands, the FFP are persistently withstanding economic interests from large stakeholders (public and private sectors) to explore the resource potentials, as well as from *grileiros* (private owners who take possession of ‘public vacant’ land) due to lack of land regularization and delays in recognition processes, hindering many of these traditional communities' rights. The aim of this research is to comprehend and identify underlying human rights issues perpetrated against the FFP in the context of wind energy expansion, by placing the communities' needs and voices at the center of the analysis. Therefore, the research question guiding the thesis is: ***How does the wind energy expansion impact the land and human rights of the Traditional Communities of Fundo e Fecho de Pasto in the semi-arid region of Bahia, Brazil?***

As Brazil foresees to more than double the current energy capacity of alternative electricity sources, such as wind power, by 2029,⁷ and as the potential areas are located to a large extent in the territory traditionally occupied by the Fundo e Fecho de Pasto Communities in the semi-arid region of the state of Bahia, this thesis seeks, in an interdisciplinary manner, to contribute with not only a sectoral (wind energy) but also a structural overview of the case, developing a framework which integrates energy justice and decolonial thinking, and praxis. The utilization of these two frameworks in the analysis is a way to carry out a critical examination of the case, as the goal of energy justice is to create a more just and sustainable energy system, and decolonial thinking's aim is to analyze interrelated systems of oppression that are ingrained in political, economic, and social structures.

In order to obtain an orderly overview of the complexity of the case, the thesis is structured in seven chapters. In chapter two, a tailored analysis of important theoretical and conceptual debates of energy justice and decolonial thinking perspectives will be presented, emphasizing a people-centered approach. In chapter three, the methodological approach and the respective methods of qualitative analysis will be outlined in order to provide a comprehensive idea of not only how data was collected and analyzed but also to show the limitations of my research approach. In chapter four, the human rights issues that the Fundo

created by Law No. 13.123/2015, and the Statute of Indigenous Peoples (Law No. 6.001/1973), among other laws and policies, also include references to traditional communities.

⁷ O. Turkovska et al., ‘Land-Use Impacts of Brazilian Wind Power Expansion’, *Environmental Research Letters* 16, no. 2 (1 February 2021), 1, doi:10.1088/1748-9326/abd12f

e Fecho de Pasto Communities face in the context of wind energy transition will be identified and analyzed. In chapter five, discussions of relevant topics that affected the human rights of the Fundo e Fecho de Pasto communities will be used for further understanding the impacts analyzed in the thesis, which will lead to chapter six, the section where suggestions for possible general interventions will be laid out to contribute with the applied stance of human rights. In chapter seven, a conclusion of the research will highlight the most important findings, and suggestions for future research.

2. Theoretical and conceptual framework

Energy justice considers issues such as energy poverty, environmental racism, and the disproportionate impacts of climate change on marginalized communities.⁸ It is a conceptual framework that has emerged in research in an interdisciplinary manner over the last decade⁹ and aims to address the socio-economic, environmental, and cultural impacts of energy production and consumption, and promote community participation in decision-making processes related to energy. Additionally, decolonial approaches have roots in the Latin American critical thought and challenge colonial power structures, mainly through the concept of coloniality, which continue to shape societies, by critiquing and resisting the ways in which Western knowledge, culture and institutions have been imposed on and continue to dominate non-Western societies.¹⁰ Decolonial thinking also has a focus on marginalized communities, by recovering oppressed discourses and considering cultural contexts in line with the right to self-determination.¹¹ By casting light on colonial power structures, it is possible to expose and critique the way they mold experiences of oppression and marginalization.

The energy transition is characterized by the decarbonization of energy supply in response to a variety of factors, such as climate change, air pollution, energy security, and advances

⁸ S. Bouzarovski and N. Simcock, 'Spatializing Energy Justice', *Energy Policy* 107 (August 2017), 640–648, doi:10.1016/j.enpol.2017.03.064; B.K. Sovacool et al., 'Pluralizing Energy Justice: Incorporating Feminist, Anti-Racist, Indigenous, and Postcolonial Perspectives' ['Pluralizing Energy Justice'], *Energy Research & Social Science* 97 (February 2023), 102996, doi:10.1016/j.erss.2023.102996

⁹ R.J. Heffron and D. McCauley, 'The Concept of Energy Justice across the Disciplines', *Energy Policy* 105 (June 2017), 658–659, doi:10.1016/j.enpol.2017.03.01822/02/2023 13:38:00

¹⁰ A. Quijano, 'Coloniality of Power, Eurocentrism, and Latin America', trans. M. Ennis, *Nepantla: Views from the South* 1, no. 3 (2000), 540–542, muse.jhu.edu/article/23906

¹¹ United Nations, 'International Covenant on Civil and Political Rights' ['ICCPR'], 16 December 1966, Art. 1(1), <https://www.ohchr.org/en/instruments-mechanisms/instruments/international-covenant-civil-and-political-rights>

in technology, which contribute with the decrease of costs of renewable energy, making it a better alternative. Yet, a just transition, which also aims at integrating social sustainability components, must focus on justice aspects, ensuring the participation of a wide range of stakeholders, including the local population affected. Although renewable energy transition is often framed by the government and newspaper media to have more positive than negative outcomes, its implementation may cause a series of critical socio-economic, cultural and environmental impacts that affect vulnerable groups. According to Sovacool et al. '*energy production and use contributes towards human rights abuses which generally cut across the basic categories of civil, cultural, economic, political, and social rights, and extend to cover issues of property, economic development, human health, safety, and the natural environment.*'¹²

In order to investigate the possible impacts within the wind energy transition an energy justice framework was developed to provide an in-depth analysis. Notwithstanding the importance of a sectoral perspective to investigate human rights in detail, its shortcomings relate to the lack of acknowledgement of ontological and epistemological injustices that rely on structural and institutional practices, and, consequentially, may be embedded in the energy system.¹³ For this reason, decolonial thinking was integrated, as it provides a contextualized overview, shedding light on historical and structural issues that may be associated with it. This is important to challenge the current *status quo*, provide alternatives, counter-argue hegemonic discourses of knowledge production and mainstreamed practices, and to recover marginalized and oppressed discourses that consider cultural contexts and are in line with the principle of self-determination.

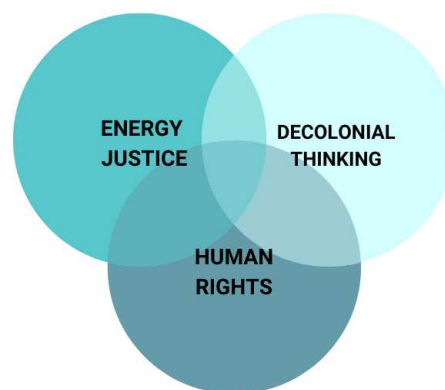


Figure 1: Intersection of frameworks

¹² B.K. Sovacool and M.H. Dworkin, *Global Energy Justice: Problems, Principles, and Practices* [Global Energy Justice], 1st ed., 2014, 165, doi:10.1017/CBO9781107323605

¹³ C. Tornel, 'Decolonizing Energy Justice from the Ground up: Political Ecology, Ontology, and Energy Landscapes', *Progress in Human Geography* (10 October 2022), 13, doi:10.1177/03091325221132561

Therefore, the combination of these perspectives and human rights (Figure 2) intends to consider the requirements of the affected communities and address historical issues and ongoing aspects of coloniality. It is also an attempt to reinterpret the way structures and institutions of the human rights system, as well as of the energy sector, in the case of the Fundo e Fecho de Pasto in Bahia, are perceived, in order to accommodate and include progressive insights aiming at sustainable change. Although such combination may seem incompatible, it was the way found to analyze through a framework that is already in place. The practical aspects of the energy justice tenets and its decision-making framework, together with the focus on marginalized discourses in a decolonial thinking project, which acknowledges historical patterns of coloniality, need to be strengthened and widely accepted in international institutions, domestic governments and structures of the energy system, especially in Latin America, in order to transform the current *status quo*, which perpetuates forms of oppression for the most marginalized, culminating in several human rights issues.

2.1. Energy Justice

The theoretical lens of energy justice framework is an interdisciplinary approach that seeks to understand the distribution of benefits and burdens of energy systems, processes and policies, and to address the power imbalances and injustices that exist within them. The energy justice framework encompasses disciplines such as energy policy, energy economics, environmental and climate justice, human rights, sociology, political science, and human geography.¹⁴ This conceptual framework evaluates the fairness and equity of energy systems, processes and policies with regards to the human rights of individuals and communities, including access to energy, environmental protection, and participation in decision-making. Energy justice considers issues such as socio-economic status, gender, race, and location, and aims to promote an energy system that is just, sustainable, and equitable.

The origins of energy justice come mainly from both practitioners and scholars in the fields of environmental justice and climate justice.¹⁵ Environmental justice emerged in the 1980s, in the United States, when activist movements fought for the protection of marginalized

¹⁴ B.K. Sovacool and M.H. Dworkin, 'Energy Justice: Conceptual Insights and Practical Applications' ['Energy Justice'], *Applied Energy* 142 (March 2015), 435–444, doi:10.1016/j.apenergy.2015.01.002; Bouzarovski and Simcock, 'Spatializing Energy Justice'

¹⁵ S. Baker, S. DeVar, and S. Prakash, *Initiative for Energy Justice: The Energy Justice Workbook*, December 2019, 10, <https://iejusa.org/wp-content/uploads/2019/12/The-Energy-Justice-Workbook-2019-web.pdf>

communities against environmental harm. Yet, although inspired by it, the Latin-American environmental justice distinguishes from those in other parts of the world, namely from the Global North,¹⁶ as it

‘is not anchored in the hazardous siting inequities,’¹⁷ but in ‘popular mobilization for social justice and equity,’¹⁸ presenting stronger ‘social justice demands and movements in different fields (political participation, land distribution, human rights, and community health).’¹⁹

The climate justice movements stem from the 1990s and 2000s, in a more global stance. The term ‘climate justice’ began to be used more widely in the mid-2000s, as the impacts of climate change began to be felt around the world, and as it became increasingly clear that the most affected communities were often those that had the least capacity to adapt.²⁰ Moreover, climate justice also brings in the idea of historical responsibility, that developed countries have contributed much more to the problem of climate change than developing countries, thus having a greater ability to address the problem. Theories of justice, and environmental and climate justice concepts contributed with relevant principles included in the framework of energy justice, for instance procedural and distributive justice (i.e., fair distribution of the burdens of development), and restorative and participatory justice (i.e., compensation of harms in form of reparations and marginalized communities’ participation in decision-making processes).²¹

It is worth noting that communities’ lived experiences reveal an interrelatedness among environmental, climate, and energy justice, thus energy policies must consider the distinctive ways in which environmental harms caused by climate change affect marginalized communities.²² Therefore, being ones of the most affected by such harms, marginalized

¹⁶D.V. Carruthers, ‘Introduction’, in ed. D.V. Carruthers, *Environmental Justice in Latin America: Problems, Promise, and Practice*, Urban and Industrial Environments (Cambridge, Massachusetts, 2008), 4

¹⁷ Carruthers, ‘Introduction’, 7

¹⁸ Carruthers, ‘Introduction’, 7

¹⁹ I. Rodriguez, ‘Latin American Decolonial Environmental Justice’, in ed. B. Coolsaet, *Environmental Justice*, 1st ed., Key Issues in Environment and Sustainability (New York NY, 2020), 2–3, <https://www.taylorfrancis.com/books/9780429642333/chapters/10.4324/9780429029585-8>

²⁰ E.A. Page, ‘Distributing the Burdens of Climate Change’, *Environmental Politics* 17, no. 4 (August 2008), 556–575, doi:10.1080/09644010802193419

²¹ M. Lacey-Barnacle, R. Robison, and C. Foulds, ‘Energy Justice in the Developing World: A Review of Theoretical Frameworks, Key Research Themes and Policy Implications’ [‘Energy Justice in the Developing World’], *Energy for Sustainable Development* 55 (April 2020), 122–138, doi:10.1016/j.esd.2020.01.010

²² Baker, DeVar, and Prakash, *Initiative for Energy Justice: The Energy Justice Workbook*, 20

communities not only depend but also rely on a fair renewable transition. A fair renewable transition ‘represent[s] a host of strategies ... that provide dignified, productive and ecologically sustainable livelihoods, democratic governance and ecological resilience.’²³ It is a transition that prioritizes the needs and perspectives of marginalized communities, and that ensures that the benefits of renewable energy are equitably shared among all members of society, integrating social sustainability components and focusing on aspects of justice.

The concept of justice as fairness in energy systems

Cost-benefit analyses, techno-economic models, scientific and engineering projections about new technologies or scenarios are typical tools to analyze the energy system. However, energy transition is about more than just economic growth and technological advancement; it also addresses political power, social cohesion, and even ethical and moral concerns about justice, fairness, and equity.²⁴ The concept of justice has a long history, from ancient thought (Aristotle and Plato) into the twenty-first century.²⁵ There are several theories about justice (distribution, retribution, deference, rehabilitation, incapacitation, reparation, denunciation), notably in the realms of law and philosophy. However, energy justice authors²⁶ usually rely on the definitions proposed by distributive justice theory, namely justice as fairness, from John Rawls.²⁷

The concept of justice as fairness is based on the idea that a just society is one in which the distribution of resources and opportunities is arranged in a way as to be fair to all members of society. Rawls based his theory on the reconciliation of two competing principles: equal basic rights and liberties, and the difference principle. The principle of equal basic rights and liberties means that all individuals have an equal right to the most basic liberties compatible with the same liberties of others. That is, all individuals have the same fundamental rights and freedoms. On the other hand, according to the difference principle, social and economic inequalities are only just if they benefit the least advantaged members of society the most. Rawls holds that these principles should be established by a hypothetical agreement in the

²³ Baker, DeVar, and Prakash, *Initiative for Energy Justice: The Energy Justice Workbook*, 22

²⁴ B.K. Sovacool et al., ‘Energy Decisions Reframed as Justice and Ethical Concerns’, *Nature Energy* 1, no. 5 (May 2016), 5, doi:10.1038/nenergy.2016.24

²⁵ L.M. Hinman, *Ethics: A Pluralistic Approach to Moral Theory [Ethics]*, 4th ed. (Australia ; Belmont, CA, 2008), 233–236

²⁶ Sovacool et al., ‘Energy Decisions Reframed as Justice and Ethical Concerns’; K. Jenkins et al., ‘Energy Justice: A Conceptual Review’ [‘Energy Justice’], *Energy Research & Social Science* 11 (January 2016), 174–182, doi:10.1016/j.erss.2015.10.004; Sovacool and Dworkin, ‘Energy Justice’

²⁷ J. Rawls, *A Theory of Justice*, Revised Edition. (Cambridge, Massachusetts, 1999)22.02.23 13:38:00

form of a social contract²⁸ that everyone would accept and agree to form a fair position, which would be made under certain idealized conditions, called by the author the ‘*veil of ignorance*.’²⁹ Such a condition prevents individuals from knowing about their own talents, abilities, social status, or other characteristics, thus establishing a common ground regarding the basic principles of justice that should govern society.

Two other ideas that expand John Rawls’ theory³⁰ are proposed by the Nobel-prize winning economist, Amartya Kumar Sen, and Professor of Law and Ethics at the University of Chicago, Martha C. Nussbaum. For Amartya Sen, justice is based on the idea that a just society is one in which individuals have the opportunities and resources to lead fulfilling lives.³¹ For Sen, injustice occurs when a person's ability to function at the same level as others is restricted by factors like poverty, unfavorable environmental conditions, or physical impairments. In this sense, his theory holds that a just society is one in which individuals have the capabilities to lead meaningful lives, focusing on the combination of various factors such as access to resources, education, healthcare, political freedom, and social and cultural opportunities that enable people to achieve the goals that they have reason to value; it also emphasizes the importance of individual freedom and agency, and the need to have access to a wide range of capabilities so that individuals can choose the life that they find most appropriate to them.³²

Like Amartya Sen, Martha Nussbaum’s theory of justice³³ argues that the traditional approach to justice, which focuses on the distribution of resources and opportunities, is inadequate because it does not consider the many ways in which individuals can use resources and opportunities to achieve their goals and aspirations. Instead, she argues that the focus should be on the capabilities, or the real opportunities, that individuals have in order to lead fulfilling lives. She elaborates ten key capabilities that are necessary for human flourishing:³⁴ life, bodily health, bodily integrity, senses/imagination/thoughts, emotions, practical reason, affiliation, relationship with other species, play, and political and material control over one’s environment. Nussbaum emphasizes the importance of cultural context,

²⁸ Rawls, *A Theory of Justice*, 10–15

²⁹ Rawls, *A Theory of Justice*, 17–19

³⁰ B. Edmondson and S. Levy, *Climate Change and Order: The End of Prosperity and Democracy* [*Climate Change and Order*], Energy, Climate and the Environment (Basingstoke, 2013), 137–139

³¹ A. Sen, ‘Justice: Means versus Freedoms’, *Philosophy & Public Affairs* Vol. 19, no. N. 2, Spring (1990), 113–117

³² A. Sen, *Development as Freedom*, 1st. ed. (New York, 1999), 292–297

³³ M. Nussbaum, ‘Capabilities as Fundamental Entitlements: Sen and Social Justice’, *Feminist Economics* 9, no. 2–3 (January 2003), 33–59, doi:10.1080/1354570022000077926

³⁴ Nussbaum, ‘Capabilities as Fundamental Entitlements: Sen and Social Justice’, 41–42

by stating that different cultures and societies may have different understandings.³⁵ She also sheds light on the importance of political and social institutions³⁶ in promoting justice as capabilities, arguing that they have a responsibility to create conditions that allow individuals to both develop and exercise these capabilities.

The concept of justice has evolved from the distribution of resources and opportunities to encompass the idea that individuals should have the capabilities and opportunities to lead fulfilling lives. John Rawls' theory of justice as fairness includes the principles of equal basic rights and liberties and the difference principle, which highlights the need to benefit the least-advantage members of society (social justice). Amartya Sen's theory emphasizes the importance of individual freedom and agency, while Martha Nussbaum expands on this by elaborating ten key capabilities necessary for a just society. Sen and Nussbaum's approaches to justice emphasize the importance of considering individuals' resources, capabilities, and cultural contexts. This has significant implications for the concept of energy justice, which seeks to ensure that all individuals have access to reliable, affordable, and sustainable energy sources.

Conceptualization of energy justice

The concept of energy justice can be defined as '*a global energy system that fairly disseminates both the benefits and the costs of energy services, and one that has representative and impartial energy decision-making.*'³⁷ Its objective is to '*offer an opportunity to develop new crosscutting social sciences agenda on exploring where injustices occur, developing new processes of avoidance and remediation, and recognizing new sections of society*', inspiring '*both evaluative accounts and normative solutions.*'³⁸ The three main tenets of energy justice have been highly addressed in research: distributional, recognitional, and procedural.³⁹

The *distributive justice* entails that everyone should receive a fair share of both the benefits and the ills, including the uneven distribution of associated responsibilities, of the energy system. It seeks to find where injustices emerge and on who they have an impact. The *recognitional justice* sheds light on the representativeness of individuals⁴⁰ within the energy

³⁵ Nussbaum, 'Capabilities as Fundamental Entitlements: Sen and Social Justice', 36–39

³⁶ Nussbaum, 'Capabilities as Fundamental Entitlements: Sen and Social Justice', 54–55

³⁷ Sovacool and Dworkin, 'Energy Justice', 436

³⁸ Jenkins et al., 'Energy Justice', 176

³⁹ Jenkins et al., 'Energy Justice', 176–178

⁴⁰ N. Fraser and A. Honneth, *Redistribution or Recognition? A Political-Philosophical Exchange [Redistribution or Recognition?]* (London, New York, 2003)

system, including the acknowledgment of the disproportionate impacts of energy production and consumption on marginalized groups, ensuring their meaningful role in decision-making processes related to energy policy. The *procedural justice* refers to aspects of fairness and transparency of processes and procedures (judicial and non-judicial) used to make decisions about energy policy and that are based on impartial information, making the decision-making process clear to all stakeholders involved. Thus, achieving societal energy justice requires addressing all three tenets. For Raphael Heffron,⁴¹ however, a more comprehensive energy justice framework comprises five tenets, being the three mentioned above, with the addition of restorative and cosmopolitanism justice. *Restorative justice* implies that the harms caused by energy systems and practices should be repaired, and that the affected communities should be actively involved in the process of repairing these harms. This approach emphasizes the importance of addressing the harm caused by past and present energy systems, and the need to create a more just and equitable energy future. *Cosmopolitanism justice* refers to the idea that humans have a right to access to energy resources and services, regardless of their geographic location, culture, or social background. This perspective emphasizes the interconnectedness of people and the planet, and the need to consider the impact of energy decisions on the global community.

An operationalization of these concepts is proposed by the Energy Justice Workbook through a tool called *Energy Justice Scorecard* that ‘*can be used to evaluate existing energy policies as well as inform the approach to a proposed energy policy.*’⁴² With a focus on the renewable energy transition impacts on marginalized communities, the scorecard provides a simple method to measure whether energy justice indicators are being followed or not in specific cases. Through this tool, advocates and policymakers attribute a score on a set of five questions regarding energy justice aspects to scrutinize about the respective energy policy. The score ranges from 1 (does not meet the requirements laid out in the question) to 5 (fully meets the requirements of energy justice indicators), being the sum of twenty-five (25), thus, considered a feasible energy policy. The questions relate to:⁴³

1. Distributive Justice: Does the policy center economic, social, or health benefits to marginalized communities?

⁴¹ R.J. Heffron, ‘Applying Energy Justice into the Energy Transition’, *Renewable and Sustainable Energy Reviews* 156 (March 2022), 2, doi:10.1016/j.rser.2021.111936

⁴² Baker, DeVar, and Prakash, *Initiative for Energy Justice: The Energy Justice Workbook*, 23

⁴³ Baker, DeVar, and Prakash, *Initiative for Energy Justice: The Energy Justice Workbook*, 22–23

2. Distributive Justice: Does the policy make energy more accessible and affordable to marginalized communities?
3. Recognitional Justice: Does the policy center the decision-making on marginalized communities?
4. Procedural Justice: Have the marginalized communities participated meaningfully in the policymaking process with sufficient support?
5. Restorative Justice: Does the policy aim to remedy prior and present harms faced by communities negatively impacted by the energy system?

The application of the energy justice lens through the energy scorecard was applied in practice in the context of the United States, in communities from California and New York. According to the Energy Justice Workbook, the application of the questions and scores highlighted key balancing issues in the energy justice realm, casting light on the need for prioritizing robust benefits for marginalized communities, while making development projects achievable.⁴⁴

For Raphael Heffron,⁴⁵ *‘resolving justice within the energy sector...will decrease risks...and contribute to solutions in solving the poor record of environmental, social and governance issues.’* For the author, since the energy sector is one of the root causes of many environmental and climate issues, it is important to apply human rights across the energy-cycle.⁴⁶ The Human Rights-Based Approach (HRBA) to Development⁴⁷ is a conceptual framework that is *‘normatively based on international human rights standards and principles and (is) operationally directed to promoting and protecting human rights.’*⁴⁸ It emphasizes the importance of protecting and promoting human rights in all policies and actions and it is based on the principle that all individuals have inherent rights that must be respected, protected, and fulfilled by the state and other actors. According to the HRBA, civil, cultural, economic, political, and social rights as well as the right to development are anchored in a system of rights and corresponding obligations established by international law. Moreover, it is based on human rights principles, such as equality, non-discrimination,

⁴⁴ Baker, DeVar, and Prakash, *Initiative for Energy Justice: The Energy Justice Workbook*, 55

⁴⁵ Heffron, ‘Applying Energy Justice into the Energy Transition’, 2

⁴⁶ Heffron, ‘Applying Energy Justice into the Energy Transition’, 2

⁴⁷ United Nations Sustainable Development Group, *United Nations Sustainable Development Cooperation Framework*, 3 June 2019, <https://unsdg.un.org/sites/default/files/2022-06/UN%20Cooperation%20Framework%20Internal%20Guidance%20--%201%20June%202022.pdf>

⁴⁸ United Nations Sustainable Development Group, *United Nations Sustainable Development Cooperation Framework*, 19

participation, and accountability that directs development cooperation, casting light on building the capacity of both rights-holders and duty-bearers to exercise their rights. This approach also implies that the State has the main duty to respect, protect and fulfill human rights while implementing sustainable development policies, holding the state accountable if rights are violated. Furthering the Human Rights-Based Approach in the context of wind energy expansion is the energy justice decision-making framework, which is used to evaluate social justice aspects within energy policy decisions; it not only encompasses but also complements the principles enshrined in the HRBA. For energy justice authors such as Sovacool and Dworkin,⁴⁹ energy decisions should promote aspects of availability, affordability, due process, good governance, sustainability, intra- and intergenerational equity, and responsibility.⁵⁰ Moreover, in an updated version from 2017, Sovacool⁵¹ added two more aspects to energy decisions: resistance (standing up to injustice) and intersectionality (intertwining with other elements, such as race, class, or power and the treatment of non-humans). Therefore, energy justice policies and decision-making should take into account the intersectional nature of social identities and experiences, such as race, gender, class, age, and disability, to ensure that they are inclusive, equitable and justice-aware. According to the authors, these elements ensure that energy systems are designed, implemented, and managed in a way that promotes social justice, respect for human rights and environmental sustainability. Both the HRBA and energy justice decision-making frameworks share similarities, for instance by taking into account the potential impacts of state and corporate actions on marginalized communities. They also prioritize the principle of participation, which means that marginalized communities must be actively engaged and consulted in the decision-making process. Additionally, the principle of non-discrimination is central to both frameworks. The HRBA requires that all individuals be treated equally and without discrimination, and the energy justice decision-making framework also emphasizes the need to ensure that energy policies and projects do not disproportionately affect marginalized communities. Therefore, the HRBA and energy justice decision-making framework share the principle of protecting and promoting the rights and needs of marginalized and vulnerable communities and ensuring that decision-making is inclusive and participatory.

⁴⁹ Sovacool and Dworkin, 'Energy Justice', 436

⁵⁰ Sovacool and Dworkin, 'Energy Justice', 440

⁵¹ B.K. Sovacool et al., 'New Frontiers and Conceptual Frameworks for Energy Justice', *Energy Policy* 105 (June 2017), 687–688, doi:10.1016/j.enpol.2017.03.005

Availability	Accessibility of energy services to all members of society, including marginalized and vulnerable groups, regardless of their location or socio-economic status.
Affordability	Ability of all members of society to afford the energy services they need, without causing undue financial burden.
Due process	The right of all members of society to have their voices heard and to have a say in the decision-making process, and to have access to information and recourse to redress any grievances they may have.
Good governance	Transparency, accountability, and participation in the decision-making process, as well as the rule of law and the protection of human rights.
Sustainability	Ability of energy systems to meet the needs of current and future generations, both environmentally and economically, and the protection of resources for future generations.
Intra- and intergenerational equity	Fair distribution of benefits and burdens within and across different generations, ensuring that the needs and rights of current and future generations are protected.
Responsibility	Moral and legal obligations of the state and other actors to ensure that energy systems are designed, implemented and managed in a way that promotes social equity, respect for human rights and environmental sustainability.
Resistance	Ability of affected communities and individuals to resist or challenge unjust energy policies or projects that negatively impact their rights, communities and the environment.
Intersectionality	Recognition that individuals and communities have multiple identities and experiences that intersect and interact, creating unique experiences and vulnerabilities.

Table 1: Energy justice decision-making⁵²

Notwithstanding the fact that dominant energy justice frameworks have their origins in developed countries,⁵³ energy justice authors acknowledge the characteristic of *mutatis mutandis* not only of the energy system but also of the world. According to Sovacool et al⁵⁴ there is a need to reframe energy debates which must include new theoretical and conceptual approaches. The authors propose two categories: strengthening energy justice theory, and revealing opportunities and tensions for energy justice in practice. While the first category encompasses non-Western theories and theorists, the value of the non-human world, and the recognition of cross-scalar issues of injustice, the latter dives into the business models and

⁵² Sovacool and Dworkin, ‘Energy Justice’; Sovacool et al., ‘New Frontiers and Conceptual Frameworks for Energy Justice’

⁵³ Lacey-Barnacle, Robison, and Foulds, ‘Energy Justice in the Developing World’, 123–124

⁵⁴ Sovacool et al., ‘New Frontiers and Conceptual Frameworks for Energy Justice’, 678–687

co-benefits, the management of trade-offs within and among energy justice principles, and the exposure of unjust discourses and narratives.

Despite the progressive approach provided by Sovacool,⁵⁵ Carlos Tornel⁵⁶ points out the shortcomings of the energy justice framework mentioned above. Among the critiques (i.e., reproduction and perpetuation of Western thought),⁵⁷ Tornel mentions that the three classic energy justice tenets often ‘affirm’ rather than ‘transform’ the underlying conditions of social and environmental justice.⁵⁸ One shortcoming that relates to this in the context of the thesis is the lack of acknowledgement of the colonial past by energy justice frameworks applied in the Global South, which continue to interact with aspects of coloniality and violence in energy systems.⁵⁹ For Tornel, a *‘decolonial approach to energy transition and energy justice would require reckoning with how the values, violence, and structures of coloniality shaped and continue to mold energy systems and energy itself.’*⁶⁰

As the objective of the thesis is not to decolonize the energy justice framework, but to find alternative ways to scrutinize the impacts of wind energy expansion on the Fundo e Fecho de Pasto communities, it is relevant to complement the energy justice framework by introducing a broader layer of analysis through decolonial thinking.

2.2. Decolonial thinking

The theoretical lens of decolonial thinking is a critical perspective that seeks to challenge and deconstruct colonial power structures, knowledge systems and epistemologies that have been imposed upon and continue to shape the world, particularly in the global South. Decolonial thinking critiques the dominant Western narratives and perspectives that prioritize eurocentric knowledge and values, and instead seeks to reclaim and validate alternative, marginalized and indigenous knowledge systems.⁶¹ Decolonial thinking includes disciplines such as philosophy, history, political science, anthropology, education, gender,

⁵⁵ Sovacool et al., ‘New Frontiers and Conceptual Frameworks for Energy Justice’

⁵⁶ Tornel, ‘Decolonizing Energy Justice from the Ground up: Political Ecology, Ontology, and Energy Landscapes’

⁵⁷ Tornel, ‘Decolonizing Energy Justice from the Ground up: Political Ecology, Ontology, and Energy Landscapes’, 5

⁵⁸ Tornel, ‘Decolonizing Energy Justice from the Ground up: Political Ecology, Ontology, and Energy Landscapes’, 6

⁵⁹ Tornel, ‘Decolonizing Energy Justice from the Ground up: Political Ecology, Ontology, and Energy Landscapes’, 7

⁶⁰ Tornel, ‘Decolonizing Energy Justice from the Ground up: Political Ecology, Ontology, and Energy Landscapes’, 8

⁶¹ Quijano, ‘Coloniality of Power, Eurocentrism, and Latin America’

and cultural studies. It argues that colonialism has shaped not only the physical world, but also the epistemic, cultural and social realms, leading to the exploitation and oppression of non-Western communities and cultures.⁶² Decolonial thinking therefore calls for a shift in power relations, knowledge production and distribution, and the dismantling of colonial structures of domination and exploitation. In this thesis, decolonial thinking is applied to explore the impact of wind energy expansion on the traditional community of Fundo e Fecho de Pasto (FFP) and the colonial roots of the injustices they face. According to Ballestrin,⁶³ the connection of Latin American theorists with postcolonial approaches began in the 1990s with the formation of the "Modernity/Coloniality Group", composed by Latin American authors such as Aníbal Quijano, Ramón Grosfoguel, Walter Mignolo, as well as the US-American, Immanuel Wallerstein.⁶⁴ In the 2000s, the group fostered dialogues with other members, such as Catherine Walsh and Nelson Maldonado-Torres. Although this body of knowledge mainly stems from Latin American authors, important contributors originate from other parts of the world, such as India (Shiv Visvanathan), Sudan/USA (Abdullahi Ahmed An-Na'im), Portugal (Boaventura de Sousa Santos) and New Zealand (Linda Smith). For decolonial thinking perspectives, colonialism is more than territorial occupation and resource exploitation; it is a discourse on the representation of the Other, which produces ways of existing and being.⁶⁵ In this sense, it is possible to infer that such perspective does coexist with the Western knowledge, as its nullification would not contribute to change in debate sought by them. Yet, it intends to challenge and criticize the ways through which dominant discourses are mainstreamed, to provide alternatives to the dominant Western knowledge production, to counter-argue hegemonic discourses of knowledge production on which the global South was built, and to recover historical narratives that were lost or are still marginalized.

⁶² Quijano, 'Coloniality of Power, Eurocentrism, and Latin America'

⁶³ L. Ballestrin, 'América Latina e o giro decolonial', *Revista Brasileira de Ciência Política* no. 11 (2013), 97–99, http://www.scielo.br/scielo.php?script=sci_arttext&pid=S0103-33522013000200004&lng=pt&tlng=pt

⁶⁴ Immanuel Wallerstein's World-System Theory aims to explain the dynamics of the global economy as a whole. It states that the globe is divided into a core, periphery, and semi-periphery, where core nations rule and take advantage of peripheral nations for their own gain. Due to the global division of labor and uneven exchange that results, the periphery experiences ongoing poverty and underdevelopment. Wallerstein claims that despite the system's five-century existence and recurrent crises, it has managed to preserve its fundamental structure. The World-System Theory is used to examine global events and comprehend how they relate to the global economy as a whole.

⁶⁵ Ballestrin, 'América Latina e o giro decolonial', 103

The coloniality of power, knowledge, and being

The ‘decolonial turn’ was a movement carried out by the Modernity/Coloniality Group for the critical and utopian renewal of social sciences in the 21st century,⁶⁶ and it emphasizes the need to rethink eurocentric ways of understanding the world. According to Luciana Ballestrin, the group adopts a variety of theoretical stances, modernizing the critical tradition of Latin American thought, providing historical reinterpretations, and problematizing both old and new issues for the continent. For the author, the group also defends the theoretical, political, and epistemological "decolonial option" in order to comprehend and act in a world where global coloniality persists at various levels of individual and collective life.⁶⁷

One of the major contributions regarding the decolonial turn was provided by Aníbal Quijano, with the conceptualization of the Coloniality of Power.⁶⁸ In simple terms, this concept aims to understand the ways in which colonialism (and imperialism) have shaped the distribution of power in the world, which started with the conquest of the Americas and is perpetuated until the present. It is divided in three forms: coloniality of power, coloniality of knowledge, and coloniality of the being.

Coloniality of power is associated with two main characteristics: i) racial distinction between Europeans and non-Europeans, being the latter considered inferior, and ii) use of Western/modern institutional forms of power in Non-Western societies to have the ‘*control of the resources of production, or in the institutions and mechanisms of public authority.*’⁶⁹ Quijano argues that colonialism created a system of racial and ethnic hierarchies that continue to shape the distribution of power and resources in the world today. For Quijano, *coloniality of knowledge* can be understood as the European ‘*hegemony over the new model of global power concentrated in all forms of control of subjectivity, culture, and especially knowledge and the production of knowledge under its hegemony,*’⁷⁰ which ultimately during colonization culminated in the eradication of other modes of knowledge. The *coloniality of being* is related to the idea of the coloniality of knowledge, which refers to the ways in which knowledge is used to justify the domination of non-Western peoples and cultures. In this sense, it is in the control of the coloniality of power that the coloniality of knowledge and

⁶⁶ Ballestrin, ‘América Latina e o giro decolonial’, 89

⁶⁷ Ballestrin, ‘América Latina e o giro decolonial’, 89

⁶⁸ Quijano, ‘Coloniality of Power, Eurocentrism, and Latin America’, 536–540; 549–551

⁶⁹ Rodríguez, ‘Latin American Decolonial Environmental Justice’, 10

⁷⁰ Quijano, ‘Coloniality of Power, Eurocentrism, and Latin America’, 561

the coloniality of the being are reproduced.⁷¹ This concept suggests that the imposition of Western knowledge systems and perspectives has also affected the way individuals and communities understand themselves, their culture, and their history.

According to Iokiñe Rodríguez, many environmental and energy injustices in Latin America are interwoven by these different structures of coloniality. The author argues that the implementation of renewable energy projects, such as hydroelectric dams,⁷² in Latin America can perpetuate these forms of coloniality and lead to negative impacts on local communities and the environment. Examples of *coloniality of power* are the invalidation of local decision-making structures and alternative local economies, as well as processes of marginalization, social exclusion, displacement, and environmental degradation caused by these projects. It is also reflected on the way in which renewable projects are imposed by external actors, often disregarding the needs and interests of local communities. *Coloniality of knowledge* can be represented by the erasure of local categories of the land, the territory, and alternative views of the future, and the replacement of these local *modus vivendi* with dominant, external perspectives. *Coloniality of being* relates to the erasure of local histories, identities, and cultural diversity, and the imposition of dominant cultural values and norms on local communities.

Walter Mignolo furthers the concept of coloniality of power and proposes the coloniality of power matrix. The matrix is a concept that explains how power is distributed and maintained across different societies. It focuses on five interrelated domains: economy, authority, nature and natural resources, gender and sexuality, and subjectivity and knowledge, which are tools of domination used to maintain power and privilege of certain groups over the others.

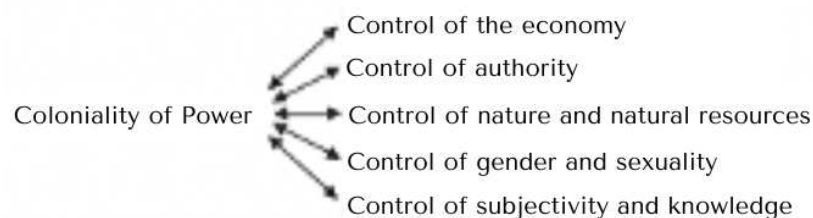


Figure 2: Walter Mignolo's Coloniality of Power Matrix⁷³

⁷¹ W. Mignolo, *Desobediencia Epistémica: Retórica de La Modernidad, Lógica de La Colonialidad y Gramática de La Descolonialidad*, Razón Política (Argentina, 2010), 75–93

⁷² Rodríguez, 'Latin American Decolonial Environmental Justice', 11

⁷³ Mignolo, *Desobediencia Epistémica: Retórica de La Modernidad, Lógica de La Colonialidad y Gramática de La Descolonialidad*, 12 (author's reproduction and translation)

Control of economy is a sphere that refers to the ways in which economic systems and structures are used to maintain power and privilege for certain groups. This can manifest in various forms such as economic policies, laws, and regulations that are designed to benefit certain groups while limiting the opportunities and resources available to others. It can also include the control and ownership of key industries, resources, and financial institutions, which can be used to exert influence and control over the wider population. *Control of authority* is another domain that refers to the ways in which political and legal systems are used for power and privilege purposes. This includes the manipulation of laws and policies to maintain the dominance of certain groups and the suppression of others. It also includes the control of key institutions such as the judiciary, law enforcement, and the media, which can be used to shape public opinion and influence political decisions. *Control of nature and natural resources* is the ways in which natural resources and environment are controlled and exploited for the benefit of certain groups. This can include the appropriation and control of land, water, and other resources, which can be used to exert influence over local communities and limit their access to resources. It can also include the manipulation of environmental policies and regulations to exploit natural resources for profit, often at the expense of local communities and the environment. *Control of gender and sexuality* is the way in which gender roles are used for the benefits of certain groups to the detriment of others. This can include the reinforcement of traditional gender stereotypes, which can limit the opportunities available to individuals based on their gender, as well as the manipulation of laws and policies to maintain patriarchal structures and the suppression of women's rights. *Control of subjectivity and knowledge* refers to the ways in which knowledge and information are controlled and manipulated for the maintenance of power and privilege of certain groups. This can include the control of education and the media, which can be used to shape public opinion and limit access to information. It can also include the manipulation of scientific research and the suppression of knowledge that challenges the status quo and threatens the power of certain groups.

Mignolo argues that these areas of control are interconnected and that understanding how they operate is crucial for understanding and challenging systems of oppression. In order to break with the colonial matrix of power, the author emphasizes the role of decoloniality:

‘Decoloniality is not, cannot be, state-led projects. They are projects by the people organizing themselves in their local histories and needs to delink from the colonial matrix. Furthermore, there are also different options among liberating forces, and

these forces multiply today around the globe, but not all of them are decolonial in the sense I described here. And of course, they do not have to be. Decoloniality, as introduced here ... is not claiming truth without parentheses. On the contrary, it is revealing that without truth in parentheses there are no solutions to the problems created by modern/colonial truth without parentheses. Decoloniality, as introduced here, is one option among many. Each option (regulatory or liberating) has its own imperatives. Imperatives are not universal. They are relevant to the option in and for which imperatives emerge and are enacted'.⁷⁴

Therefore, it is possible to imply that detachment is a decolonial project, which brings knowledge from other epistemologies and other ways of knowing.⁷⁵

The concept of cognitive justice in decolonial thinking

The concept of cognitive justice stems from the work of Indian author, Shiv Visvanathan,⁷⁶ and is commonly used in decolonial thinking perspectives in the works of Santos,⁷⁷ as it is a concept that proposes an alternative to such '*epistemic supremacy in the dominant model of knowledge production*'.⁷⁸ Visvanathan argues that cognitive justice requires valuing the knowledge and perspectives of marginalized groups and actively working to overcome the barriers that prevent them from participating fully in the production and dissemination of knowledge. However, Visvanathan also emphasizes the need for a more critical and reflexive approach to knowledge production, one that questions the assumptions and biases of dominant forms of knowledge and power. According to Visvanathan,

'Cognitive justice recognizes the right of different forms of knowledge to co-exist but adds that this plurality needs to go beyond tolerance or liberalism to an active recognition of the need for diversity. It demands recognition of knowledges, not only as methods but as a way of life. This presupposes that knowledge is embedded in

⁷⁴ W. Mignolo and C. Walsh, *On Decoloniality: Concepts, Analytics, Praxis*, On Decoloniality (Durham, 2018), 115

⁷⁵ Mignolo, *Desobediencia Epistémica: Retórica de La Modernidad, Lógica de La Colonialidad y Gramática de La Descolonialidad*, 9–17

⁷⁶ S. Visvanathan, *A Carnival for Science: Essays on Science, Technology and Development [A Carnival for Science]* (Oxford, 1997)

⁷⁷ B. de S. Santos, ed., *Another Knowledge Is Possible: Beyond Northern Epistemologies*, Reinventing Social Emancipation: Toward New Manifestos 3 (London, New York, 2008)

⁷⁸ Rodriguez, 'Latin American Decolonial Environmental Justice', 13

*ecology of knowledges where each knowledge has its place, its claim to a cosmology, its sense as a form of life. In this sense knowledge is not something to be abstracted from a culture as a life form; it is connected to livelihood, a life cycle, a lifestyle; it determines life chances.*⁷⁹

He furthers the idea by stating that ‘*cognitive justice is not a lazy kind of insistence that every knowledge survives as is, where is. It is an idea which is actually more playful (...).*’⁸⁰

For the author, ‘*play seeks encounters, the possibilities of dialogue, of thought experiments, a conversation of cosmologies and epistemologies.*’⁸¹

For Boaventura de Sousa Santos⁸², cognitive justice refers to the idea that access to knowledge and cognitive resources should be distributed fairly among different social groups and cultures, in order to promote social justice and counter the dominant forms of knowledge and power in society. Within the epistemological reconstruction (confrontation between regular and emancipatory knowledges) it is necessary to seek an "ecology of knowledges," that is, a process in which equality in the relations between different knowledges is aimed at making other forms of knowledge viable, especially subalternized, sometimes reduced and silenced by the processes of coloniality. For Santos,

‘It is clear, nowadays, that beyond its economic and political dimensions, colonialism had a strong epistemological dimension. And when one considers the resilience of such dichotomies as nature/society, savage/civilized, developed/underdeveloped one must ask how much of the colonial past remains in the postcolonial present.’⁸³

For the author, the goal is to increase epistemic diversity in the world in processes which different knowledges contribute to knowledge of the world as an emancipatory proposal. The importance of this concept lies in the acknowledgement of different knowledges and their capacity to co-exist, thus, proposing a change in the conditions of dialogue of competing ideas, in order to overcome structures and standards of Western knowledge or

⁷⁹ S. Visvanathan, ‘The Search for Cognitive Justice’, [Website], 2009, accessed 27 December 2022, https://www.india-seminar.com/2009/597/597_shiv_visvanathan.htm

⁸⁰ Visvanathan, ‘The Search for Cognitive Justice’

⁸¹ Visvanathan, ‘The Search for Cognitive Justice’

⁸² B. Santos, ‘A Ecologia Dos Saberes’, *A Gramática Do Tempo: Para Uma Nova Cultura Política*, vol. 4, 2nd ed., Para Um Novo Senso Comum (São Paulo, 2008), 137–165

⁸³ Santos, *Another Knowledge Is Possible: Beyond Northern Epistemologies*, xxxv

worldviews that have traditionally excluded marginalized voices and practices.⁸⁴ Yet, for this to happen, cognitive justice needs to start from research, as it must be able to respond to social, cultural, political, economic and environmental imperatives of the agendas of locals.⁸⁵

The intersection between decolonial thinking and human rights

Decolonial thinking and law often center on scrutinizing conventional legal institutions in the context of human rights, which involve the rights of indigenous peoples and traditional communities.⁸⁶ Moreover, hegemonic discourses often affirm that human rights have intrinsic Western values. Therefore, the intersection between decolonial thinking and human rights is important because it seeks to challenge and transform the power imbalances and injustices that exist within the human rights system. It urges for a shift in the way human rights are understood and implemented, taking into account the perspectives and knowledge of marginalized and oppressed communities, and recognizing the impact of coloniality on human rights.

According to Glenda Sluga,⁸⁷ historians tended to associate the universalism of human rights with an European agenda, which would have a solid contrast to cultural relativism led by anticolonialists. Countries from the global South would often defend cosmopolitanism to sustain universality to challenge the Europeanness of human rights. In addition, for Roland Burke⁸⁸, in the 1960s, human rights were ‘the subject of growing skepticism,’⁸⁹ and the independence of some countries in the context of decolonization brought to the surface the questions of ‘modified universalism’⁹⁰ and ‘developmental exception.’⁹¹ However, it is also important to note that the human rights system has also been used to challenge and resist colonial rule, and to promote the rights of marginalized communities. In the following years

⁸⁴ Rodriguez, ‘Latin American Decolonial Environmental Justice’, 13

⁸⁵ L.T. Smith, *Decolonizing Methodologies: Research and Indigenous Peoples*, 2nd. (London & New York, 2012), 198–217

⁸⁶ F. Bragato and G. Mantelli, ‘Comentário ao Capítulo 2: “A Pós-Colonialidade do Direito Internacional” – Abordagens Pós-Coloniais e Descoloniais no Direito Internacional’, in ed. M. Badin, F. Morosini, and A. Giannattasio, *Direito Internacional: leituras críticas*, 2019, 108

⁸⁷ G. Sluga, ‘René Cassin: Les Droits de l’homme and the Universality of Human Rights, 1945–1966’, in ed. S.-L. Hoffman, *Human Rights in the Twentieth Century* (Cambridge, 2011), 107–124

⁸⁸ R. Burke, ‘Decolonization, Development, and Identity: The Evolution of the Anticolonial Human Rights Critique, 1948-78’, in by J.H. Quataert and L. Wildenthal, ed. J. Quataert and L. Wildenthal, *The Routledge History of Human Rights*, 1st ed. (London, 2019), 222–240, doi:10.4324/9780429324376-12

⁸⁹ Burke, ‘Decolonization, Development, and Identity: The Evolution of the Anticolonial Human Rights Critique, 1948-78’, 232

⁹⁰ Burke, ‘Decolonization, Development, and Identity: The Evolution of the Anticolonial Human Rights Critique, 1948-78’, 230

⁹¹ Burke, ‘Decolonization, Development, and Identity: The Evolution of the Anticolonial Human Rights Critique, 1948-78’, 232

of the issuance of the Universal Declaration of Human Rights (1948), several interpretations of what human rights would entail and comments made on the UDHR itself were submitted to United Nations Educational, Scientific and Cultural Organization (UNESCO). Two comments and interpretations from the global South representatives sent to this organization are essential to highlight: from Chung-Shu Lo (China),⁹² and S. V. Puntambekar (India).⁹³ These non-Western approaches raised relevant counterbalances. Each of them offered their perspectives to translate their views of what human rights would mean from their standpoint. For the former, human rights would already be intrinsically connected with an established practice in their own countries, such as the concept of mutual obligations, which is the fundamental teaching of Confucianism, and for the latter human rights should entail not only ‘the material conditions of a happy life but also the spiritual virtues of a good life’⁹⁴, encompassing five social freedoms:⁹⁵ (i) freedom from violence (Ahimsa), (ii) freedom from want (Asteya), (iii) freedom from exploitation (Aparigraha), (iv) freedom from violation or dishonor (Avyabichara), and (v) freedom from early death and disease (Armitatva and Arogya). Notwithstanding the diverse considerations, one can still observe structural issues in the human rights system. For Salil Shetty, former Secretary General of Amnesty International, in a speech at the London School of Economics in 2018, he stated:

‘Human rights in the last one-and-a-half centuries were in an odd and artificial way always linked to the project of colonization itself, before they more genuinely, became a part of the reverse effort of resistance against colonialism.’⁹⁶

He argues that the current human rights system is too focused on individual rights and not enough on collective rights and that this approach has its roots in colonialism. Shetty has also highlighted the need for greater representation and participation from people from marginalized communities in the human rights system and has called for a more inclusive human rights framework that considers the experiences and perspectives of people from different regions, cultures, and backgrounds. He continues, by affirming that instead of altering such a colonial stance, institutions and governments keep on perpetuating

⁹² UNESCO, ‘Human Rights: Back to the Future’, *The UNESCO Courier*, 2018, 30–31, <https://unesdoc.unesco.org/ark:/48223/pf0000265904>

⁹³ UNESCO, ‘Human Rights: Back to the Future’, 27–29

⁹⁴ UNESCO, ‘Human Rights: Back to the Future’, 27

⁹⁵ UNESCO, ‘Human Rights: Back to the Future’, 28

⁹⁶ Amnesty International, ‘Decolonising Human Rights’, [Website], 22 May 2018, accessed 26 August 2022, <https://www.amnesty.org/en/latest/news/2018/05/decolonizing-human-rights-salil-shetty/>

colonialism in human rights practice in three different ways: (i) *lack of representation*: many non-Western countries and indigenous peoples have been underrepresented in the drafting, implementation and monitoring of human rights; (ii) *economic exploitation*: the human rights system has often been a tool for economic exploitation by developed countries, through structural adjustment policies and aid conditionalities; (iii) *cultural imposition*: human rights norms and institutions have often been imposed on colonized and marginalized communities without regard for their own cultural and historical context, leading to a lack of cultural sensitivity and relevance.

The philosophical debate about the universalism and cultural relativism also presents a didactic starting point to scrutinize about the *modus operandi* of the human rights system. Notwithstanding its complex implications, the debate contributes to a possible deconstruction of colonial aspects of human rights. On one hand, universalists believe that some moral judgments are universally valid, such as those codified in the Universal Declaration of Human Rights (UDHR), and other international covenants. On the other hand, relativists affirm that cultures around the world are so diverse that no human rights norms can be truly applied in all cases in a uniform manner. A way of accommodating both perspectives is proposed by a constructivist analysis, which intends to mediate both sides through a decolonial lens, by shifting the current human rights system to a process of dialogue and negotiation between different cultures and societies, rather than as a set of fixed and unchanging principles.

A constructive perspective provides an incipient alternative for overcoming this universalist-relativist dichotomy, which encompasses a mediation of such competing views. In the book *Decolonizing Human Rights*, the author Abdullahi An-Na'im argues that '*it is essential for every person to have the ability to strive to define or present their own conception of their human dignity in ways that make rights both the ends and means of self-determined universality.*'⁹⁷ He also argues that '*the discourse of protection of universal human rights is misrepresented and rationalized as necessary to fulfill the civilizing mission of the postcolonial hegemony and exploitation of former colonies, which is used to justify an imperial uniformity as necessary for centralized production of human rights norms through international law principles and institutions.*'⁹⁸ He states that the '*production of universality of human rights under principles and institutions of international law is merely liberal*

⁹⁷ A.A. An-Naim, *Decolonizing Human Rights*, 1st ed. (Cambridge, 2021), 14, doi:10.1017/9781108264921

⁹⁸ An-Naim, *Decolonizing Human Rights*, 14–15

relativism pretending to be global universalism.'⁹⁹ He suggests a pragmatic approach, an 'incremental promotion of universal and sustainable protection among all human societies, each on its own terms, everywhere.'¹⁰⁰ An-Na'im's arguments are a call for a decolonized human rights system, one that is more inclusive, culturally sensitive, and effective in promoting and protecting the rights.

In this sense, An-Na'im challenges the current *status quo* and proposes a paradigm shift, from a state-centric (based on the idea that individuals are not capable of protecting their own rights, and that the state must take on this role) to a people-centered human rights system (focused on the importance of empowering individuals and communities to take control of their own human rights, rather than relying solely on the state to protect their rights). The latter, combined with what he calls a 'procedural formula', which is cultural transformation and political mobilization, provides a way to change the present system into another that acknowledges and replicates one of the most relevant human rights law principles, the self-determination.¹⁰¹ According to the author, cultural transformation means that human rights norms and institutions must be understood and defined within the cultural context of the people for whom they are intended, and political mobilization stands for the direct involvement of marginalized communities' development and implementation of human rights norms and institutions. According to An-Na'im, although this process is already in motion (e.g. Inter-American Human Rights System and the right to property of indigenous peoples and traditional communities), it needs to be strengthened, since this seems to be one successful way in which the human rights systems will exclusively rely on individuals and their peculiarities, without preconceived/biased ideas that have been originated in other contexts. Yet, there are still complex barriers that hinder the efficacy of this idea.

3. Methodological approach

The following chapter discusses the methodology and the methods of data collection and analysis used for this thesis, taking into account the theoretical and conceptual frameworks chosen. Complex human rights issues, such as the impact of wind energy on the Fundo e Fecho de Pasto communities, cannot be analyzed in a linear manner, but should be based on the understanding of how they interconnect and articulate in specific contexts and among

⁹⁹ An-Naim, *Decolonizing Human Rights*, 14–15

¹⁰⁰ An-Naim, *Decolonizing Human Rights*, 11–20; 81–102

¹⁰¹ An-Naim, *Decolonizing Human Rights*, 14–15

different actors. This research approach follows metatheoretical considerations of interpretivism,¹⁰² which emphasizes the importance of understanding the perspective of the stakeholders involved. In order to fulfill the criteria of research (transparency, intersubjectivity, reliability, validity), the combination of a system thinking approach with qualitative methods, was a relevant methodological approach to be applied in this thesis, as it assisted in the understanding of the empirical, epistemological, and ontological impacts of wind energy transition on the Fundo e Fecho de Pasto Communities in the semi-arid region of Bahia, in Brazil.

The system thinking approach for human rights refers to an interdisciplinary and holistic perspective to understanding and addressing human rights issues. It considers the complex and interconnected nature of human rights and seeks to understand the relationships and interactions among the various factors that may culminate in human rights violations. According to Birkin and Suntinger, the use of system thinking principles¹⁰³ can influence human rights practice by broadening perspectives to understand problems and solutions, by influencing basic attitudes to behave differently in relations, and by applying normative tools, which implies conducting work differently and achieving better, lasting and more impactful human rights results.¹⁰⁴ On the other hand, Michael C. Jackson states that

*'systems thinkers (...) are dedicated to practice but often neglect theory. It is equally obvious that any attempt to change the world rests upon taken-for-granted assumptions about the nature of that world. Hidden in the commonsense or craft knowledge of the systems practitioner are ontological and epistemological presuppositions. In not exploring these, systems thinking has failed to take full advantage of opportunities to learn from practice and to develop as a discipline.'*¹⁰⁵

¹⁰² W.M. Sullivan and P. Rabinow, 'The Interpretive Turn: A Second Look', in ed. P. Rabinow and W.M. Sullivan, *Interpretive Social Science: A Second Look*, revised. (Berkeley, 1987), 3–10

¹⁰³ The principles of system thinking as applied in human rights practice, according to the authors are: (i) looking at the big picture, (ii) integrating multiple perspectives, (iii) seeing connections not events, (iv) circles not straight lines, (v) looking at the bottom of the iceberg, (vi) looking at patterns, (vii) looking at systemic failures not at persons, (viii) looking at resources not only deficits, (ix) recognizing the limits of interventions and looking for entry points, and looking at oneself.

¹⁰⁴ M. Birk and W. Suntinger, 'A Systemic Approach to Human Rights Practice', in ed. M. Nowak et al., *Menschenrechten Gestalt Und Wirksamkeit Verleihen: Making Human Rights Work* (Wien, Graz, 2019), 649–675

¹⁰⁵ M.C. Jackson, *Critical Systems Thinking and the Management of Complexity* (Oxford, 2019), 233–244

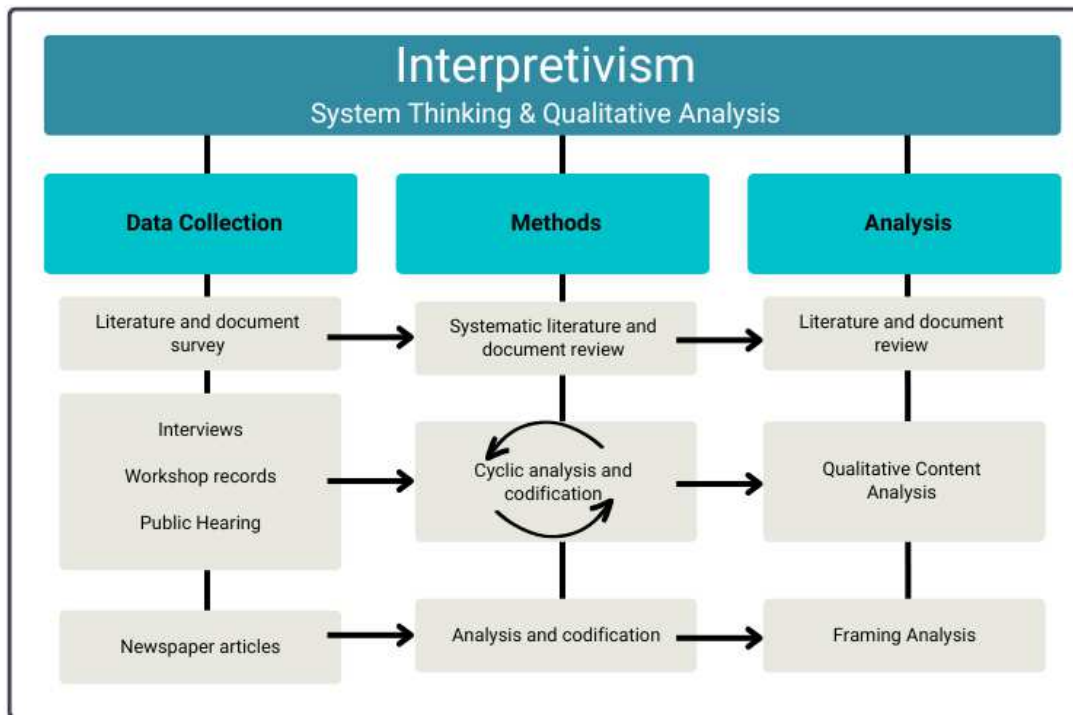


Figure 3: Methodological approach and methods used (author's figure)

The combination of practice and theory (Figure 3) provides advantages of the systems thinking approach in this specific case as it aims to identify and address the root causes of human rights problems, rather than just treating the symptoms. While system thinking provided a holistic overview of the case, the qualitative research methods contributed with important social sciences tools to address the case, allowing that *'one can react and learn (...) and at the same time encapsulate findings leading to possible interventions, culminating in a theory and practice model,*¹⁰⁶ compensating, therefore, the deficits of a single method, and obtaining a panoramic analysis of the research object. The chosen framework favored a freedom in the analysis to move through different paths of empirical knowledge, making it possible to assume various positions along the way.

3.1. Data collection

Literature and document survey

The literature and document collection was obtained online through academic search engines, but also during field research in Bahia. Binding and non-binding Human Rights treaties both from the United Nations and agencies, as well as from the Inter-American

¹⁰⁶ Jackson, *Critical Systems Thinking and the Management of Complexity*, 233–244

Human Rights System were gathered in order to understand the international norms and instruments which the Brazilian State has the obligation to abide by. Brazilian government policy and strategy papers, annual reports, and official publications were used as a source of data to analyze renewable energy transition strategies. The federal and state constitutions, as well as other pertinent legislations were reviewed to understand the dynamics of land tenure regularization and recognition of Traditional Communities which are associated with the expansion of wind energy transition. The research also included scientific publications studying the impacts of renewable energy transition on the specific case of Fundo e Fecho de Pasto Communities, as well as Brazilian non-governmental organizations and research projects, involving local communities and wind facilities. Important civil society reports of organizations that historically contributed to this field are the Pastoral Land Commission (CPT) and the Association of Lawyers and Rural Workers (AATR) were also scrutinized.

Interviews, workshop records and Public Hearing

A field trip was made between 07th and 21st of July 2022, in order to obtain different perspectives *in loco*. The semi-structured interviews were held either in person or via online tools due to Covid-19 circumstances, between the 08th and 15th of July 2022, in the city of Salvador. The selection of the interviewees considered stakeholders from the public sector and the organized civil society, involved in the process or in the monitoring of wind energy expansion in the state of Bahia/Brazil, such as the Secretariat for the Promotion of Racial Equality in the State of Bahia (SEPROMI), the Agrarian Development Coordination of the State of Bahia (CDA), the Office of the Attorney General of the State of Bahia (PGE-BA), the Secretariat of Economic Development of the State of Bahia (SDE), and a member of the Lawyers Association for Rural Workers (AATR). For each interview, a guideline was prepared beforehand, in order to ensure consistency. Moreover, a consent was requested, to guarantee data protection for the interviewees (anonymization).

Interviews				
Ref.	Date	Institution	Description	Interview location
I/01	2022-07-08	SEPROMI	Secretariat for the Promotion of Racial Equality in the State of Bahia	Salvador, Bahia
I/02	2022-07-11	PGE-BA	Office of the Attorney General of the State of Bahia	Salvador, Bahia
I/03	2022-07-11	CDA	Agrarian Development Coordination of the State of Bahia	Salvador, Bahia

I/04	2022-07-12	AATR	Lawyers Association for Rural Workers (NGO)	Online
I/05	2022-07-14	SDE	Secretariat of Economic Development of the State of Bahia	Salvador, Bahia

Table 2: List of interviews conducted

The workshop records were obtained from reFUEL,¹⁰⁷ a research project funded by the European Research Council and hosted at the Institute for Sustainable Economic Development, at the University of Natural Resources and Life Sciences (BOKU), from Vienna/Austria. In March 2021, the Brazilian civil society organizations designed a hearing, in the state of Bahia, to discuss the problems and challenges faced by traditional communities vis-a-vis the implementation of wind energy projects surrounding the traditionally occupied lands. After two online public hearings (Port. oitivas), with an audience of over 90 representatives from rural and traditional communities, mainly Quilombolas and Fundo e Fecho de Pasto, the demand for information exceeded the scope of a state-level seminar leading to the decision to structure into a workshop as an extension course.¹⁰⁸ From March 2021 to July 2022, due to the Covid-19 pandemic, and under the leadership of CPT, a virtual form of participation through online workshops was held among the civil society (10envolvimento, AATR, and IRPAA), academia (BOKU/reFUEL and Federal University of Bahia/GeografAR), and the traditional communities. The lectures that were most relevant were selected for analysis, which included cycles 2 (Initial Topics), 3 (Impacts), 4 (Grilagem and Contracts), 6 (Economic Impacts), and 7 (Moving Forward) based on their close relationship with the topics covered in the thesis.

The conclusion of the workshop series was held in person, in the city of Senhor do Bonfim/Bahia, in a Public Hearing, on 20th of July 2022. Not only the organized civil society, academia and the Traditional Communities took part in this event but also different stakeholders of the public sector, which were also invited to attend and participate in the open discussions. During this event, it was possible to collect and crosscheck information that was obtained under separate instances.

Ref.	Date	Topic	Workshop format
W/02	2021-08-02	Initial topics	Online
W/03	2021-11-05	Impacts	Online

¹⁰⁷ reFUEL (BOKU), 'ReFUEL', [Website], n.d., accessed 08 February 2023, <https://refuel.world/>

¹⁰⁸ Santos et al., *Dossiê: Energias Renováveis Na Bahia: Caminhos e Descaminhos*

W/04	2021-12-10	<i>Grilagem</i> and Contracts	Online
W/06	2022-04-08	Economic Impacts	Online
W/07	2022-05-10	Moving Forward	Online
PB/01	2022-07-20	Public Hearing	In person, in Senhor do Bonfim, Bahia, and Online

Table 3: List of the analyzed workshop records and Public Hearing

Newspaper articles

An online search on the Bahian newspaper Correio* portal's search engine system was conducted, using the key words 'energia eólica' (wind energy). The articles retrieved between 2019 and 2022 were skimmed (to ensure they relate to the topic) and saved for analysis and codification. These years were chosen to encompass the period before and after the issuance of Normative Instruction 01/2020 (NI 01/2020) to check any change in the public debate about wind expansion in Bahia. A total of 121 articles were retrieved, but due to time constraints, only one third (40) of the articles were analyzed (see appendix). The selection of one third of the articles were organized in chronological order on a table and every other three articles was used in the analysis.

3.2. Data analysis

Systematic literature and content review

Systematic literature and document review have been used in the Social Sciences with the objective of identifying empirical evidence that relates to the data collection criteria in order to answer the research question.¹⁰⁹ The process involved a systematic and rigorous examination of the data corpus to identify key themes and patterns in following specific research questions. This included searching for relevant literature, evaluating the quality of the sources, and extracting relevant data to assist in answering the research question.

Qualitative content analysis and cyclic codification process

Qualitative content analysis was used in order to obtain more detailed information about the case. This method was chosen to verify the different facets of wind energy expansion and the impacts they have on the Fundo e Fecho de Pasto Communities. The interviews, analysis

¹⁰⁹ H. Snyder, 'Literature Review as a Research Methodology: An Overview and Guidelines', *Journal of Business Research* no. 104 (2019), 333–339, doi:10.1016/j.jbusres.2019.07.039

of workshop records held with the communities and the public hearing were used to assure a multi-perspective overview.

The transcripts of the interviews, workshop records and public hearing were subjected to a cyclic content analysis according to Philip Mayring.¹¹⁰ In order to facilitate the analysis, the data was organized and analyzed with the qualitative data analysis software MaxQDA. In a first step, the content of the transcriptions was paraphrased, synthesized to their substantial meaning and, finally, codified, following a deductive approach, which aimed to associate the research question with the energy justice and decolonial thinking frameworks. This determined clear initial categories and definitions (Table 3).

Deductive coding categories for qualitative content analysis		
Energy Justice ¹¹¹	Distributive Justice	<i>Does the policy center economic, social or health benefits to the FFP communities? Does the policy make energy more accessible and affordable to the FFP communities?</i>
	Procedural Justice	<i>Have the FFP communities participated meaningfully in the policy-making process with sufficient support?</i>
	Recognition Justice	<i>Does the policy center the decision-making of the FFP communities?</i>
	Restorative Justice	<i>Does the policy aim to remedy prior and present harms faced by the FFP communities negatively impacted by the wind expansion?</i>
	Cosmopolitanism	<i>Are there crossborder/intergenerational effects in the wind expansion impacting the FFP communities?</i>
Decolonial thinking ¹¹²	Coloniality of power	<i>Are there economic, political, and cultural forms of domination against the FFP communities in the wind energy expansion? (i.e. invalidation of decision-making structures and alternative local economies, displacement, marginalization, social exclusion, and environmental degradation)</i>
	Coloniality of knowledge	<i>Are there epistemic and cognitive violence and the imposition of a singular way of knowing the world towards the FFP communities in the wind energy expansion? (i.e. erasing and making invisible local categories of the land, the territory, and alternative views of the future)</i>

¹¹⁰ P. Mayring, 'Qualitative Content Analysis: Theoretical Foundation, Basic Procedures and Software Solution', [Website], *Social Science Open Access Repository*, 2014, accessed 08 February 2023, <https://www.ssoar.info/ssoar/handle/document/39517>

¹¹¹ According to Jenkins et al., 'Energy Justice', Heffron, 'Applying Energy Justice into the Energy Transition', and Baker, DeVar, and Prakash, *Initiative for Energy Justice: The Energy Justice Workbook*

¹¹² According to Quijano, 'Coloniality of Power, Eurocentrism, and Latin America', and Rodriguez, 'Latin American Decolonial Environmental Justice'

Coloniality of being	<i>Are the subjective, individual, and collective identities of the FFP communities being acknowledged? (i.e. erasing local histories, identities, and cultural diversity)</i>
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Table 4: Cyclic analysis - deductive coding categories

The second part followed an inductive procedure (Table 4), so that more precise categories related to human rights could be created, explaining in more detail the coded segments.

Inductive coding categories for qualitative content analysis			
Human Rights	Inherent issues connected to wind expansion	Land rights	- Land grabbing (grilagem) - Enticement (cooptação) - Normative Instruction 01/2020
		Self-determination (recognition)	- Structural discrimination - Institutional discrimination - Contracts
	Consequential impacts of wind expansion	The right to health and to a healthy environment	- Intragenerational impacts - Intergenerational impacts
		The right to work	
		Women's rights	

Table 5: Cyclic analysis - inductive coding categories

In order to obtain the overlapping coded segments related to the analysis, the function “Intersection (Set)” of the Complex Coding Query was used to retrieve only the sections of the coded segments that intersect within the different documents. A final automated codification was done to analyze only the retrieved results. With this procedure, it was possible to obtain an interconnected view of the case. Lastly, MaxMaps, which is a visual representation of the relationships between ideas (also known as mind maps), were created to each Inductive category (Table 4) to visualize how the results interconnect.

Framing analysis and codification process

In order to obtain information about how newspaper media portrays the wind energy expansion in the semi-arid region of Bahia, a framing analysis was conducted. Framing analysis is an important tool in research as it allows to understand how newspaper media is communicating about certain issues and how these frames shape public opinion and policy decisions. It is a way of understanding how people make sense of the issue and how they talk about it in different contexts and communities. Such analysis also plays an important

role in 'determining which viewpoints are included and represented in the public debate'.¹¹³ According to T. Bjärstig et al., the media shapes the public understanding of both the benefits and risks of wind power.¹¹⁴ As well as with the qualitative content analysis, the articles were also organized and analyzed with the assistance of the software MaxQDA.

The chosen daily newspaper, Correio*¹¹⁵ (virtual outlet also known as Correio da Bahia) has the highest number of readers and ranks among the most influential newspapers in the state of Bahia. Moreover, Correio* is considered to be one of the most traditional and respected newspapers in Bahia, and its coverage is regarded to be very important for the population of the state. The newspaper has a reputation for being independent and objective in its reporting, and it is known for its commitment to quality journalism.¹¹⁶

In order to have an overview of the wind energy context within the years 2019 and 2022, the articles were summarized to their substantial meaning and, finally, codified. The codification followed a two-step strategy (Table 5). In the first step, the main topics and themes were identified from a predetermined list of categories (Economic, Environmental, Technological) through the question "Which are the main topics associated with wind energy?". The next part followed an inductive round, so that more precise categories could be created, explaining in more detail the coded paragraphs.

Lastly, taking into account Djerf-Pierre, Cokley & Kuchel¹¹⁷, the same selected paragraph(s) were subjected to a simple analysis and codification, through the question: "Are the topics related to wind energy framed in a positive, neutral or negative stance?", evaluating, thus, how media portray the topic of wind power to the public.

Two-step strategy for framing analysis			
Step 1	Which are the main topics associated with wind energy?	Economic	- Employment - Investment
		Environmental	- Wind potential - Clean energy
		Social/Technological	- Capacity building - Women in energy sector

¹¹³ T. Bjärstig et al., 'Is Large-Scale Wind Power a Problem, Solution, or Victim? A Frame Analysis of the Debate in Swedish Media', *Energy Research & Social Science* 83 (2022), doi:10.1016/j.erss.2021.102337

¹¹⁴ Bjärstig et al., 'Is Large-Scale Wind Power a Problem, Solution, or Victim? A Frame Analysis of the Debate in Swedish Media', 1

¹¹⁵ 'Correio Da Bahia', [Website], n.d., accessed 08 February 2023, <https://www.correio24horas.com.br/>

¹¹⁶ L. Oliveira, 'Jornalismo Cultural: uma análise do jornal Correio da Bahia' (Universidade Federal da Bahia, 2009), 25–29

¹¹⁷ M. Djerf-Pierre, J. Cokley, and L.J. Kuchel, 'Framing Renewable Energy: A Comparative Study of Newspapers in Australia and Sweden' ['Framing Renewable Energy'], *Environmental Communication* 10, no. 5 (2 September 2016), 634–655, doi:10.1080/17524032.2015.1056542

Step 2	<i>Are the topics related to wind energy framed in a positive, neutral or negative stance?</i>	Positive 👍
		Neutral (-)
		Negative 👎

Table 6: Two-step strategy for framing analysis

4. Results

The application of the methodological approach to the collected materials resulted in the findings presented in this chapter. As mentioned in chapter 3, the combination of methods was used to retrieve the human rights impacts on the Fundo e Fecho de Pasto communities. Some research projects¹¹⁸ have been carried out to comprehend how wind energy production has affected traditional communities in Bahia's semi-arid, however the focus has mostly been on the geographical, economical, and politico-legal facets, and not necessarily on the communities' human rights in a specific sense.

The results found in this analysis were split into two parts: inherent issues and consequential impacts. The inherent issues concern the most fundamental claims of the FFP communities, which are those related to the land they traditionally occupy and their own recognition (self-determination) as a traditional community. Although these issues have been researched in other works, it was important to connect them with the question of wind energy expansion in order to have a differentiated perspective of the FFP's human rights situation in these cases. The consequential impacts are understood as a result of the direct implementation of the wind energy production within the areas where the FFP communities live in the semi-arid. These issues have also been studied before, to a lesser extent,¹¹⁹ but they were selected to cast light on the impacts that go beyond the self-evident ones, incorporating the theoretical framework and a framing analysis. The framing analysis (chapter 3.2.) of selected articles from the local newspaper *Correio** was carried out to fill possible gaps, but the results referred mostly to the consequential impacts and not to the inherent ones, therefore being used only in the analysis of the former.

¹¹⁸ Universidade Federal da Bahia, Geografar, 'Publicações', [Website], n.d., accessed 08 February 2023, <https://geografar.ufba.br/publicacoes>

¹¹⁹ Universidade Federal da Bahia, Geografar, 'Publicações'; Santos et al., *Dossiê: Energias Renováveis Na Bahia: Caminhos e Descaminhos*

4.1. Inherent human rights issues connected with wind expansion

The first round of qualitative content analysis (chapter 3.2., Table 3) was used to both paraphrase and codify the most important segments according to the theoretical framework based on energy justice and decolonial thinking. In the second round (chapter 3.2., Table 4), the segments were double-checked and codified with more detailed categories, related to the human rights impacts on the Fundo e Fecho de Pasto communities. After both codification processes, the results of the interrelated codified topics referred to *land rights*, followed by *self-determination (recognition)*. Although these claims exist regardless of the wind energy expansion, they have also been severely intensified by the wind projects. From these findings, a systematic literature and document review was conducted to obtain contextual information to complement the results and add another layer of analysis to assist in the system thinking part of the methodology. In order to report the results in a more organized manner, the structure of the following chapters (4.1.1. and 4.1.2.) start with historical aspects, which leads to specific findings of the qualitative content analysis, culminating in the integrative perspective of energy justice and decolonial thinking.

4.1.1. Land rights: the historical issue of land inequality in Brazil

‘For more than 500 years, the land issue in Brazil has not been solved and the concentration is increasing even more.’¹²⁰

Colonial roots of the Fundo e Fecho de Pasto traditionally occupied lands

The existence of large properties (*latifúndios*) in Brazil derives from territorial organization during colonial times. The acquisition of large-scale properties to a single person or family contributed to the unequal distribution of land, which in relation to land concentration is the main cause of social inequality in the country.¹²¹ The colonization of Brazil is considered part of modern colonialism, based on occupation and exploitation.¹²² Upon the arrival of the European settlers, the land was divided into captaincies (*capitanias hereditárias*) and each plot of land was granted to a single Portuguese nobleman, who was given the title of captain

¹²⁰ I/04, AATR, 12 July 2022 (author’s translation)

¹²¹ Oxfam, *Informe Da Oxfam Brasil*, [Website], 2016, accessed 26 August 2022, https://oxfam.org.br/wp-content/uploads/2019/08/relatorio-terrenos_desigualdade-brasil.pdf

¹²² Ballestrin, ‘América Latina e o giro decolonial’, 94

general. In order to better administrate the territory and to attract more Christian settlers, mostly from Portugal, the captaincies were subdivided into smaller parts called *sesmarias*. Each *sesmaria* was controlled by a *sesmeiro* (*squatter*), who would not, however, have full administrative power and remained subject to the captain general and the Portuguese Crown. The captain General would hold 20% of the territory and was obliged to distribute the remaining 80% within the *sesmaria* system. The *squatters*, to whom the *sesmeiros* leased the land, began to cultivate it and demand recognition of the right over the territories.¹²³

In Bahia, while the coastal areas were reserved for the cultivation of sugar cane for the centers and international trade, the semi-arid periphery was targeted to livestock to supply the domestic demand. The so-called livestock axis mostly belonged to Guedes de Brito (Casa das Torres) and Garcia d'Ávila (Casas da Ponte) families.¹²⁴ With the advent of the sugar cane crisis and the discovery of gold in another Brazilian state (Minas Gerais) in the 17th century, the aforementioned families became increasingly absent from their lands to seek other profitable business; these territories were left for many years undocumented. Such lands were given back to the Portuguese Crown and were thus considered 'vacant lands' (Port. terras devolutas), despite being occupied by the local population.¹²⁵

In 1822 the *sesmarias* system was abolished¹²⁶ and although Brazil was already an independent country, the remnants of colonial practice remained present. In order to regulate agrarian land, the government issued in 1850 the Land Law (Lei de Terras), which established the purchase as the only form of access to and use of land. As a result, settlers with lower financial conditions had great difficulties in obtaining a plot of land. Despite regulating agrarian property, the Land Law was not followed through by the landowners, thus legitimizing the encroachment and expansion of land. In addition, there was an overall lack of state regulation over land, which became a condition for the development of peasant and collective forms of land use. Moreover, in 1891, the first Republican Constitution of Brazil determined that all 'vacant' lands would belong to the state (i.e. Bahia), where they were located, and not to those who were occupying it¹²⁷. In addition to land, other factors, such as climate, socioeconomic, and culture, played a role in the formation and persistence

¹²³ B. Fausto, 'O Brasil Colonial (1500-1822)', *História Do Brasil*, 2nd. (São Paulo, 1995), 35–140

¹²⁴ D. de Alcântara and G.I. Germani, 'Fundo de Pasto: um conceito em movimento', *Espaço e tempo: complexidade e desafios do pensar e do fazer geográfico* (presented at the VIII Encontro Nacional da ANPEGE, Curitiba, Paraná, 2009), 4

¹²⁵ de Alcântara and Germani, 'Fundo de Pasto: um conceito em movimento', 4

¹²⁶ B. Fausto, *História Concisa do Brasil*, 1st. (São Paulo, 2001), 19–21

¹²⁷ de Alcântara and Germani, 'Fundo de Pasto: um conceito em movimento', 4

of this type of occupation.¹²⁸ Most notably, geographic isolation and a lack of economic interest in the region contributed to the survival of the communities in these ‘vacant’ lands during the 19th and 20th centuries. However, the territorial expansion process through the enlargement of agricultural frontiers due to the development of irrigation techniques in the semi-arid of Bahia during the Brazilian military dictatorship (1964-1985) led to economic valorization.¹²⁹ The lands, which were considered anachronistic spaces, were then used to implement profitable projects, which received support through tax incentive policies to facilitate the rural expansion.¹³⁰

Land regularization and ‘wind corridors’

While in the past, large-scale market-based companies targeted these lands for agricultural and livestock production, nowadays it is also possible to add renewable energy systems due to the natural potential that these areas bring. In 2013, the Wind Atlas of Bahia (*Atlas Eólico da Bahia*) mapped the areas with wind potential (estimated at 195 GW), which are mostly located within the semi-arid region (Figure 4), overlapping with land traditionally occupied by the Fundo e Fecho de Pasto communities.¹³¹ These areas are called ‘wind corridors’ (*corredores de vento*) and they attract large investments not only from the global North but also from Brazilian and international companies for the establishment of wind farms for renewable energy production. Although wind energy production requires less direct land-use than, for instance, solar energy production, the qualitative content data suggests that this does not exempt the traditional communities from facing potential land issues. The lack of land tenure regularization, which is an ongoing issue since colonial times, constitutes a crucial problem for the traditional communities, especially for the Fundo e Fecho de Pasto.

¹²⁸ L.A. Júnior and M. Bursztyn, ‘À margem de quatro séculos e meio de latifúndio: Razões dos Fundos de Pasto na história do Brasil e do Nordeste (1534-1982)’ (presented at the IV Encontro Nacional da Anppas, Brasília, 2008), accessed 26 August 2022, https://geografar.ufba.br/sites/geografar.ufba.br/files/2008a_ferraro_e_bursztyn.pdf

¹²⁹ D. de Alcântara and G.I. Germani, ‘Fundos de Pasto: espaços comunais em terras baianas’ (presented at the X Encontro de Geógrafos da América Latina, São Paulo, 2005), 343

¹³⁰ de Alcântara and Germani, ‘Fundos de Pasto: espaços comunais em terras baianas’, 350

¹³¹ Governo da Bahia, *Atlas Eólico Da Bahia*, 2013, 6, <http://www.infraestrutura.ba.gov.br/arquivos/File/publicacoes/atlaseolicobahia2013.pdf>



Figure 4: Promising areas of wind corridor in the state of Bahia¹³²

The Fundo e Fecho de Pasto communities only exist as a community because of the territory they traditionally occupy and collectively use. Their identity emerged in the context of agrarian conflicts in communities that used pastures in a communal manner. Their self-organization and favorable actions from government sectors increased the communities' strength. An example of a positive action is the promulgation of Bahia's state constitution, in 1989, which in article 178 acknowledges:

*'(...) in the case of communal use and cultivation of the land, the state, if it deems it convenient, may grant the Real Right of Use, engraved with an inalienability clause, to the association legitimately built and integrated by all its real occupants, especially in areas called Fundo de Pasto or Fecho (...) prohibiting the transfer of ownership.'*¹³³

It is important to note that (i) this acknowledgement is not a legal recognition of the FFP as Traditional Communities, as the communities must file a request in the government, through

¹³² Governo da Bahia, Atlas Eólico Da Bahia, 74; ((1) Sobradinho, Sento Sé, Casa Nova, (2) Serras Azul and Assuruá, (3) Morro do Chapéu, (4) Serra do Estreito, (5) Serra do Tombador (Serra de Jacobina), (6) Serra do Espinhaço (Caetitê/Guanambi/Pindai), (7) Novo Horizonte, Piatã, Ibitiara, Brotas de Macaúbas).

¹³³ Estado da Bahia, *Constituição Do Estado Da Bahia*, 1989, Art. 178, https://www2.senado.leg.br/bdsf/bitstream/handle/id/70433/CE_BA_EC_29-2022.pdf?sequence=11&isAllowed=y (author's translation)

SEPROMI, to be fully recognized as such, and (ii) the state does not give the FFP full titlement to the land, but only grants the ‘Real Right of Use’. The Real Right of Use in Brazilian law is a type of property right that grants its holder the right to use and enjoy a property that belongs to someone else, which in this case is the state of Bahia. This right is known in Portuguese as ‘Direito Real de Uso’ and is regulated by the Brazilian Civil Code.¹³⁴ However, by recognizing themselves and being recognized as the Fundo e Fecho de Pasto, these communities gather forces even in conflict situations. The acknowledgement of the community increased its internal diversity, including *quilombolas*¹³⁵ (Afro-Brazilian communities) and *ribeirinhos*¹³⁶ (*riverside and fisherpersons communities*), who have also found refuge under this common identity to have access to the land in which they have cultivated for years.¹³⁷

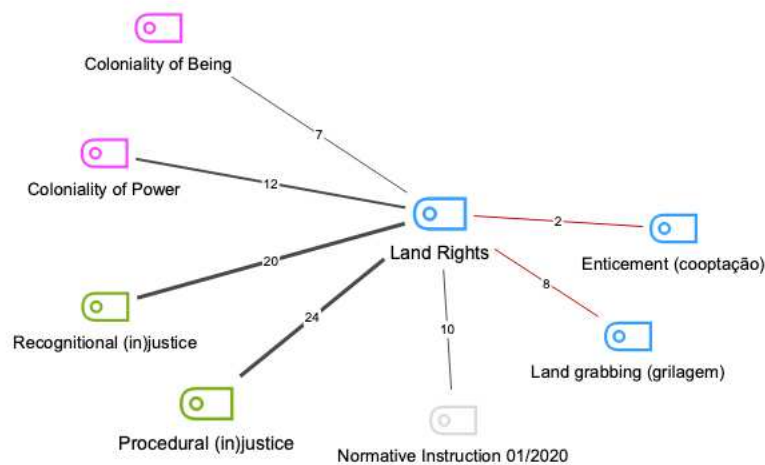


Figure 5: Visual results of intersected segments for land rights via MaxMaps¹³⁸

The qualitative content analysis identified enticement and land grabbing (Figure 5, red lines) as main causes of land issues and conflicts. Moreover, recently, in 2020, the state of Bahia issued Normative Instruction (NI) 01/2020 to compensate shortcomings of the domestic legislation regarding land tenure regularization. Furthermore, the data also shows the

¹³⁴ *Código Civil Brasileiro, Lei n. 10.406, 2002, Art. 1.225*

¹³⁵ *Quilombola* peoples have their origins from the remnants of quilombos. They share the African ancestry of enslaved people who fled the cruelty of slavery and took refuge in Brazil’s hinterlands.

¹³⁶ *Ribeirinhos* are traditional inhabitants of rivers’ banks, who live with the conditions offered by nature, being fishing the main activity for subsistence.

¹³⁷ L.A. Júnior and M. Bursztyn, ‘Tradição e Territorialidade Nos Fundos de Pasto Da Bahia: Do Capital Social Ao Capital Político’ (presented at the IV Encontro Nacional Anppas, Brasília, 2008), 2–3, <http://portalyfade.mma.gov.br/fundo-e-fecho-de-pasto-biblioteca>

¹³⁸ ref. Chapter 3.2, Table 4

presence of procedural and recognitional (in)justices (Figure 5), as well as aspects of coloniality of power and of being.

Enticement (*cooptação*) and land grabbing (*grilagem*)

The lack of land regularization from the state of Bahia leads to land issues observed within the wind energy transition in the traditionally occupied areas. The main problems related to land reported by the FFP communities, civil society organizations, and the public sector mostly concern (i) enticement (Port. *cooptação*) and (ii) land grabbing (Port. *grilagem*¹³⁹), which directly affect the communities' social and economic rights.

Regarding the first, it was observed that wind energy companies regularly entice individuals bilaterally (as opposed to collectively) by promising for the support in processing land tenure regularization of the individual areas, which lures the FFP communities to accept such offers, as land security is indeed their most fundamental *raison d'être*. However, the companies usually regulate the land which they are going to install the wind farm projects, leaving the communal areas of the FFP unattended. According to SEPRMI¹⁴⁰ and CDA,¹⁴¹ this constitutes a crucial problem, because when the land regularization is carried out later, some parts of the land are already compromised and occupied, hindering both the land regularization and the recognition of the Fundo e Fecho de Pasto communities. It is worth noting that the FFP communities have a specific characteristic in terms of land, as it embraces both individual and communal areas. According to Law 12.910/2013, Article 2 (I),¹⁴²

'It is authorized the concession of the right of use of rural and vacant state public lands, traditionally occupied, in a collective way, by the communities of Fundos de Pastos or Fechos de Pastos, with the objective of maintaining their physical, social and cultural reproduction, according to criteria of self-recognition, and in which are

¹³⁹ According to NGO Platform PlenaMata (<https://plenamata.eco/en/verbete/grilagem/>), the term *grilagem* is derived from the historical practice of deliberately aging documents to gain access to public spaces by storing them in drawers or boxes filled with crickets (Port. *grilo*). The papers took on an old and realistic appearance due to the chemical action of the insects' urine. With registrations in real estate registry offices, corruption, and the introduction of false data on land regulation electronic platforms, this federal crime is now committed in a modern manner.

¹⁴⁰ I/01, SEPRMI, 08 July 2022.

¹⁴¹ I/03, CDA, 11 July 2022.

¹⁴² Governo do Estado da Bahia, *Lei n. 12910*, 2013, <https://cpisp.org.br/lei-n-o-12-910-de-11-de-outubro-de-2013/#:~:text=O%20GOVERNADOR%20DO%20ESTADO%20DA,pelas%20Comunidades%20Remanescentes%20de%20Quilombos.>

observed, simultaneously, the following characteristics: (I) communal land use, which may be allied to individual use for subsistence.'

In addition, for the FFP¹⁴³ communities, such enticements generate internal conflicts (sometimes even within families) because the companies create a split in the community by claiming future socioeconomic regional development, which in practice is often short-term (e.g., employment of local people only during the construction phase) or inexistent.¹⁴⁴ This generates a situation of polarization, as those who are skeptical about aspects of wind projects are consequently framed as the ones who are against the opportunities for progress and development in the region.

Concerning the latter, although it is a practice that also happens in other economic sectors (i.e. agriculture), in the energy sector governmental organizations from Bahia¹⁴⁵ and civil society¹⁴⁶ reported that companies, in order to reduce installation costs and save time, they frequently use illegal methods, such as land grabbing (*grilagem*), to demonstrate their right to use the lands¹⁴⁷ and thus participate in energy auctions. Land grabbing refers to the illegal appropriation of public or private land by individuals or groups through the falsification of land titles and documents. It also has historical roots in Brazil, dating back to the colonial period, when land was distributed by the government without clear property titles.¹⁴⁸

The case of Operation Faroeste¹⁴⁹ (Operação Faroeste), reported by SEPROMI¹⁵⁰ is an example of the complexity of land grabbing in Brazil. This operation was a series of actions organized by the Brazilian Federal Police, in 2019, aimed at investigating the involvement of members of the Court of Justice of Bahia (TJ-BA) in an alleged scheme of land grabbing (among other crimes) in that Bahia's Western region. In the first instance, the Superior Tribunal of Justice (Superior Tribunal de Justiça) ordered the immediate removal from office of the then President of TJ-BA, Judge Gesivaldo Brito, as well as five other judges; throughout the investigations, the participation of more judges, public servants of the Bahia's Public Security Secretariat (Secretaria de Segurança Pública da Bahia) and the Bahia State

¹⁴³ W/02, Initial Topics, 02 August 2021, W/06, Economic Impacts, 08 April 2022, PB/01, Public Hearing, 20 July 2022.

¹⁴⁴ Santos et al., *Dossiê: Energias Renováveis Na Bahia: Caminhos e Descaminhos*, 35–37

¹⁴⁵ I/02, PGE-BA, 11 July 2022, I/03, CDA, 11 July 2022, I/05, SDE, 14 July 2022.

¹⁴⁶ I/04, AATR, 12 July 2022.

¹⁴⁷ Santos et al., *Dossiê: Energias Renováveis Na Bahia: Caminhos e Descaminhos*, 23

¹⁴⁸ F.L. Zeneratti, 'O acesso à terra no Brasil: reforma agrária e regularização fundiária' ['O acesso à terra no Brasil'], *Revista Katálysis* 24, no. 3 (December 2021), 564–575, doi:10.1590/1982-0259.2021.e79558

¹⁴⁹ Poder 360, 'Operação Faroeste', 2022, <https://www.poder360.com.br/tag/operacao-faroeste/>

¹⁵⁰ I/01, SEPROMI, 08 July 2022.

Prosecutor's Office (Ministério Público do Estado da Bahia) were investigated. According to the Public Prosecutor's Office (Ministério Público Federal), the criminal motivation involved the legalization of land grabbed lands in Western Bahia, in an area of ca. 360.000 ha, which involved billions of Brazilian reais, with the use of "straw-people" (Port. "laranjas") and companies, to legalize the illegally obtained resources, encompassing members of the Bahian judiciary, lawyers, and rural producers.

During the public hearing, the FFP voiced the issues they have been facing, illustrating the complexity of land grabbing on their traditionally occupied lands:¹⁵¹

'Our area has been used by us for more than 100 years, being one of its owners 100 years old; this gentleman is alive, and his great-grandfather already used the area. A preserved area with four springs surrounded by us, and that now was invaded (...). When we tried to stop their advance, the Military Police arrived in less than 20 minutes to coerce us to leave the area, so we had to leave and could not do anything. Some things that this land grabber (grileiro) did was to take down our fence; they knocked down our fence, (...) opened a corridor more than 20 meters wide from the road BR-349 to the riverbank. The land grabber destroyed our ranches and the corrals where we used to keep the cattle. He took down our gate and the sign that said, "Fecho de Pasto Boi à Rib'abaixo – Proteção Ambiental" (Cattle Pasture Downstream – Environmental Protection). The cerrado¹⁵² is only standing because we use it collectively. You can pay attention: the areas that are collectively used are all well preserved (...). There we are being treated as land grabbers, (...) we do not have the right to access our area and the police are coercing us. That was it, we want to be heard.'

This example sheds light not only on the land conflicts and the human rights impacts on the FFP that go beyond land rights (i.e. freedom of movement, adequate housing) but also the participation of state actors, such as the Military Police, in exercising such illegal practices.

Normative Instruction (NI) 01/2020

¹⁵¹ PB/01, Public Hearing, 20 July 2022 (author's translation)

¹⁵² Cerrado is a Brazilian biome, also known as Brazil's tropical savanna, and is one of the richest savannas in the world.

Several steps must be taken by renewable energy companies to proceed with the installation of wind farms in the semi-arid. The process of installation requires beforehand an environmental impact assessment, a land tenure assessment (Port. Diagnóstico Fundiário), public inquiries with the local community, and the issuance of a lease contract with the communities, which defines the terms and conditions of the on-site enterprise. In many of the ‘wind corridors’, the FFP communities were not yet granted the Real Right of Use of their lands. The lack of regularization creates difficulties for the renewable energy companies, as they cannot issue contracts with the traditional communities, as these are still considered ‘vacant’ lands,¹⁵³ which although owned by the state, are indeed traditionally occupied. To end such impasse, on 01 July 2020, the state of Bahia issued NI 01/2020, which creates a ‘legal process flow’¹⁵⁴ to regulate undesignated state lands that are within the potential areas for wind power development.

The publication of the NI¹⁵⁵ 01/2020 is a joint action, signed by the heads of Bahia’s secretariats of Economic Development (SDE), Rural Development (SDR), the Agrarian Development Coordination (CDA), and the State of Bahia Attorney General’s Office (PGE-BA). According to PGE-BA¹⁵⁶ and CDA¹⁵⁷, the idea of this Normative Instruction came about to regulate the areas of vacant state land that are in areas of wind potential. One of the demands for the creation of such an instrument came from the many extrajudicial usucapion¹⁵⁸ (Port. usucapião extrajudicial) processes in the promising areas, which began in mid-2015. CDA¹⁵⁹ reported that there was a growing number of alien registrations and land grabbing activities in the western regions of Bahia.

Before the Normative Instruction, the regularization was initiated in the name of the property claimer, in most cases related to the agriculture or mining sector, but increasingly the regularization started to be done in the name of companies, although there was no legal provision for such an option. To find other ways to regularize land, the interested parties, most notably the companies, started to file for extrajudicial usucapion. The state contested

¹⁵³ I/05, SDE, 14 July 2022.

¹⁵⁴ I/02, PGE-BA, 11 July 2022; I/03, CDA, 11 July 2022.

¹⁵⁵ In Brazilian Administrative Law, according to Maria Di Pietro, a Normative Instruction is an administrative act that is supplementary to a hierarchically superior norm and must be in line with the entire legal system.

¹⁵⁶ I/02, PGE-BA, 11 July 2022.

¹⁵⁷ I/03, CDA, 11 July 2022.

¹⁵⁸ According to Merriam-Webster definition: (Roman Law) a mode of acquiring title to property by uninterrupted possession of it for a definite period (as one year for movables or two for immovables) under a title acquired in good faith. Available at <https://www.merriam-webster.com/dictionary/usucapion> accessed 28 December 2022.

¹⁵⁹ I/03, CDA, 11 July 2022 (author’s translation).

the usucapion practices and then the pressure from the private sector about land regularization started at the government level.

Despite the public sector's insistence in the interviews (PGE-BA, CDA, SDE) to emphasize that the normative instruction mainly concerns the regularization of lands within the wind power potential areas, which *may* or *may not* encompass traditional communities, Article 1.4¹⁶⁰ of the NI 01/2020 itself states that '*in the land regularization, preference will be given to the occupants, including the traditional communities of Fundo or Fecho de Pasto, existing in the vacant lands (...).*' Yet, although SEPROMI¹⁶¹, which is the organization responsible for the certification of the FFP communities, acknowledges that many of the areas overlap with the occupancy of the communities, they were not included in the formulation of this procedural flow to represent the interests of the FFP communities. The State Articulation of the Fundo e Fecho de Pasto (AAFFP),¹⁶² an organization that defends and protects the rights of the FFP communities, claims that they were also never involved in the creation of the aforementioned instrument, contrary to customary law practices enshrined in international conventions, such as Convention 169 from the International Labor Organization (ILO), in regards to public consultation, and that the communities have been requesting the Real Right of Use of the traditionally occupied lands for years, but the requests were either archived or not processed by the state.¹⁶³

The official aim of the NI 01/2020 is to facilitate and improve aspects of land regularization for the Fundo e Fecho de Pasto communities, however the instrument also casts lights on overlapping territorial interests between state and corporate entities. These multiple land claims do affect the livelihood of traditional communities as the collective use of land for grazing activities are hindered, especially in situations, where land control is dominated by the private sector. The access to, use of, and control over land related to wind power

¹⁶⁰ Secretaria de Desenvolvimento Econômico, Secretaria de Desenvolvimento Rural, Coordenadoria de Desenvolvimento Agrário and Procuradoria Geral do Estado, *Instrução Normativa Conjunta*, 2020, <http://www.sda.sdr.ba.gov.br/sites/default/files/2020-07/INSTRU%C3%87%C3%83O%20NORMATIVA%20-%20%C3%81REAS%20ENERGIA%20EOLICA.pdf> (author's translation)

¹⁶¹ I/01, SEPROMI, 08 July 2022.

¹⁶² Articulação Estadual das Comunidades Tradicionais de Fundo e Fecho de Pasto, 'Articulação Estadual de Fundo e Fecho de Pasto lança nota pública' ['AATR'], [Website], *Associação de Advogados de Trabalhadores Rurais*, 2020, accessed 09 February 2023, <https://www.aatr.org.br/post/articula%C3%A7%C3%A3o-estadual-de-fundo-e-fecho-de-pasto-lan%C3%A7a-nota-p%C3%BAblica>

¹⁶³ C. Ribeiro and G. de Oliveira, 'Terras Públicas, Comunidades Tradicionais e Corredores de Vento: Caminhos Da Energia Eólica Na Bahia', in ed. J. Marques, F. Barrero, and Í. Maia, *O Cárcere Dos Ventos: Destruição Das Serras Pelos Complexos Eólicos*, vol. 3, 1st. (Paulo Afonso, Bahia, 2021), 26

development paves the way to new resource frontiers, which are institutionally legitimized as actions to mitigate climate change and improve energy security.

Energy (in)justices and aspects of coloniality

In terms of land rights within the energy system, issues related to justice were observed, namely concerning the recognitional and procedural principles of the energy justice framework. The questions guiding this analysis are listed in Chapter 3.2 (Table 3). The same strategy was applied with the decolonial thinking framework (Table 3) to have a thorough perspective, which resulted most notably in aspects of coloniality of power.

Regarding *recognitional justice*, the acknowledgement of whether wind energy policy(ies) was/were centered on the FFP communities was analyzed. PGE-BA stated that a Working Group (WG) was created within the PGE¹⁶⁴ to review the current legislation regarding the land of Traditional Communities, namely land tenure laws 3.038/1972, 3.665/1973, and the Bahia State Constitution from 1989. Dialogues between PGE-BA and notaries are being established to facilitate and speed up the process of land regularization, especially of undesignated public lands. In addition, it was reported that there is an intention to create a Normative Instruction specifically about the relation of the FFP communities with land regularization. The secretariat responsible for economic development, SDE,¹⁶⁵ reported their role to provide support for wind companies to develop renewable energy in the state of Bahia, by analyzing the companies' proposal through a basic form of land tenure assessment (Port. Diagnóstico Fundiário) and a Term of Commitment (Port. Termo de Compromisso) in which the companies themselves investigate, with almost full autonomy, the area and wind potential due to the private's sector better resources and personnel, which would normally take more time if solely under the responsibility of CDA. CDA¹⁶⁶ claims that the state of Bahia does not have enough human resources to bear all the work related to land regularization, and such task would have to be done by the Federal Government through the National Institute for Colonization and Agrarian Reform (INCRA), however for years this has not been followed properly.

Regarding *procedural justice*, the FFP community's degree of participation in decision-making was considered in the process of the wind energy expansion. Equality aspects

¹⁶⁴ I/02, PGE-BA, 11 July 2022.

¹⁶⁵ I/05, SDE, 14 July 2022.

¹⁶⁶ I/03, CDA, 11 July 2022.

reported by CDA¹⁶⁷ referred to the visits that need to be realized to the communities and the assistance provided in the dialogue with the wind companies. However, issues reported by SEPROMI¹⁶⁸ referred to the absence of their participation prior and during the elaboration of NI 01/2020; although meetings were organized to review the instrument, they have been successively canceled due to the Covid-19 pandemic. In addition, the lack of acknowledgement of FFP communities by the wind companies was also mentioned by this organization; yet, by closely analyzing the Wind Atlas Bahia (2013)¹⁶⁹, it is relevant to emphasize two points: (i) even though the atlas was a state of Bahia initiative, it was prepared by Camargo-Schubert Associated Engineers with the support of wind energy companies (i.e. Casa dos Ventos, Sowitec, Brazil Wind etc.), and (ii) the atlas mentions the existence of indigenous and quilombolas lands, which have more robust (but still fragile) legislations and regulations, but it ignores the existence of the Fundo e Fecho de Pasto Communities¹⁷⁰. Following the concept of *coloniality of power*,¹⁷¹ the economic and political forms of domination were scrutinized in relation to wind energy transition and the territory occupied by the FFP communities. The following are economic aspects of coloniality of power reported by the communities:

(a) *‘The company arrives in such a way that it becomes the one who issues orders on the property of the communities, and they accept us as long as the company’s business is not harmed. Who is going to tell the company what they can do in a traditionally occupied area? These are things that don’t benefit the community but are indeed more beneficial to businesses.’*¹⁷²

(b) *‘I am from Remanso, a traditional community of Fundo de Pasto, and I want to say here that we are not ignorant not to want development, but we want development so that we don’t go hungry, so that we don’t go thirsty, and so that we live and raise our children with dignity on our land. We have been a community for more than 200 years, owners of that land, living and raising our goats, planting and feeding ourselves. We do want to be recognized as a traditional community of Fundo de*

¹⁶⁷ I/03, CDA, 11 July 2022.

¹⁶⁸ I/01, SEPROMI, 08 July 2022.

¹⁶⁹ Governo da Bahia, *Atlas Eólico Da Bahia*, 3

¹⁷⁰ Governo da Bahia, *Atlas Eólico Da Bahia*, 31

¹⁷¹ Quijano, ‘Coloniality of Power, Eurocentrism, and Latin America’

¹⁷² W/04, Grilagem and Contracts, 10 December 2022 (author’s translation).

*Pasto, but we are not there to compete with anyone. We are the owners, why should we compete with wind energy companies? If we are recognized as a traditional community of “Fundo de Pasto”, let it be free from big projects. We want to be recognized not to compete with anyone.*¹⁷³

The testimonies of the FFP communities highlight the unequal power dynamics that exist between corporations and traditional communities, where companies often impose their will and interests on the land and its people without proper consultation or respect for local cultures and traditions. The desire for development is present among these communities, but it must not come at the expense of their basic rights to food, water, and dignity.

The **political** facet of coloniality of power could be observed in the interviews with PGE-BA,¹⁷⁴ CDA,¹⁷⁵ and SDE.¹⁷⁶ The importance given to land regularization became urgent and demanded better procedures mainly after the pressure prompted by the private sector combined with the illegal practices of land grabbing, thus ignoring the historical resistance, and the demands for land regularization and recognition that the FFP have been claiming for years. This is clear in the following passage stated in the interview with SDE:¹⁷⁷

‘And then I say that the CDA also succeeded in this aspect. To build a series of normative instructions, of legal and regulatory instruments that did what? They relaxed the law in some way to make it viable, because what do we want? We want to regularize (land) (...) for the communities. Because if we don’t do this, no enterprise will survive. No enterprise is going to settle there because they (communities) also make a mess. They say: no, don’t come here, this is mine.’

The pressure from the private sector and the illegal practices of land grabbing have forced the government to act and create better procedures for land regularization. However, in doing so, the historical resistance and demands of traditional communities, such as the FFP, have often been ignored. In summary, although positive impacts on the land regularization process can be observed, the lack of participation of the Fundo e Fecho de Pasto in energy decision-making, such as in the elaboration of NI 01/2020, is a fundamental issue of procedural

¹⁷³ PB/01, Public Hearing, 20 July 2022 (author’s translation).

¹⁷⁴ I/02, PGE-BA, 11 July 2022.

¹⁷⁵ I/03, CDA, 11 July 2022.

¹⁷⁶ I/05, SDE, 14 July 2022.

¹⁷⁷ I/05, SDE, 14 July 2022 (author’s translation).

injustice. The coloniality of power was also scrutinized, showing that economic and political forms of domination by companies and the government affected the FFP communities' rights. These findings have highlighted the need for a more inclusive and equitable approach to land rights and energy justice, as well as addressing the ongoing effects of coloniality.

4.1.2. Self-determination: recognition as a Traditional Community

*'Why is it that the state (...) of Bahia in 8 years (...) has not released a document [certificate of recognition] for our Fundo e Fecho de Pasto, but within 30 days they manage to release a project (...) for wind companies (...) to come into our communities?'*¹⁷⁸

The Fundo e Fecho de Pasto, in their composition and origin¹⁷⁹, have a strong presence of black and brown people, with great influence of indigenous peoples, all coming from a context of rural workers from the colonial time of the *sesmarias*.¹⁸⁰ Under the *sesmaria* system (chapter 4.1.1), landholders were given large grants of land, called *sesmarias*, in exchange for their commitment to settle and develop the land. These landholders relied heavily on the African enslaved to work the land, which made the system of *sesmarias* and slavery very interconnected. With the abolition of slavery in 1888, the government of Brazil faced a labor shortage due to the lack of efforts to create public policies to grant land, employment, and minimal conditions for the former enslaved population. Bahia faced, and still faces,¹⁸¹ several issues of socio-economic inequality, having the cases of delay in land regularization and recognition process a direct impact on traditional communities, such as the Fundo e Fecho de Pasto.

The qualitative content analysis data (Figure 6) shows that the lack or delay in recognizing the FFP as a traditional community leads to issues regarding structural and institutional discrimination, as well as abusive contracts (red lines), which hinder the FFP's rights. The data also suggests the presence of procedural and recognitional (in)justices, and aspects of coloniality of power and being.

¹⁷⁸ W/04, Grilagem and Contracts, 10 December 2022 (author's translation).

¹⁷⁹ I/01, SEPROMI, 08 July 2022.

¹⁸⁰ I/01, SEPROMI, 08 July 2022.

¹⁸¹ I/01, SEPROMI, 08 July 2022, I/02, PGE-BA, 11 July 2022, I/03, CDA, 11 July 2022.

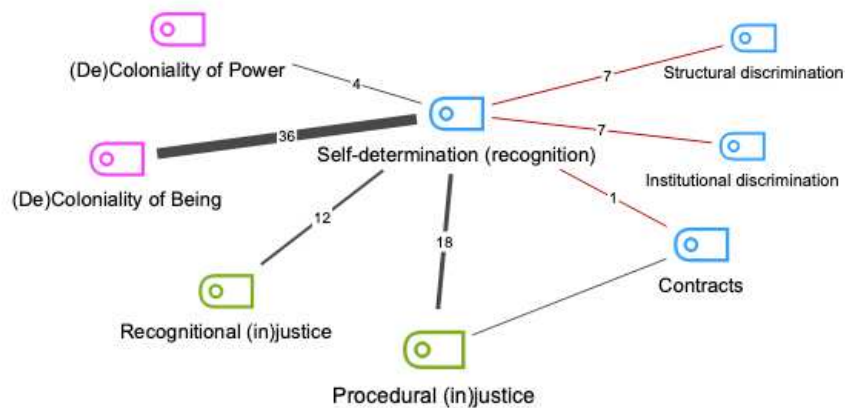


Figure 6: Visual results of intersected segments for Self-determination (recognition) through MaxMaps¹⁸²

Structural and Institutional Discrimination

The FFP are numerous communities dispersed across the semi-arid region of the Cerrado and Caatinga biomes in Bahia. They are defined as ‘traditional communities’ (Port. Comunidades Tradicionais), governed by customary law, linked either by blood ties (kinship) or alliance (compadrio).¹⁸³ For Alcântara, Germani and Sampaio, the Fundo e Fecho de Pasto communities can thus be comprehended as:

‘an experience of appropriation of the typical semi-arid territory of Bahia, originating from traditional groups of cowherd origin, understood as historical peasants who extensively raise goats, sheep, pigs, and cattle on common land, articulating this practice with others carried out on the individual plot. Breeders are the individuals who cultivate peasant crops in individual areas and practice plant extraction in areas of refreshment and common use. They are shepherds, farmers, and extractivists organized into family groups, with land, family, and work taking center stage in their way of life. They (...) form small communities scattered across the semi-arid of the state of Bahia, to resist expropriation, and assume their identity in the struggle to remain on their land.’¹⁸⁴

¹⁸² ref. Chapter 3.2, Table 4

¹⁸³ D. de Alcântara and G.I. Germani, ‘Há Uma Lei No Meio Do Caminho: Luta Para Permanecer Na Terra Dos Fundos e Fechos de Pasto Na Bahia’, *Terra Livre* 2, no. 37 (2011), 79–80

¹⁸⁴ de Alcântara and Germani, ‘Há Uma Lei No Meio Do Caminho: Luta Para Permanecer Na Terra Dos Fundos e Fechos de Pasto Na Bahia’, 79–80 (author’s translation).

As stated in chapter 4.1.1, their identity stem from agrarian conflicts, which led them to self-organize as a traditional community. Despite positive efforts for the recognition of the traditional communities of the FFP in the domestic realm (chapter 4.1.1.), most notably the Bahia State Constitution (1989) and Law 12.910/2013, the qualitative analysis data suggests that the FFP continue to face injustices concerning discrimination through the lack or delay of their explicit recognition. According to SEPRONI,¹⁸⁵ as opposed to other traditional communities (i.e. Quilombolas and Indigenous peoples), the Fundo e Fecho de Pasto does not have specific legislation that determine clear guidelines about the recognition process. The FFP must follow the International Labor Organization's Indigenous and Tribal Peoples Convention (ILO 169), in which they have to self-declare (or self-recognize) as a traditional community, following then a procedure in which the state of Bahia issues a self-recognition certificate, which allows them to have access to public policies, and land regularization. Regarding structural and institutional discrimination, SEPRONI¹⁸⁶ stated that although the FFP communities exist for more than 200 years, public policies targeted to them were only very recently created, which can be linked with aspects of '*structural discrimination at several levels.*'¹⁸⁷ The Fundo e Fecho de Pasto Associations, in an open letter¹⁸⁸ from 19 August 2022 state:

'The institutional racism of the state of Bahia towards these communities is clear, and the great majority of these communities are made up of black and brown people. They are treating us as incapable of surviving with our way of being and do not recognize the diversity of the communities, many of which are secular, surpassing seven generations.'

Moreover, since 2013, SEPRONI was responsible for the complete certification process of the Fundo e Fecho de Pasto communities through Law 12.910/2013.¹⁸⁹ However, after the publication of Bahia's decree 17.471, in 2017, the certification process was altered, creating another procedural step: it became mandatory for SEPRONI to send the FFP certification

¹⁸⁵ I/01, SEPRONI, 08 July 2022.

¹⁸⁶ I/01, SEPRONI, 08 July 2022.

¹⁸⁷ I/01, SEPRONI, 08 July 2022.

¹⁸⁸ Articulação Estadual das Comunidades Tradicionais de Fundo e Fecho de Pasto, 'Nota Pública: Movimento Fundo e Fecho de Pasto', [Website], *Serviço de Assessoria a Organizações Populares e Rurais*, 2020, accessed 09 February 2023, <https://sasop.org.br/2020/08/nota-publica-movimento-fundo-e-fecho-de-pasto/> (author's translation).

¹⁸⁹ Governo do Estado da Bahia, *Lei n. 12910*, Art. 2, par. 1

process to Bahia's Casa Civil,¹⁹⁰ so that the state Governor authorizes and publishes the recognition act in the official gazette (Port. Diário Oficial da União). After the publication, the process returns to SEPROMI, so that they can issue the certificate and hand it over to the FFP communities. According to PGE-BA,¹⁹¹ many certification processes were stalled at Bahia's Casa Civil, which indirectly affected the wind corridor project (NI 01/2020), but through the creation of a Work Group at Bahia's Casa Civil, the workload of the certification processes advanced. The delay in the certification process through Bahia's decree 17.471/2017 and the sudden celerity given from 2020 onwards is beneficial to the FFP, but it also sheds light on the political and economic interests of state actors and the private sector. CPT's publication "Conflitos no Campo" (Land conflicts), from 2021, highlights that the most affected by rural conflicts in Brazil (2011-2021) according to social classes are the Traditional Communities, such as Fundo e Fecho de Pasto. For CPT, the fact that the conflictive locations are within the Traditional Communities' area

*'indicates that a profound expropriation process on the part of capital and the oligarchies, in general, is underway. (...) these are populations that do not fight for access to land, like the Sem-Terra (Landless), but for permanence in their territories, since they are in real possession of the use of their lands/territories.'*¹⁹²

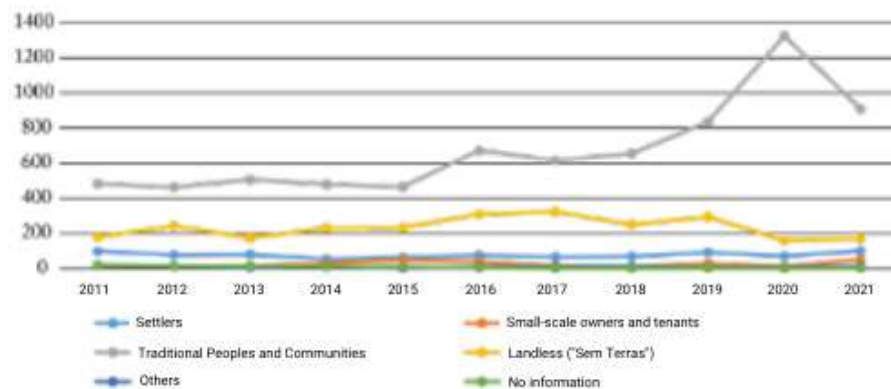


Figure 7: Most affected by rural conflicts in Brazil (2011-2021)¹⁹³

¹⁹⁰ In Brazil, the Casa Civil is an organization that is directly linked to the head of the executive branch of the federation or units of the federation (states). In the state executive branch, it has the status of a government secretariat that reports directly to the state Governor.

¹⁹¹ I/02, PGE-BA, 11 July 2022.

¹⁹² C.W. Porto-Gonçalves et al., 'Expropriação, Violência e R-Existência: Uma Geografia Dos Conflitos Por Terra No Brasil (2021)', in ed. Comissão Pastoral da Terra, *Conflitos No Campo: Brasil* (Goiânia, 2022), 97, <https://www.cptnacional.org.br/downloads?task=download.send&id=14271&catid=41&m=0> (author's translation)

¹⁹³ Porto-Gonçalves et al., 'Expropriação, Violência e R-Existência: Uma Geografia Dos Conflitos Por Terra No Brasil (2021)', 97 (author's translation)

Although Figure 7 also encompasses different Traditional Communities (i.e. Indigenous, Quilombolas) and several economic sectors other than wind energy (i.e. hydroelectricity, mining), it provides an overall perspective of the situation which the FFP, for instance, must go through, even after they are recognized as a Traditional Community and have Real Right of Use of their lands. These conflicts often arise when powerful interests seek to exploit the natural resources in these territories, leading to forced evictions, violence, and environmental destruction. In the specific case of the relation between wind energy and the FFP, the subalternity of relations is usually observed through lease contracts,¹⁹⁴ which are governed by federal legislations, namely the Land Statute (1965) and the decree 59.566 (1966), instruments which do not deal with renewable energy, a technological innovation that was inexistent by the time the documents were written.

Contracts

Through contracts, companies offer a monthly payment, a closed amount or a percentage of the profit, in exchange for the right to the use of the land, for which the FFP possess the Real Right of Use. Lease or rental contracts are the legal documents that grant those in charge of wind development access and use of the respective land. It allows the company to occupy the territory and install the measuring equipment. If the wind tests are successful, the wind power generation structures are built.¹⁹⁵ According to the qualitative content analysis, the data suggests that the question of lease contracts is portrayed differently between state actors and civil society/FFP communities; while the first acknowledges more positive aspects regarding the contracts, the latter report several disadvantages. One limitation of the analysis lies in the lack of a representative from the private sector to clarify possible misinterpretations, however an attempt to fill this void is the utilization of the interview with SDE, the secretariat responsible for fostering the economic development of the state of Bahia, which provides support to wind companies in potential wind corridor areas.

The public sector is mostly favorable about the lease contracts, although it also recognizes relevant shortcomings in the contract themselves. PGE-BA¹⁹⁶ states that the contract does not conflict with the activities of the FFP communities, and it is up to them to sign the contracts or not. Moreover, PGE-BA reported that there are:

¹⁹⁴ Santos et al., *Dossiê: Energias Renováveis Na Bahia: Caminhos e Descaminhos*, 22–26

¹⁹⁵ Santos et al., *Dossiê: Energias Renováveis Na Bahia: Caminhos e Descaminhos*, 23

¹⁹⁶ I/02, PGE-BA, 11 July 2022 (author's translation).

‘many communities that have already contacted the CDA because they want to sign the contract, they want regularization (...) because they are interested. It is an important resource, and it does not hinder, at least all the technical information that came here to the Prosecutor's office says that, is that the production is coexistent.’¹⁹⁷

CDA¹⁹⁸ sees advantages in the contract because *‘the lease will always belong to the community, so the land will never be passed on to these large investments and will avoid land grabbing’*, although it acknowledges:

‘the contract, it is precarious, it is not the [land] title, but it is what we have. If they sign the contract, we register it in the notary's office, and this avoids the area to be illicitly occupied. But if they don't sign it, pressure is brought to bear, and illegal occupation will happen.’

SDE¹⁹⁹, however, reports difficulties in the relationship between the FFP and the companies, as the first are:

‘demanding things beyond what was negotiated’, although *“most companies have social-environmental responsibility, mainly because they have international capital, they need to respond to their financing funds there. (...) things that we didn't even know about in terms of investment and the indirect benefits that are given to these communities, such as the maintenance of areas for the preservation of vegetation species.’*

For the civil society, many of these contracts are asymmetrical, offering more benefits to companies. Although the contracts vary from company to company, the following abusive clauses were reported,²⁰⁰ among others, as common to most of the contracts between wind companies and the Fundo e Fecho de Pasto communities. The clause **‘object of the contract’ (objeto do contrato)** highlights that the lease covers not only the ground but also the underground soil and airspace, which allows wind companies to explore raw materials in the

¹⁹⁷ I/02, PGE-BA, 11 July 2022 (author's translation).

¹⁹⁸ I/03, CDA, 11 July 2022 (author's translation).

¹⁹⁹ I/05, SDE, 14 July 2022 (author's translation).

²⁰⁰ Santos et al., *Dossiê: Energias Renováveis Na Bahia: Caminhos e Descaminhos*, 24–26

area and puts the responsibility of any environmental impacts on the landowner, that is the Fundo e Fecho de Pasto community. The ‘term of the contract’ (prazo de vigência) is long term, usually extending to the transfer of responsibilities to the heirs of the area, and in many cases, the contract can be extended unilaterally without the FFP's approval. As for ‘payment’ (pagamento) for the lease is generally low compared to the profits of the wind companies and the limitations that the wind production brings to the FFP. The contract also includes a ‘right of preference’ (direito de preferência) clause, which allows for agricultural, livestock, and leisure activities only after the company's authorization and prohibits the area from being ceded, transferred, or rented to carry out activities that interfere with the feasibility of studies, the implementation or operation of the wind power plant. In case of ‘termination of the contract’ (rescisão do contrato), if the company does not obtain the necessary approval from the government, it will be terminated without any compensation to the holders of the area (FFP), while if the FFP wants to take the area back, they will have to compensate the company for losses, damages, and loss of profit through the payment of very high fines. The contract also includes a ‘confidentiality clause’ (cláusula de sigilo) which prohibits the FFP from providing documents or any information about the contract to third parties, without the company's authorization, during or after the term of the agreement. Lastly, the contract specifies that in case of any judicial conflict arising from the signing of the contract, the action will be processed in distant cities, such as Brasília or Salvador, which is usually difficult for the FFP to access. In addition to the issues mentioned above, during a workshop,²⁰¹ one representative of the communities, reported the following perspective regarding their interpretation of the contracts:

‘I keep thinking that Brazil is a country without rules. Imagine, all these contracts are going around, they are being signed, they are being notarized. This is absurd. They are highly abusive, it is explicit, and there is no punishment for it. Because there is nothing to stop the contracts; the wind projects keep going forward, signing these kinds of contracts with the communities. So, for me, this is a lack of commitment by the Brazilian state to protect the rights of the Brazilian citizens, because many times these projects, which are executed by these companies... these companies are not Brazilian, they are multinationals, they are foreigners. So, they arrive and exploit

²⁰¹ W/04, Grilagem and Contracts, 10 December 2021 (author’s translation).

our country, the sources of wealth of our country, in this way. In fact, they steal the wealth of our country.'

The establishment of the contracts attempts to avoid illegal practices concerning land grabbing, and is usually successful in this regard. In Brazil, contracts between private parties are studied in the area of civil law, more specifically in the branch of private law. Civil law²⁰² is the law that regulates the relationships between private parties, and within it, contract law is the law that regulates the relationships between the parties to a contract. It is where the norms, principles, and rules that govern the formation, execution, and termination of contracts are studied. In the case of the wind energy companies and the Fundo e Fecho de Pasto, the discussions from the workshop cycle 4 (Contracts) and the interviews conducted with CDA and SDE suggest that the contracts also provide important insights regarding possible structural and institutional discrimination (i.e. decision-making based on technical reports, oversimplified reasons for the FFP to accept the contracts), as well as subalternity of relations (i.e. termination of the contract, abusive fines) between the private sector and the Fundo e Fecho de Pasto communities. Despite efforts from CDA²⁰³ to support the FFP, the analysis shows that the public sector is still behind in fulfilling its obligations to provide a robust legal framework to secure these communities' rights through strong National Human Rights Institutions and accountability regarding businesses' corporate responsibility in relation to human rights.

Energy (in)justices and aspects of coloniality

In terms of self-determination (recognition) of the traditional community within the energy system, distributive, recognitional and cosmopolitanism tenets of the energy justice framework were observed. As stated previously, the questions guiding the analysis are listed in Chapter 3.2. The same approach was applied with the decolonial thinking framework (Table 3) to have a holistic perspective, which resulted most notably in aspects of coloniality of being.

Regarding *distributive justice*, the analysis encompassed economic, social or health policies, as well as affordability and accessibility targeted to the FFP in the wind energy production.

²⁰² Senado Federal, *Código Civil Brasileiro, 2002*, n.d., <https://www2.senado.leg.br/bdsf/bitstream/handle/id/70327/C%C3%B3digo%20Civil%202020ed.pdf>

²⁰³ I/03, CDA, 11 July 2022.

CDA²⁰⁴ mentions that the communities are more aware and are thus demanding investments to be done locally, such as construction of schools and capacity building by the offering of professional training courses focused on the local market; this has been happening in the case of communities in Gentio do Ouro and Serra da Assuruá, where companies are entering in the process of dialogues with the communities. On the other hand, aspects questioned by the FFP²⁰⁵ were:

‘why do they [wind companies] build in a certain territory, deforest, do a lot of bad things, and then they do some benefits to another community? It leaves the impacts in one, but this liability it tries to compensate in another community. Why does this happen?’

It was also observed by the civil society and mentioned in the public hearing²⁰⁶ the fact that *‘the vast majority of renewable energy projects request financing from the National Bank for Economic and Social Development (BNDES)’*, which demands that a *‘percentage between 5% and 1% must be invested in the communities surrounding the projects’*, however as stated by the civil society representative, *‘this often does not always happen’* although *‘it is a condition for the licensing that the company must comply with and carry out in the territory’*. Moreover, a member of the FFP²⁰⁷ mentioned that, in terms of affordability, wind energy transition would lower energy costs, but this has not happened yet; on the contrary, there are places, such as the region of Parque dos Morrinhos, which has no energy *‘neither wind nor solar, nor any other type of energy’*, and in other places where the energy is available, their energy bill *‘which was 25 reais, has gone to 77 reais now... I’m paying an absurd amount; the public policy said it would lower the energy costs, but this is not happening.’*

Regarding *recognitional justice*, the acknowledgement of whether wind energy policy(ies) was/were centered in the FFP was analyzed. SEPRMI²⁰⁸ mentioned their partnership with Fundo e Fecho de Pasto Associations to identify communities through an Active Search (Port. *Busca Ativa*), encompassing a bottom-up approach and proceed with their recognition and land regularization, which, according to them, would not be possible if relying only on

²⁰⁴ I/03, CDA, 11 July 2022.

²⁰⁵ W/06, Economic Impacts, 08 April 2022 (author’s translation).

²⁰⁶ PB/01, Public Hearing, 20 July 2022 (author’s translation).

²⁰⁷ W/07, Moving Forward, 01 May 2022 (author’s translation).

²⁰⁸ I/01, SEPRMI, 08 July 2022 (author’s translation).

the Secretariat's human resources. SEPRONI²⁰⁹ also mentioned a public policy (Edital de Fomento da Década Afrodescendente), which is a public call whose aim is to transfer a specific amount of money to civil society organizations so that they can carry out actions focused on Traditional Communities to contribute with the fight against racial discrimination with the participation of youth and women. Moreover, SEPRONI²¹⁰ also coordinates the State Sustainability Council for Traditional Communities (CESPCT), which is a deliberative council in the state of Bahia, composed by members of civil society, as well as members of public sector of the state, which aims to address the interests of the Traditional Communities. However, SEPRONI²¹¹ referred to the fact that despite being stated in Ordinance (Port. Portaria) 010/07/2017, which regulates the recognition process done by this secretariat, the technical visit to the communities is not mandatory, notwithstanding being an important step in the certification process, which serves '*to substantiate the recognition process.*'²¹² In addition, both SEPRONI²¹³ and PGE-BA²¹⁴ mention the need to create a normative instruction for the Fundo and Fecho de Pasto communities specifically, since other traditional communities (Quilombolas) already have one. According to these public sector actors, this has even been discussed together with other bodies.

Regarding *cosmopolitanism justice*, the intergenerational effects of the wind transition on FFP were considered. SEPRONI²¹⁵ mentioned that the communities are in favor of renewable and clean energies, because they know the socioeconomic advantages that the development brings among local and national scales.

In *coloniality of power*, the economic and political forms of domination were scrutinized in relation to the expansion of wind energy and the FFP communities. According to SEPRONI²¹⁶, in the beginning of wind energy production, companies did not have enough information about the existence of traditional communities in the area, so they started to settle and formalize land regularization '*because they had a legal apparatus...very competent for that,*'²¹⁷ which generated several conflicts impacting the FFP's human rights.

²⁰⁹ I/01, SEPRONI, 08 July 2022.

²¹⁰ I/01, SEPRONI, 08 July 2022.

²¹¹ I/01, SEPRONI, 08 July 2022.

²¹² I/01, SEPRONI, 08 July 2022.

²¹³ I/01, SEPRONI, 08 July 2022.

²¹⁴ I/02, PGE-BA, 11 July 2022.

²¹⁵ I/01, SEPRONI, 08 July 2022.

²¹⁶ I/01, SEPRONI, 08 July 2022.

²¹⁷ I/01, SEPRONI, 08 July 2022 (author's translation).

SEPROMI²¹⁸ also stated that although the Fundo e Fecho de Pasto communities had not formalized the Real Right Use of the land at that time, they had the right to occupy them. In *coloniality of being*, aspects of acknowledgement, or the lack of, regarding subjective (i.e. erasure of local histories), individual, and collective identities (i.e. cultural diversity) of the Fundo e Fecho de Pasto communities due to the wind energy expansion were scrutinized. According to SEPROMI,²¹⁹ usually the lands for collective use, which are not necessarily properly defined, are not fenced; however, with the advent of wind companies in the areas, the FFP communities started to fence them due to the construction of roads crossing their lands, in order to protect animals; but such practice can erase the traditionality that has been part of the communities' characteristic. Moreover, the FFP communities²²⁰ raise the following questions regarding the unequal treatment provided to them in relation to wind companies:

'We have been in this community for 200 years, 300 years, does that mean that we do not have right to anything? Everything that has been done during all this time just to lose to wind power now?', 'why regularize these areas now? Our area started in 1987, so why hasn't the Real Right of Use been given to our area until now? Two comrades have already been killed and this area remains undocumented, and for companies is it just a snap of a finger?,' and 'why is it that the state, for example, that took, let's say, 8 years, or 2 terms of Rui Costa and the governor mandates (...) and did not release one single document for our Fundo and Fecho de Pasto community, but within 30 days they manage to release a project of this magnitude for wind companies (...) to enter our communities?'

Regarding the way they feel they are perceived by the wind companies, they stated:²²¹

'the accumulation that we all have (...) in our struggle, we cannot remain silent, we have an accumulation of wisdom in our life (...). Because what they use most is this, they think that we don't know things and that's why they can push things down our

²¹⁸ I/01, SEPROMI, 08 July 2022.

²¹⁹ I/01, SEPROMI, 08 July 2022.

²²⁰ W/03, Impacts, 05 November 2021 (author's translation).

²²¹ W/06, Economic Impacts, 08 April 2022 (author's translation).

throats. (...) It's for us to reflect on this, we know a lot and we really need to talk a lot, in the face of these companies' advances.'

The FFP communities' testimonies highlight the unequal treatment they receive in relation to wind companies. The questions they raise shed light on a sense of injustice and disregard for their rights and history.

4.2. Consequential impacts of wind expansion

The following impacts, which are consequential to activities related to the wind energy expansion, stem from the analysis of the same previous materials (interviews, workshops, public hearing, literature, and documents) in the form of qualitative content analysis and systematic review, with the addition of a framing analysis. Although the analysis retrieved findings that go beyond those scrutinized below, it was decided to select issues that have not yet been discussed but had a relation with the findings portrayed by the newspaper media. As in chapter 4.1., the first round of qualitative content analysis was used to both paraphrase and codify the most important segments according to the theoretical framework (energy justice and decolonial thinking, chapter 3.2., Table 3). In the second round (chapter 3.2., Table 4), the segments were double-checked and codified with more detailed categories, related to the human rights impacts on the Fundo e Fecho de Pasto. After both codification processes, the results of the interrelated codified topics referred to *the right to health and to a healthy environment, the right to work*, followed by *women's rights*. From these findings, a systematic literature and document review was carried out to obtain contextual information to complement the results, which were combined with the framing analysis (chapter 3.2., Table 6). In order to report the results in a clearer manner, the structure of the following chapters starts with contextual aspects, which leads to specific findings of the qualitative content analysis in an integrative perspective, ending with the comparison of the framing analysis results.

4.2.1. On the right to health and to a healthy environment

A healthy environment is pivotal for human and non-human health and survival. Climate change, desertification, biodiversity loss, and land degradation negatively affect human well-being by endangering the provision of ecosystem services including freshwater availability

and food production²²². Moreover, it can affect non-humans by interfering in the ecosystem, leading to the extinction of flora and fauna.²²³ In terms of energy justice, the denominations intra- and intergenerational justice/equity have been integrated in the decision-making debates²²⁴ because the aim of energy justice is not only to consider the needs of the current but also of future generations. While the first refers to the fair distribution of benefits and burdens *within* the same generation, the latter regards to the fair distribution of benefits and burdens *across* generations. This means that the current generation should not overexploit natural resources or cause environmental damage that will negatively impact future generations. It also means that future generations should have the same access to resources and opportunities as the current generation. Regarding the analysis of the Fundo e Fecho de Pasto, the qualitative content data (Figure 8) suggests that the transition to wind energy in the semi-arid has brought a series of negative impacts to the areas where the FFP are located, and such actions affected not only their health but also the survival of future human and non-human generations. Concerning health-related issues, the data shows aspects of intragenerational concerns, recognitional (in)justices and intergenerational issues, which also relate with environmental issues, also leading to aspects of cosmopolitanism (in)justice and coloniality of being. On the other hand, the framing analysis points out only the positive characteristics of the wind energy expansion in Bahia.

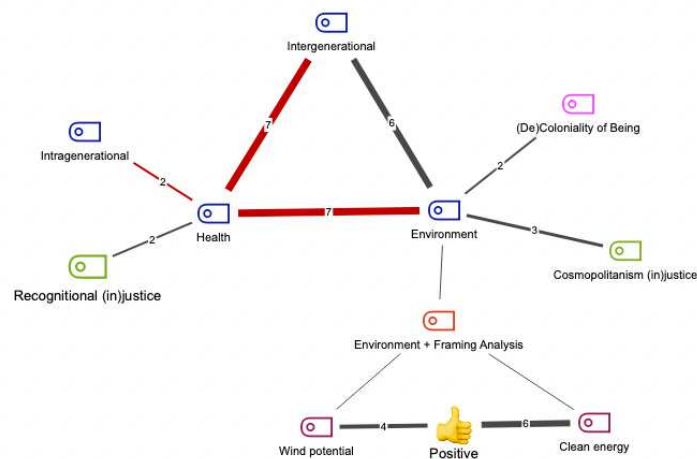


Figure 8: Visual results of intersected segments for health and environment through MaxMaps²²⁵

²²² IPCC, 'Climate Change and Land', [Website], *The Intergovernmental Panel on Climate Change*, n.d., <https://www.ipcc.ch/srccl/>

²²³ N. Almiron and C. Faria, 'Climate Change Impacts on Free-Living Nonhuman Animals. Challenges for Media and Communication Ethics', *Studies in Media and Communication* 7, no. 1 (29 May 2019), 37, doi:10.11114/smc.v7i1.4305

²²⁴ Sovacool et al., 'New Frontiers and Conceptual Frameworks for Energy Justice', 687–688

²²⁵ ref. Chapter 3.2, Table 4

In terms of intragenerational health-related concerns, one of the main issues raised by FFPs is the constant noise generated by the wind turbines, which can be disruptive and stressful for residents. The noise has been described as being similar to ‘*an airplane that never lands*’²²⁶ or ‘*an airplane that flies over your house 24 hours a day*.’²²⁷ Additionally, FFP communities have reported an increase in the incidence of thunderstorms²²⁸ in their lands, which can cause additional stress and disruption. Another concern raised by FFP communities²²⁹ is the impact of wind power plants specifically on the health of the communities. For example, the turbine propellers can kill bats, which are predators of the kissing bugs (barbeiros),²³⁰ leading to a resurgence of these insects in the region and an increased risk of Chagas disease, a serious condition that can lead to heart and digestive problems.²³¹ The destruction of habitats and the loss of keystone species can also disrupt the ecosystem, causing a cascade of negative effects on biodiversity and ecosystem services, which can also impact the health of traditional communities.

In *recognitional justice*, the acknowledgement of whether wind energy policy(ies) was/were centered on the FFP communities was analyzed. CDA²³² acknowledges the environmental impacts and communicated that they are working to slow down projects in preservation areas where ararinha-azul (*Cyanopsitta spixii*) and onça-pintada (*Panthera onca*) are endemic. However, CDA²³³ also stated that the impacts on the Traditional Communities are lower in comparison to the fauna and flora, as the noise of the wind turbines are not an issue to humans because the towers are not installed close to the houses (as opposed to what was stated by the FFP communities before). Moreover, during the public hearing,²³⁴ the FFP communities voiced a complaint addressed to the State’s Public Prosecutor’s Office (MPE-

²²⁶ W/03, Impacts, 5 November 2021 (author’s translation).

²²⁷ W/03, Impacts, 5 November 2021 (author’s translation).

²²⁸ W/03, Impacts, 5 November 2021.

²²⁹ W/03, Impacts, 5 November 2021.

²³⁰ According to the Virtual Library of the Brazilian Ministry of Health “In 1909, the Chagas disease was discovered by the Brazilian sanitarian Carlos Chagas who, at the time, was fighting malaria in the interior of Minas Gerais. The vector of the disease is the protozoan *Trypanosoma cruzi* - so named by Chagas to honor the scientist - which uses the barbeiro as host. The name "barbeiro", or barber, is due to the insect's habit of biting people in the region of the face”, available at <https://bvsmms.saude.gov.br/doenca-de-chagas-e-o-barbeiro-informacao-e-a-melhor-forma-de-erradicacao/>

²³¹ Centers for Disease Control and Prevention, ‘Parasites - American Trypanosomiasis (Also Known as Chagas Disease)’, CDC, accessed 20 February 2023, https://www.cdc.gov/parasites/chagas/gen_info/detailed.html#:~:text=Chagas%20disease%20is%20caused%20by,referred%20to%20as%20American%20trypanosomiasis.

²³² I/03, CDA, 11 July 2022.

²³³ I/03, CDA, 11 July 2022.

²³⁴ PB/01, Public Hearing, 20 July 2022.

BA) that the companies are exploiting the springs of the Itapicuru basin, forcing the communities to leave the traditionally occupied territories.

Concerning the intergenerational issues, the FFP communities reported the exacerbated use of water²³⁵ to build the structure of the wind turbine, despite the communities being very careful with water savings, as water scarcity in the semi-arid is very common. Still in terms of resources, the FFP communities²³⁶ mentioned the removal of truckloads of sand from the creek ‘Riacho Grande’, a tributary of the São Francisco River, to favor wind turbines’ bases. Regarding endemic flora, it was reported²³⁷ that soil degradation is contributing to the extinction of *Cangalheiro* (Latin *Lamanonia ternate Vell.*), a tree native to the Cerrado biome, which due to its endemic characteristic cannot survive in different soils and habitats. Furthermore, the FFP communities²³⁸ communicated that deforestation of areas for the installation of wind projects are gradually contributing to the extinction of another native tree, but in the Caatinga biome, which is the Licurizeiro (Latin *Syagrus coronata*), a source of food to arara-azul-de-lear (*Anodorhynchus leari*). In this sense, another bird that is being endangered by the wind towers is jaó-do-sul (*Crypturellus noctivagus*).

In *cosmopolitanism justice*, the intergenerational effects of the wind expansion on FFP were considered. The FFP²³⁹ communities communicated their concerns in relation to their own and their families’ future:

‘It is an uncertain future, because when I was a child, I could see the devastation that took place here in the Caatinga, for the production of beans. (...) Today, where are they producing beans? And then I see the same situation with wind projects, which are now invading the mountain ranges. After they devastate the mountain, what will be left for us and the animals? So, people are only thinking about capitalism, that's why I see a very compromised future’, and ‘I see that the future is compromised, when it comes to environmental issues, because we realize that in these areas where wind farms are being implemented, they are devastated areas, (...). We'll have money, but in the future, we won't have water, we won't have a pleasant climate, we'll be toasting under the sun because of deforestation, so it's sad (...).’

²³⁵ W/03, Impacts, 5 November 2021.

²³⁶ W/03, Impacts, 5 November 2021.

²³⁷ W/03, Impacts, 5 November 2021.

²³⁸ W/03, Impacts, 5 November 2021.

²³⁹ W/07, Moving Forward, 10 May 2022 (author’s translation).

In *coloniality of being*, aspects of acknowledgement, or the lack of, regarding subjective (i.e. erasure of local histories), individual, and collective identities (i.e. cultural diversity) of the Fundo e Fecho de Pasto communities within the wind energy expansion were scrutinized. In the public hearing²⁴⁰, the civil society questioned why clean energies are violating human rights and environmental issues, on which everyone is dependent for survival. They also reported an interference with their religious and spirituality practices²⁴¹, mentioning that the arrival of wind farms inhibited the freedom of religion of many communities, who need these territories in balance to practice their spirituality. The FFP communities²⁴² also reported that they practice low impact extractivism, which consists of small-scale agriculture, harvesting seeds and medicinal herbs, as well as breeding loose animals in the area. The devastation of natural resources not only jeopardizes the FFP communities' health and subsistence but also the survival of endangered species and the preservation of the ecosystem surrounding the semi-arid (Cerrado and Caatinga biomes).

On the other hand, this interrelatedness is not portrayed by the newspaper sample analyzed. Instead, the articles²⁴³ highlight the positive eco-efficient initiatives of the private sector in alignment with the United Nations Sustainable Development Goals (SDG) concerning energy efficiency. These initiatives seek to reduce energy consumption and promote the use of renewable energy, aiming to achieve carbon neutral companies. While these initiatives are essential in promoting sustainable development, they are often presented in the newspaper media in isolation, without addressing the negative impacts that corporate activities can have on local/traditional communities and their environment. The negative impacts were not given enough attention in media coverage, leading to an incomplete picture of renewable energy initiatives.

4.2.2. On the right to work

According to the Renewable Energy and Jobs Annual Review 2022,²⁴⁴ Brazil ranks as the second largest country to produce direct and indirect jobs in renewable energy. Focusing on

²⁴⁰ PB/01, Public Hearing, 20 July 2022.

²⁴¹ PB/01, Public Hearing, 20 July 2022.

²⁴² PB/01, Public Hearing, 20 July 2022.

²⁴³ N/32, Indústria baiana avança em ações que consolidam os critérios de ESG, 25 May 2022; N/19, Braskem fortalece iniciativas de eficiência energética, 27 May 2021; N/18, Parque eólico em Campo Formoso, que vai fornecer energia para Braskem, entra em operação, 07 May 2021.

²⁴⁴ International Renewable Energy Agency and International Labor Organization, *Renewable Energy and Jobs: Annual Review 2022* [Annual Review 2022] (Abu Dhabi and Geneva, 2022), 31, https://www.irena.org/-/media/Files/IRENA/Agency/Publication/2022/Sep/IRENA_Renewable_energy_and_jobs_2022.pdf?rev=7c0be3e04bfa4cddaedb4277861b1b61

wind energy alone, Brazil stands in the fourth position,²⁴⁵ producing 63.800 jobs.²⁴⁶ The most important are in construction, followed by Operation and Maintenance (O&M). The same report states that 80% of the Brazilian wind installed capacity is in the country's Northeast, including Bahia, where wind equipment manufacturing plants are also hosted.²⁴⁷ In the case of the wind energy expansion in Bahia's semi-arid, the offered jobs are welcomed by the traditional communities,²⁴⁸ however, the duration of the job is short-term. Another source of income provided by the wind energy expansion are the lease contracts analyzed in the chapter 4.1.2., which, as observed, present several shortcomings. The development of a wind project in Brazil²⁴⁹ has four phases described below (Figure 9):

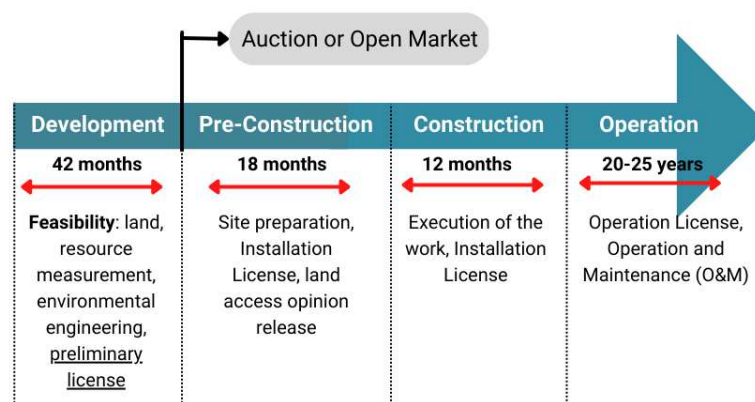


Figure 9: Development process of a wind farm²⁵⁰

In all these phases, the jobs are of temporary nature. This implies that jobs created during construction, which is the period when the greatest number of workers are concentrated, lasts on average 12 months;²⁵¹ furthermore, when the project enters the last phase, there is a drastic decrease of labor force²⁵² and the public sector is aware of this fact. SDE²⁵³ reported that in terms of direct employment in the long-term, few positions are available, which are all well-remunerated. Consequently, a more qualified labor force, with a better income level,

²⁴⁵ International Renewable Energy Agency and International Labor Organization, *Annual Review 2022*, 21

²⁴⁶ International Renewable Energy Agency and International Labor Organization, *Annual Review 2022*, 31

²⁴⁷ International Renewable Energy Agency and International Labor Organization, *Annual Review 2022*, 33

²⁴⁸ W/03, Impacts, 5 November 2021.

²⁴⁹ A. Silva et al., 'Energias Renováveis: Caminhos e Descaminhos', [Website], 2022, 37, <https://www.dossienergiasrenovaveis.com.br/>

²⁵⁰ Santos et al., *Dossiê: Energias Renováveis Na Bahia: Caminhos e Descaminhos*, 37 (Author's version and translation)

²⁵¹ Santos et al., *Dossiê: Energias Renováveis Na Bahia: Caminhos e Descaminhos*, 37

²⁵² Santos et al., *Dossiê: Energias Renováveis Na Bahia: Caminhos e Descaminhos*, 37

²⁵³ I/05, SDE, 14 July 2022.

generates a higher level of demand for the purchase of products and services, thus creating indirect employment opportunities. Another indirect impact comes from the taxes collected by the municipality, which escalate during the project due to the increase in demand and should be reverted to local development. Moreover, for CDA,²⁵⁴ during the construction phase, there is an increase in direct opportunities, but all “very momentary.”²⁵⁵ The qualitative content data (Figure 10) presented distributive (in)justices associated with the right to work, and positive results of the framing (Investment and Employment, chapter 3.2., Table 5) associated with the topic.

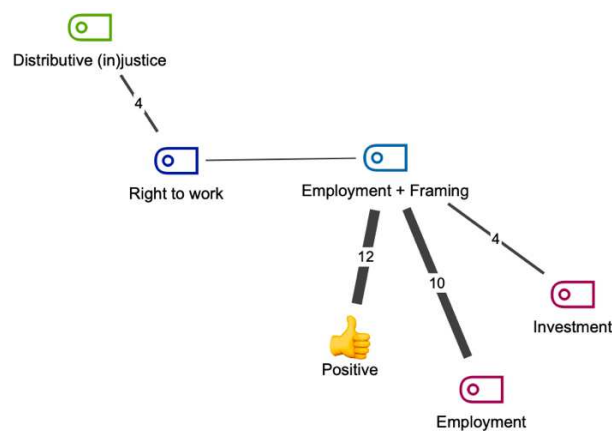


Figure 10: Visual results of intersected segments for right to work through MaxMaps²⁵⁶

In *distributive justice*, the analysis encompassed economic, social policies, as well as affordability and accessibility targeted to the FFP in the wind energy production. The FFP²⁵⁷ mentioned that in order to be benefited by the wind companies, they negotiated a “Term of Commitment”, by the means of Fundo e Fecho de Pasto Associations, to invest in social projects locally, which would have to start at the same time as the wind projects and by the time the project was over, the social projects would have to be fully functioning too; regarding employment opportunities, the FFP Associations also demanded that local labor must be prioritized. However, the FFP communities also communicated²⁵⁸ an example occurred in Campo Largo, where these temporary jobs were created, but after the conclusion

²⁵⁴ I/03, CDA, 11 July 2022.

²⁵⁵ I/03, CDA, 11 July 2022.

²⁵⁶ ref. Chapter 3.2, Table 4

²⁵⁷ W/06, Economic Impacts, 08 April 2022.

²⁵⁸ W/03, Impacts, 5 November 2021.

of the construction phase the work was over and everyone was dismissed. Moreover, during the public hearing, a community affected by current wind power installations contested:

*'You talk about wind development, that it generates jobs, that it is good business; for us, it is not good business because we are living hell from the wind farms. Who says that the wind farm generates jobs, I'm sorry, but they are lying, because we are inside a wind farm and we are having difficulties and we don't have access to the policies that they say they create in the community.'*²⁵⁹

Regarding the role of media in publicizing information on the process of facility installations, a FFP community²⁶⁰ mentioned:

'When the construction starts, it creates a whole political fact, it goes to the media that everyone is employed; this favors the companies [showing] that they are in fact bringing progress to the city. I think that the issue of communication still needs a lot of improvement, in order to undo the discourse of these companies - job creation, clean energy - and how to contradict this issue of renewable energy, right?'

This statement corroborates with the analysis of the newspaper article framing analysis. In terms of work opportunities/employment, all the results were framed positive. The majority mentions the existence of direct or indirect jobs and are associated with high investments from companies to develop and foster wind energy in the region. In regards to investments, an article²⁶¹ states that there will be a total of 36.300 job opportunities created and R\$ 28 billion invested in various locations in Bahia. Additionally, in terms of direct and indirect employment, the report states that the Brazilian Ministry of Mines and Energy predicts a 125% expansion of wind energy by 2026, with 29% of the country's energy coming from wind power. The Brazilian Association of Wind Energy (ABEEólica) estimates that for each new megawatt installed, 15 direct and indirect jobs will be created. Furthermore, the Brazilian Agency for Industrial Development (ABDI) predicts that by 2026, the wind power industry has the potential to create 200.000 new direct and indirect jobs.²⁶²

²⁵⁹ PB/01, Public Hearing, 20 July 2022 (author's translation).

²⁶⁰ W/03, Impacts, 5 November 2021 (author's translation).

²⁶¹ N/14, Novos investimentos devem trazer R\$ 28 bilhões para a Bahia, 08 October 2020.

²⁶² N/03, Bahia lidera o Brasil na corrida dos ventos, 30 April 2019.

4.2.3. On women's rights

The term intersectionality has been included in energy justice decision-making debates,²⁶³ shedding light on the importance of analyzing and addressing human rights issues within the energy system in an intertwined and inclusive manner. Although the authors²⁶⁴ include elements such as race, class, power, and the treatment of non-humans, in the current case of the Fundo e Fecho de Pasto the aspect of gender will be utilized to analyze women's rights in relation to wind energy projects. Moreover, from a decolonial thinking perspective, it is not only relevant but also a need to recognize and undo hierarchical structures, including related to gender imbalances²⁶⁵, which are intertwined with forms of coloniality and global capitalism. The qualitative content data (Figure 11) presents coloniality of being associated with women's rights, and positive results of the framing (chapter 3.2., Table 6) associated with the topic.

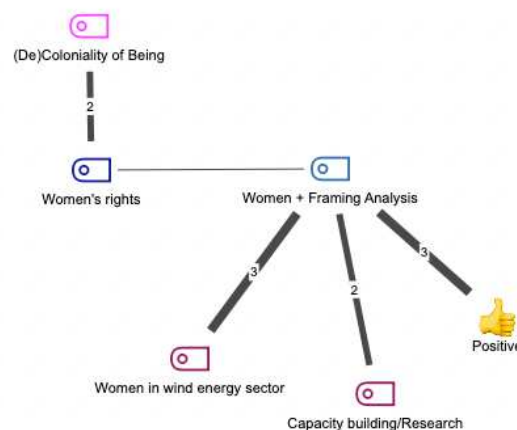


Figure 11: Visual results of intersected segments for women's rights through MaxMaps²⁶⁶

In *coloniality of being*, aspects of acknowledgement, or the lack of, regarding subjective (i.e. erasure of local histories), individual, and collective identities (i.e. cultural diversity) of the Fundo e Fecho de Pasto within wind energy transition were scrutinized. It was reported by the civil society in the public hearing,²⁶⁷ the case of so-called “*the children of the wind*”. The expression refers to children born from women and girls that get pregnant from wind

²⁶³ Sovacool et al., ‘New Frontiers and Conceptual Frameworks for Energy Justice’, 687–688

²⁶⁴ Sovacool et al., ‘New Frontiers and Conceptual Frameworks for Energy Justice’, 687–688

²⁶⁵ Mignolo and Walsh, *On Decoloniality: Concepts, Analytics, Praxis*, 16

²⁶⁶ ref. Chapter 3.2, Table 4

²⁶⁷ PB/01, Public Hearing, 20 July 2022.

company's employees who work at the time of the implementation of these projects and leave after the project's construction is over. It was communicated in the event, that employees usually promise a better life or marriage to these women and girls, but the children end up being raised without a father. In addition, the wind energy projects also cause other serious problems related to women, such as the increase in violence, and transmission of sexual diseases (STDs).²⁶⁸ The FFP community of Campo Formoso explicitly mentioned:

*'12, 13, 14, 15-year-old girls are pregnant (...). So, it is very important that we start paying attention to this, I am saying this because we are living this, and it hurts to have to say this here. But why is this happening to us? And then the most important question, for whom is all [wind energy] this?'*²⁶⁹

the same member of the community furthered the subject in another workshop by stating:

*'we have children taking care of children. It is a very serious situation here in our region (...). For example, this is a fact that nobody sees, the public authorities don't see, they don't put it in the reports even, to not be able to demonstrate, to not be able to say that the wind power is a problem for us, for the municipality.'*²⁷⁰

The materials collected and used in this chapter did not provide further information regarding the subject. To investigate more details, it would be necessary to conduct further evidence. Yet, such an alarming situation cannot be ignored, a reason why it was chosen to be added in this research in combination with the framing analysis.

On the opposite direction, a sample of newspaper media provided positive views of wind projects locally, emphasizing the employability of women in the energy sector. According to article N/39,²⁷¹ a wind company stated *'we set up the project and adopted the premise of local labor. We trained 200 local people, hired 100, and the other 100 were trained (...). Most of them are women.'* In addition, demands for other services have arisen because of the wind operation, such as daycare facilities, which have been taken care of by an agreement between the company and the city hall of the municipality where it is located, allowing 150

²⁶⁸ Santos et al., *Dossiê: Energias Renováveis Na Bahia: Caminhos e Descaminhos*, 20

²⁶⁹ W/03, Impacts, 05 November 2021 (author's translation).

²⁷⁰ W/06, Economic Impacts, 08 April 2022 (author's translation).

²⁷¹ N/39, Empresas buscam resultados além do lucro, 19 October 2022 (author's translation)

children (from 0 to 3 years old) to be enrolled in full-time education. Another wind company has plans to ‘*train women to work in the operation and maintenance of wind projects,*’²⁷² acknowledging that the energy sector is predominantly male. The company stated that it has a percentage of 32% of positions filled by women, aiming to fill 30% of the top leadership positions by 2030; yet it was not mentioned whether these positions would be from the local population. Furthermore, capacity-building initiatives are being widespread in the state of Bahia, attracting women to expand their knowledge. In a newspaper articles, a woman stated the following:

*‘I am taking a course in wind energy, and I hope to work with this. I am happy to be part of this female growth in a field that used to be considered exclusively male. I believe that this trend should only increase because we are fully capable of making a difference in these markets as well.’*²⁷³

While the employment opportunities for women in the renewable energy sector are certainly positive, it is important to acknowledge that the development of wind projects can also have negative impacts on traditional communities, especially on women. The framing analysis shows that media coverage often overlooks these impacts in favor of portraying the benefits of wind energy expansion and addressing gender inequality in the sector.

4.3. Limitations

In this research, several limitations have been identified that may impact the validity of the findings, however they were mitigated in the best way possible in order to achieve better research results.

Although a combination of different methodological approaches was used, important details may still be left out from the analysis. For this reason, the choice of putting the needs of the Fundo e Fecho de Pasto Communities at the center of the analysis was important, because focusing on the impacts of wind energy expansion on them was essential to provide a different view of the case, aiming at possible interventions (chapter 6).

²⁷² N/29, Complexo eólico baiano terá apenas mulheres na operação e manutenção, 11 March 2022 (author’s translation)

²⁷³ N/16, Através de cursos rápidos, mulheres ganham espaço em profissão antes dominadas por homens, 11 March, 2021 (author’s translation)

The analyzed content was limited to the materials available, and it was based on members of the Fundo e Fecho de Pasto communities that voiced their concerns during specific events. A larger sample, with more FFP communities would provide more generalizable results. Additionally, it would be valuable to directly engage with the communities to better understand their perspectives and experiences.

It is also important to acknowledge that there was a lack of time to do all interviews intended, especially with the Public Prosecutor's Office (MPE-BA), the private sector and *grileiros*, but this was mitigated by incorporating a newspaper framing analysis to have a broader view of the case. Moreover, the study was conducted over a limited time-period, and further research is needed to examine the long-term impacts of wind energy expansion on the human rights of communities.

Finally, the value provided by this research relies on the process of (re)learning, (re)signifying and (de)constructing reality through progressive perspectives that aim to also change the current research *status quo*, by including and focusing on the voices of those who are usually marginalized.

5. Discussions

This thesis aimed to investigate the impact of wind energy expansion on the human rights of the Fundo e Fecho de Pasto communities in Bahia by centering on their needs and voices in the analysis. The methodology (chapter 3) used to retrieve the results followed closely the objectives and research question in a system thinking manner, which assisted in obtaining a thorough overview (chapter 4). The findings of this research reveal that while wind power has the potential to provide clean and renewable energy, it can also have negative impacts, particularly related to the FFP communities' lands, their self-determination (recognition), their right to health and to a healthy environment, their right to work, and women's rights. The following chapter will explore these results in more detail and consider their implications for policy and practice.

5.1. Land rights: more than property rights

Regarding land (chapter 4.1.1.), the analysis identified the lack of regularization as a critical problem, which started during colonial times and is perpetuated until today, leading to land issues such as enticement (cooptação) and land grabbing (grilagem). Despite positive efforts made by the institutions dealing with land in Bahia (CDA and PGE-BA) to regulate public

‘vacant lands’ through the NI 01/2020, which are also traditionally occupied and collectively used by the Fundo e Fecho de Pasto communities, the findings show the need for more just measures and mechanisms to equilibrate the benefits of both the wind power companies and the FFP communities. This requires the implementation of policies and programs in compliance with International Labor Organization (ILO) Convention 169. Brazil has ratified²⁷⁴ ILO Convention 169, which sets standards for the rights of Indigenous and tribal peoples. The instrument provides a framework to promote and protect the rights of indigenous and other traditional communities, with a focus on their rights to self-determination, land, resources, and culture. According to Articles 13 to 19²⁷⁵ of the instrument, land is essential for traditional communities as it protects their rights to own, use, and manage their ancestral lands, territories, and resources. This includes the acknowledgement of their rights to customary land tenure systems, as land consists of the basis of an essential part of their cultural identity, livelihoods, and spiritual well-being. By securing the traditionally occupied lands of the Fundo e Fecho de Pasto communities, it creates a possibility to pave the way to prevent several issues, such as enticement (cooptação), land grabbing (grilagem), displacement, exploitation, and discrimination against traditional communities, as well as access to resources.

In reference to energy justice, recognitional injustices were observed, particularly about the extensive support given from the public sector to wind power companies, which is substantiated by procedural injustices, such as the lack of participation of the FFP in energy transition policies within the territory they traditionally occupy. The findings related to energy injustices indicate the lack of participation of the Fundo e Fecho de Pasto, particularly in the case of the publication of NI 01/2020 (chapter 4.1.1.). One of the main principles of the ILO 169 is the right of indigenous and tribal peoples to participate in decisions that affect their lives and communities, enshrined, for instance, in articles 2, 7, and 15.²⁷⁶ The convention requires that governments consult with these communities in order to obtain their free and informed consent before undertaking any projects or activities that may affect their lands, resources, or way of life. It also obliges the States to establish mechanisms for the

²⁷⁴ International Labor Organization, ‘Ratifications of C169: Indigenous and Tribal Peoples Convention, 1989 (N. 169)’ [‘ILO’], [Website], *Normlex: Information System on International Labor Standards*, n.d., accessed 09 February 2023, https://www.irena.org/-/media/Files/IRENA/Agency/Publication/2022/Sep/IRENA_Renewable_energy_and_jobs_2022.pdf?rev=7c0be3e04bfa4cddaedb4277861b1b61

²⁷⁵ International Labor Organization, *Indigenous and Tribal Peoples Convention, 169*, 1989, https://www.ilo.org/dyn/normlex/en/f?p=NORMLEXPUB:12100:0::NO::P12100_ILO_CODE:C169

²⁷⁶ International Labor Organization, *Indigenous and Tribal Peoples Convention*

participation of indigenous and tribal peoples in decision-making processes that affect them, and to ensure that their rights are respected and protected. By not including the FFP communities in the decision-making process related to wind projects, the Brazilian government has failed to uphold the standards set out by the convention.

Since land regularization was also acknowledged as a colonial issue, the analysis identified aspects of coloniality of power in economic and political terms (chapter 4.1.1). The results shed light on companies' imposition of rules to the communities, competition for land security between the private sector and the FFP, and the public sector's urgency to regularize land after pressure from the private sector. This disproportionate support given by the public sector to wind energy companies to the detriment of the Fundo e Fecho de Pasto reflects Walter Mignolo's concept of 'control of the economy' (chapter 2.2.). The concept refers to the idea that the dominant economic systems and structures in the world have been shaped by colonial practices and continue to perpetuate certain power dynamics, which includes the imposition of Western-centric economic models on marginalized people without regard for their local cultures, customs, and knowledge systems.²⁷⁷ It also involves a critique of the Eurocentric notion of development and the notion of 'modernization' as a way of measuring progress that has been imposed on marginalized people, which continues to justify the exploitation of resources and labor.²⁷⁸ The analysis supports that the land regularization process in this case of the FFP communities is not only a coloniality of power issue but also a manifestation of the control of the economy. This emphasizes the need for the FFP to have more agency and control over their own interests, based on their own worldviews and values. Although land rights are not usually associated with human rights,²⁷⁹ J eremie Gilbert posits that there are important human rights issues related to land rights, such as access to food, adequate housing, and development, as well as economic security.²⁸⁰ The author also mentions that land rights have historically been an instrument of oppression and colonization, stating that access and rights to land are often stratified and based on hierarchical systems where the marginalized do not have security of land tenure.²⁸¹ The Inter-American Human Rights System, in comparison to international and other regional systems, is very advanced on the matter of right to property, as it embraces a different

²⁷⁷ Quijano, 'Coloniality of Power, Eurocentrism, and Latin America'

²⁷⁸ Quijano, 'Coloniality of Power, Eurocentrism, and Latin America'

²⁷⁹ J. Gilbert, 'Land Rights as Human Rights: The Case for a Specific Right to Land', *Sur: International Journal on Human Rights* 10, no. 18 (2013), 115

²⁸⁰ Gilbert, 'Land Rights as Human Rights: The Case for a Specific Right to Land', 115

²⁸¹ Gilbert, 'Land Rights as Human Rights: The Case for a Specific Right to Land', 115

approach which, to a certain extent, distances itself from the Western idea. The Inter-American Court interprets the right to property, enshrined in article 21²⁸² of the American Convention on Human Rights (ACHR), not only as an individual right but also as a right that encompasses indigenous and traditional modes of living, and communal usage of the land, therefore enlarging and adapting the scope of this right. For the Inter-American Court, the relationship between indigenous peoples and traditional communities, their territories' natural resources and intangible components, is a matter of protection under Article 21.²⁸³ For instance, in the paradigmatic case *Awas Tingni vs Nicaragua*²⁸⁴ the Court concluded that Nicaragua had not adopted adequate domestic legal measures to allow for the demarcation and titling of indigenous community lands. According to the considerations of the Court, paragraph 149 states:

*‘Given the characteristics of the instant case, some specifications are required on the concept of property in indigenous communities. Among indigenous peoples there is a communitarian tradition regarding a communal form of collective property of the land, in the sense that ownership of the land is not centered on an individual but rather on the group and its community. Indigenous groups, by the fact of their very existence, have the right to live freely in their own territory; the close ties of indigenous people with the land must be recognized and understood as the fundamental basis of their cultures, their spiritual life, their integrity, and their economic survival.’*²⁸⁵

The Inter-American Court's jurisprudence in this matter, seems to acknowledge the use of cultural transformation and political mobilization to better translate the world's diversity, going beyond the dichotomy of universalism and cultural relativism in a more

²⁸² Article 21: (1) *Everyone has the right to the use and enjoyment of his property. The law may subordinate such use and enjoyment to the interest of society.* (2) *No one shall be deprived of his property except upon payment of just compensation, for reasons of public utility or social interest, and in the cases and according to the forms established by law.* (3) *Usury and any other form of exploitation of man by man shall be prohibited by law.*

²⁸³ M. Melo, 'Recent Advances in the Justiciability of Indigenous Rights in the Inter-American System of Human Rights', *Sur: International Journal on Human Rights* 4, no. 3 (2006), 34–36, <https://sur.conectas.org/en/recent-advances-justiciability-indigenous-rights-inter-american-system-human-rights/>

²⁸⁴ *Mayagna (Sumo) Awas Tingni Community v. Nicaragua* Mayagna (Sumo) Awas Tingni Community v. Nicaragua (Inter-American Court of Human Rights 2001)

²⁸⁵ *Mayagna (Sumo) Awas Tingni Community v. Nicaragua*, par. 149 (Inter-American Court of Human Rights 2001)

comprehensive manner. The case relates to An-Naim's (chapter 2.2.) call for transformative action that addresses the structural inequalities and power imbalances that have led to human rights violations. In this sense, the case of the Fundo e Fecho de Pasto communities and the slow pace for the creation of appropriate measures and mechanisms to secure their traditional lands sheds light on the importance of land rights as an inherent human rights issue, since their lands are linked with several of their other rights, such as right to life, right to adequate housing, right to food, right to work etc.

The colonial roots of negligence in land regularization have contributed to land disputes and enticement, which have caused land grabbing, thus hindering the Fundo e Fecho de Pasto's subsistence and their self-determination. The research also revealed recognitional and procedural injustices, mostly regarding the lack of participation of the FFP in the creation of Normative Instruction 01/2020, shedding light on aspects of coloniality of power of both the state and the capitalist system through the control of the economy, which reinforces the power dynamics that are detrimental to the FFP communities' rights.

5.2. Discrimination and subalternity

In relation to self-determination/recognition (chapter 4.1.2.), despite positive efforts in the domestic realm, most notably in the Bahia State Constitution (1989) and initiatives made by SEPROMI and other governmental institutions (chapter 4.1.2.), the analysis points out that the lack of, or the delay in, the recognition process of the Fundo e Fecho de Pasto communities as a traditional community leads to aspects of historical/structural, and institutional discrimination.

The question of discrimination in Brazil is complex and stems from the Brazilian social imaginary that there is no racial discrimination in the country, as its composition encompasses three distinct racial groups: European, African, and Indigenous. This concept, known as the "theory of three races,"²⁸⁶ emerged during the colonial period, and it was used to justify the enslavement of people of African descent, as well as the forced labor of Indigenous people. The theory of three races in Brazil was also used to justify the policy of "whitening" the population through immigration, as well as the forced assimilation of Indigenous peoples and Afro-Brazilians. This policy aimed to promote the "superiority" of European culture and to reduce the proportion of people of African and indigenous descent in the population. Although not effective, as according to the Brazilian Institute of

²⁸⁶ D. Ribeiro, *O Povo Brasileiro: a formação e o sentido do Brasil*, 2nd ed. (São Paulo, 1995), 81–166

Geography and Statistics (IBGE)²⁸⁷ 56% of the Brazilian population declare themselves as black or brown, the theory still leaves indelible marks in the country. In recent years, there has been a growing movement to acknowledge and reject the theory of three races in Brazil, and to recognize the diversity and complexity of racial identities in the country, as well as to fight against the structural and institutional discrimination that affects many Afro-Brazilians and indigenous peoples. Sílvia Almeida²⁸⁸ defines racial discrimination as

‘the attribution of differential treatment to members of racially identified groups. Therefore, the fundamental requirement of discrimination is power, that is, the effective possibility of using force, without which it is not possible to attribute advantages or disadvantages on account of race. Thus, discrimination can be direct or indirect.’

Direct discrimination is the overt rejection of individuals motivated by their racial condition; it is the treatment in a less favorable manner in a comparable situation. On the other hand, indirect discrimination is a process in which the situation of marginalized groups is either ignored or put in disadvantage by apparently neutral provisions or practices.

In the case of the Fundo e Fecho de Pasto communities, the data suggests that the delay in the recognition process can have a significant impact on the community's rights. For instance, without official recognition, the community is denied access to land regularization and other resources and public policies that are essential for their livelihood. Additionally, the delay in recognition can also lead to a lack of representation and political power, making it difficult for the FFP communities to advocate for their rights and interests. For instance, the FFP communities may not have representation in local government or in other decision-making instances, leading to a lack of influence over decisions that have a direct impact on them. This further perpetuates the discrimination of the FFP communities and undermines the efforts to achieve equality and justice (chapters 2.1. and 2.2.). Therefore, the recognition of traditional communities is crucial in order to ensure that their rights are protected and that they are able to fully participate in the decision-making process. Moreover, the FFP communities reported²⁸⁹ their discomfort with the fact that wind energy companies tend to

²⁸⁷ Instituto Brasileiro de Geografia e Estatística, ‘Pesquisa Nacional Por Amostra de Domicílios Contínua Trimestral’ [‘IBGE’], [Website], accessed 11 February 2023, <https://educa.ibge.gov.br/jovens/conheca-o-brasil/populacao/18319-cor-ou-raca.html>

²⁸⁸ S. Almeida, *Racismo Estrutural*, São Paulo, Sueli Carneiro; Pólen, 2019, p. 24-37.

²⁸⁹ W/06, *Economic Impacts*, 08 April 2022.

treat them in a subordinate manner. Such position is observed, not only, but particularly in the case of lease contracts and abusive clauses (chapter 4.1.2), which remain an obstacle to the fulfillment of the FFP's human rights within wind energy expansion. As the philosopher Judith Butler suggests, the condition of subalternity of certain subjects, especially those with evident social markers, such as race and social class (i.e. Traditional Communities), causes their lives to be considered banal. In this sense, oppressive actions carried out against the FFP communities are considered 'ordinary', without greater attention from the public sector to investigate the underlying motivations behind such acts, thus perpetuating, for instance, cases of abusive lease contracts (Chapter 4.1.2.).

Concerning the energy justice framework, distributive injustices were identified, especially with respect to the lack of investments within the areas that host wind projects, as well as in the rise of energy prices in the FFP communities. In the case of investments, the data suggests that the communities are not usually contemplated by social, economic, and cultural projects/infrastructures, unless they firmly position themselves and demand such actions through contracts and negotiations (chapter 4.1.2) with the wind companies. Recognitional injustices were also observed, particularly in the slow efforts to create or amend specific legislation to better regulate the FFP communities' rights, which can further perpetuate the discrimination against the communities. Without specific laws and regulations to protect the FFP communities' rights, the community may be at a constant disadvantage, even in comparison to other Traditional Communities, such as Indigenous and Quilombolas, who have more robust – however still fragile – legal protections. The lack of a legal framework undermines the community's ability to negotiate and fight for their rights, leading to a continued cycle of discrimination and marginalization. To address these issues, it is important to ensure that the community is adequately involved in the decision-making process (ref. chapter 5.1.) for energy projects that affect them, as well as to provide them with the necessary resources and support to benefit from the projects. Additionally, specific legislation and regulations that protect the rights of the Fundo e Fecho de Pasto communities should be put in place and implemented effectively. This will help to promote energy justice and ensure that the community has a fair and equitable share of the benefits and burdens, and not only the burdens of wind energy production.

Concerning coloniality of power, it was observed that there were times that wind companies would be able to regulate land for wind energy production, despite the FFP communities having the right to request them, due to their better juridical apparatus to plead before the

notaries and the government,²⁹⁰ revealing, to a certain extent, that the development of wind energy projects has prioritized the interests of large corporations over the needs and rights of traditional communities. In terms of coloniality of being, the analysis identified the beginning of erasure of the Fundo e Fecho de Pasto's grazing methods, like the fencing of areas, thus limiting the practice of transhumance. The process of cultural erasure can be understood as a way to exert control and authority over the traditional communities, and to assert dominance. Thus, in a decolonial perspective, the erasure of FFP's traditionality is seen as an integral part of the broader project of oppression and domination and is closely linked to the ongoing legacy of Walter Mignolo's coloniality of power matrix, such as in the control of authority (chapter 2.2.).

In the land (4.1.1) and recognition (4.1.2.) chapters, the data suggests that both issues are considered inherent demands from the Fundo e Fecho de Pasto communities and are deeply interconnected topics. The analysis identifies that without formal recognition, the FFP cannot secure their land, and without land, they are not considered a traditional community, since one of their main characteristics (defined in Law 12910/2013; chapter 4.1.1.) relates to the land they traditionally occupy and the communal aspects of these territories. Moreover, as illustrated, the relation of racial discrimination and socio-economic marginalization is a result of a complex phenomenon that continues to exclude minorities in Brazil. However, by recognizing themselves and being recognized through their self-determination, in particular by the guarantee of their certification processes, the Fundo e Fecho de Pasto communities can gather forces to resist, and thus maintain their traditional way of living on the lands they traditionally occupy. Land regularization and formal recognition can create benefits for both the Fundo e Fecho de Pasto communities and energy companies in wind production by providing clear and legally recognized land tenure rights and boundaries. This can facilitate fair negotiations and agreements for compensation between traditional communities and wind energy companies for the use of land for wind energy development. It can also help to promote the sustainable development of wind energy and build trust and cooperation between traditional communities, the public sector, and wind energy companies.

²⁹⁰ W/06, Economic Impacts, 08 April 2022.

5.3. Intra- and intergenerational effects on health and the environment

Regarding health and healthy environment (chapter 4.2.1.), the analysis identified impacts not only on the Fundo e Fecho de Pasto subsistence and health, but also on the semi-arid ecosystem as a whole. Relevant to this issue, it is important to note the adoption, on October 18, 2021, of the Human Rights Council resolution A/HRC/RES/48/13,²⁹¹ approved by the UN General Assembly. This instrument declares that the right to a clean, healthy, and sustainable environment is a human right. Although not legally binding, it is an important step to address problems related to climate change, loss of nature and biodiversity, pollution, and waste. Following this approval, the Brazilian Supreme Court (STF) became the first to recognize the Paris Agreement,²⁹² which is a legally binding document, as a human rights treaty. In the Brazilian case, human rights treaties have supra-legal status, ranking above ordinary laws. According to Judge Luís Roberto Barroso, environmental treaties also constitute a type of human rights treaty, and can also be considered supra-national²⁹³. Although it is possible under Brazilian law to equate human rights treaties with constitutional norms, they must go through a special procedure to be adopted as constitutional amendments,²⁹⁴ which has not yet been done in the case of the Paris Agreement; yet the supra-legal status, which contributes to a better legal enforcement, is in force.

In the case of the interrelation between the health of the Fundo e Fecho de Pasto communities and the environment, the Paris Agreement, which was adopted in 2015 by the United Nations Framework Convention on Climate Change (UNFCCC), contains several articles that mention the importance of engaging traditional communities and protecting their rights, in efforts to combat climate change. For instance, one of the preamble clauses²⁹⁵ recognizes that climate change is a global issue and that all parties should take into account their responsibilities to respect, promote and consider human rights, including the right to health, the rights of indigenous peoples, local communities, migrants, children, persons with

²⁹¹ Human Rights Council, *The Human Right to a Clean, Healthy and Sustainable Environment*, Resolution A/HRC/RES/48/13, 18 October 2021, <https://documents-dds-ny.un.org/doc/UNDOC/GEN/G21/289/50/PDF/G2128950.pdf?OpenElement>

²⁹² I. Sarlet and T. Fensterseifer, 'Guardian of the Amazon: On the Brazilian Supreme Court's "Climate Fund Case" Decision', [Blog], *Verfassungsblog: On Matters Constitutional*, 6 July 2022, doi:10.17176/20220707-052522-0.; I. Kaminski, 'Brazilian Court World's First to Recognise Paris Agreement as Human Rights Treaty', [Website], *Climate Home News*, 7 July 2022, <https://www.climatechangenews.com/2022/07/07/brazilian-court-worlds-first-to-recognise-paris-agreement-as-human-rights-treaty/>

²⁹³ Sarlet and Fensterseifer, 'Guardian of the Amazon: On the Brazilian Supreme Court's "Climate Fund Case" Decision'

²⁹⁴ República Federativa do Brasil, *Constituição Federal*, 1988, Art. 5, par. 3

²⁹⁵ United Nations Framework Convention on Climate Change, *Paris Agreement*, 2016, entered into force 04 November 2016, https://unfccc.int/sites/default/files/english_paris_agreement.pdf

disabilities and those in vulnerable situations, as well as the right to development, gender equality, women's empowerment and equity across generations when addressing this problem²⁹⁶. Article 12 encourages the participation of relevant stakeholders, including local and indigenous communities, in the implementation of the agreement. Article 13 requires countries to regularly report on their efforts to implement the agreement, including information on how they are involving stakeholders, including local and indigenous communities, in these efforts. The Paris Agreement places a strong emphasis on the need to engage and empower traditional communities, recognizing that their participation and capacity-building is crucial for successful climate action. Having recognized the Paris Agreement as a human rights treaty, Brazil is now legally bound to abide by its provisions, as the instrument has a supra-legal status, which means that it holds a higher legal authority than domestic laws.

The analysis shows how the FFPs community is affected by the impacts of wind energy production on their health and subsistence, which is a significant concern. Additionally, the negative impact on the semi-arid ecosystem highlights the need to consider not only the local but also broader environmental implications of wind energy projects. It is important that both the state and wind energy companies take these impacts into account in order to minimize negative impacts and protect the health and well-being of the Fundo e Fecho de Pasto communities and the environment in the short, mid and long terms.

5.4. Corporate responsibility

In the chapter 4.2.2., the analysis identified the issue of unequal employment opportunities in wind energy projects. The data suggests that the jobs that are available tend to require a more qualified labor force and offer higher income levels, which may not be accessible to members of the Fundo e Fecho de Pasto communities. Additionally, it could be observed that although there are some indirect employment opportunities created, these are also temporary in nature. Although not very much discussed in the case of wind energy production in the semi-arid, the issue of work opportunities identified in the analysis can also relate to the corporate responsibility of companies to respect human rights. Specifically, it emphasizes the need for companies to also consider the potential impacts of their operations on the human rights of local communities, including their right to work, adequate

²⁹⁶ United Nations Framework Convention on Climate Change, *Paris Agreement*, 2016, entered into force 04 November 2016, https://unfccc.int/sites/default/files/english_paris_agreement.pdf

standard of living and many other rights. As the analysis suggests, the jobs that are available in wind energy projects are mostly incompatible and may not be accessible to members of the Fundo e Fecho de Pasto communities without proper capacity-building, indicating that the wind energy companies are not fulfilling their responsibility to respect the human rights of local communities, by not providing equal opportunities and benefits to the people living in the area. Therefore, the analysis highlights the importance of considering the human rights implications of wind energy projects and the corporate responsibility of companies to respect the human rights of local communities, which should also be taken into account during the planning and implementation phases of these projects.

Governments are primarily responsible for protecting and promoting human rights within their own countries, by creating laws and policies that promote and protect human rights, and by ensuring that their institutions are held accountable for upholding these rights. They also have an obligation to investigate and prosecute human rights violations, and to provide remedies for victims of such violations. However, it is also relevant to note that corporations also have a responsibility to respect human rights, which means that they should avoid causing or contributing to human rights abuses and address adverse impacts with which they are involved. The issuance of the United Nations Guiding Principles on Business and Human Rights (UNGPBHR),²⁹⁷ in 2011, was a very important milestone to fill a gap concerning corporate responsibility in relation to human rights. The principles shed light on (a) the states' obligations to respect, protect and fulfill human rights, (b) the role of business to comply with all applicable laws to respect them, and (c) the use of appropriate and effective remedies against violations.²⁹⁸ The Guiding Principles provided a framework for companies to identify and address human rights risks in their operations, and for stakeholders to hold them accountable for their actions. The principles also emphasize the importance of due diligence, transparency, and engagement with affected communities. Since the UNGPBHR publication, many companies have integrated the principles into their corporate policies and practices, and a growing number of governments have begun to adopt legislation and regulations that align with the UNGPBHR. However, there are still significant challenges to ensure that the principles are fully implemented and that human rights are effectively protected in the context of business activities. The ongoing efforts to improve corporate

²⁹⁷ United Nations Human Rights Office of the High Commissioner, *Guiding Principles on Business and Human Rights* [UNGPBHR] (New York and Geneva, 2011), https://www.ohchr.org/sites/default/files/documents/publications/guidingprinciplesbusinessshr_en.pdf

²⁹⁸ United Nations Human Rights Office of the High Commissioner, *UNGPBHR*

accountability and to promote human rights are crucial to achieving a more just and equitable global economy. In the case of corporate-related human rights abuses, it can be observed that they are often scrutinized in a biased manner,²⁹⁹ because the responsibility for such abuses can be complex and multifaceted. State actors and companies may both play a role in human rights abuses, and determining the specific actions and responsibilities of each one can be difficult. Additionally, there may be legal and jurisdictional limitations that make it challenging to hold both accountable for human rights abuses. Furthermore, companies and state actors may be more powerful or have more resources than others, which can make it difficult for victims and advocates to hold them accountable.

It is crucial to ensure that the employment opportunities created by wind energy projects should be inclusive, providing fair and equitable opportunities for the local communities, including those who may not have the qualifications or skills required for the more specialized jobs. This will ensure that the wind development is truly sustainable and benefits all actors involved. Brazil complies with relevant human rights instruments, yet the state and wind energy companies can still act in accordance with their interests, bypassing these norms. It is imperative to consider the power dynamics and the need for both state actors and companies to take responsibility for respecting human rights.

5.5. A gender lens

In chapter 4.2.3., the analysis identified both negative and positive impacts. The negative effects concern the “children of the wind” (children born from women and girls who become pregnant from wind company employees during the implementation of these projects and who leave after the project's construction is completed), together with the increase in violence and sexually transmitted diseases (STDs) in the traditional communities. On the other hand, the framing analysis suggests the increasing opportunities to women in the wind energy sector in general, highlighting a very important step toward gender equality.

The case of "the children of the wind" shed light on the legacy of coloniality in a patriarchal society and its impact on the traditional communities, specifically on the autonomy and agency of women. For Brazilian feminist, sociologist, and anthropologist, Lélia Gonzales, patriarchy is deeply ingrained in Brazilian society. It is a major source of discrimination for women, particularly women of color, represented by the triad of racism, sexism, and

²⁹⁹ *Chevron Corporation and Texaco Petroleum Company v. The Republic of Ecuador*, 2007-02/AA277 2007-02/AA277 (Permanent Court of Arbitration ongoing)

oppression.³⁰⁰ According to Gonzales, the patriarchal structure of Brazilian society is rooted in the country's history of colonialism and slavery, which had resulted in the institutionalization of white supremacy and the marginalization of Black and Indigenous peoples. The author also argues that the patriarchal system was reinforced by the Catholic Church and other traditional institutions, which upheld traditional gender roles and reinforced the idea that men were the dominant and a superior gender. Gonzales also argued that patriarchal structures were reinforced by the capitalist economic system, which is based on the 'commodification of everything'³⁰¹, including women's bodies, which reinforces oppressive attitudes towards women and objectifies them as a commodity to be bought and sold.³⁰² Such imbalance in power dynamics reflects the control of gender and sexuality (Walter Mignolo, chapter 2.2.) in the FFP communities. The "children of the wind" can be considered an example of the exploitation and manipulation of traditional communities' women by wind company employees, who are usually outsiders. The wind company employees' ability to impregnate the women, and then leave without providing any form of support for the child or the mother illustrates patriarchal attitudes. In this sense, the "children of the wind" exemplifies the negative impacts of wind energy projects on traditional communities, particularly on women, and how these projects perpetuate the coloniality of being and control of gender and sexuality (chapter 2.2.).

In a complete opposite direction, the framing analysis (chapter 4.2.3.) suggests that wind companies are making efforts to reduce gender inequality in the energy sector. It is not assessed, however, whether these efforts are effectively addressing the specific needs and concerns of women from the Fundo e Fecho de Pasto communities affected by wind energy projects. For instance, the absence of public information regarding "the children of the wind" can be an indication of this. This leads to question whether or not the wind companies are using publicity methods of 'genderwashing',³⁰³ in order to persuade the public opinion that wind companies are 'diversity-friendly' (which is indeed another debate that demands further research), to divert the attention away from violations perpetrated by wind projects on women. Genderwashing is a term used to describe the process by which development

³⁰⁰ L. Gonzales, 'Racismo e sexismo na cultura brasileira', *Temas e Problemas da População Negra no Brasil* (presented at the IV Encontro Anual da Associação Brasileira de Pós-graduação e Pesquisa nas Ciências Sociais, Rio de Janeiro, 1980), 223–244

³⁰¹ Gonzales, 'Racismo e sexismo na cultura brasileira'

³⁰² Gonzales, 'Racismo e sexismo na cultura brasileira'

³⁰³W. Fox-Kirk, R.A. Gardiner, and H. Finn, 'Genderwashing: The Myth of Equality', *Human Resource Development International* 23, no. 5 (19 October 2020), 586–597, doi:10.1080/13678868.2020.1801065 <https://www.tandfonline.com/doi/epdf/10.1080/13678868.2020.1801065?needAccess=true&role=button>

projects, policies, and programs are marketed as being gender-sensitive or empowering to women without addressing the underlying patriarchal structures and power imbalances that contribute to gender inequality. However, such articles present opportunities to women in the energy sector in general, which is a very important step toward gender equality and should effectively be promoted.

A gender lens (and many other lenses) must be applied and taken into consideration in wind energy projects. The "children of the wind" suggests that exploitation, manipulation, and patriarchal control over women's bodies also happen in wind energy expansion. The same lens can also address aspects of gender inequality, by also fostering opportunities for women in the energy sector. In this sense, it is crucial to find a balance between economic development and protection of the rights of the FFP communities, and to involve women in decision-making processes to ensure that their voices are also heard and taken into consideration.

6. Potential interventions for supporting a just energy transition in Bahia

As an essential part of an applied human rights thesis, the proposition of interventions may provide practical suggestions to help address the human rights issues encountered in the analysis and contribute to the improvement of the human rights situation for the Fundo e Fecho de Pasto in Bahia. Additionally, the suggestion of interventions can contribute to the body of knowledge in the field of human rights and provide new insights, helping inform future research and policymaking. The following are general interventions, based on the available evidence and research, encompassing the needs and requirements of the FFP, which was the essential objective of the thesis. They represent a hybrid approach³⁰⁴, combining top-down and bottom-up alternatives. A top-down³⁰⁵ intervention refers to an approach that is imposed from a central authority to lower levels of a system. It typically involves decision-making and implementation from the top-level and is then passed down to lower levels for implementation. This approach contrasts with a bottom-up³⁰⁶ intervention,

³⁰⁴ E.A.T. Hermansen and G. Sundqvist, 'Top-down or Bottom-up? Norwegian Climate Mitigation Policy as a Contested Hybrid of Policy Approaches' ['Top-down or Bottom-Up?'], *Climatic Change* 171, no. 3–4 (April 2022), 1–22, doi:10.1007/s10584-022-03309-y

³⁰⁵ Hermansen and Sundqvist, 'Top-down or Bottom-Up?', 26

³⁰⁶ Hermansen and Sundqvist, 'Top-down or Bottom-Up?', 26

which involves input and decision-making from communities and individuals at the grassroots level. By taking into account both the central authority's decision-making and the communities' and individuals' input, the interventions can be more effective and sustainable. However, balancing these approaches may be challenging, but it is crucial to consider both in order to create lasting change. Therefore, a hybrid approach (Figure 12) is an inclusive and holistic way to address human rights issues of the Fundo e Fecho de Pasto within the wind energy expansion strategies in Bahia and can lead to more comprehensive and sustainable solutions.



Figure 12: Interventions for the FFP Communities using a hybrid approach

International: the international community must advance in guidelines for including land rights as human rights, as well as for sustainable renewable energy development, helping to ensure that they are implemented in a way that respect not only the right to a healthy environment but also of traditional communities, who, particularly in Brazil, are usually the ones to bear the burden of the negative impacts of wind expansion, as it is the case of the Fundo e Fecho de Pasto communities. The Sustainable Development Goal 7³⁰⁷ (SDG 7) aims to ensure access to affordable, reliable, sustainable, and modern energy for all. The goal includes targets related to increasing the share of renewable energy in the global energy mix, improving energy efficiency, and increasing access to energy in developing countries.

³⁰⁷ United Nations, ‘Sustainable Development Goals’ [‘The 17 Goals’], [Website], n.d., <https://sdgs.un.org/goals>

However, there are criticisms that highlight its shortcomings.³⁰⁸ The SDG 7 is criticized for inadequate consideration of energy justice,³⁰⁹ which refers to the unequal distribution of energy resources and access, and the implications for marginalized communities. Additionally, the goal does not sufficiently address the root causes of energy poverty, such as political, economic, and institutional barriers, and the need for systemic change.³¹⁰ Furthermore, SDG 7 places too much emphasis on economic and technological solutions to energy access and sustainability, without considering the social and cultural dimensions of energy use and access.

It is also important to monitor and address human rights violations in the context of energy transitions, including the corporate responsibility to protect human rights. One way to ensure that human rights are protected is to hold companies accountable for their actions. In this sense, it is necessary to further develop and enforce the United Nations Guiding Principles on Business and Human Rights (UNGPBHR). Particularly, it is important to monitor renewable energy companies, as they often operate in areas where traditional communities and the environment are vulnerable. Renewable energy projects can have a significant impact on these communities and their surroundings. By further developing the UNGPBHR and enforcing mechanisms for monitoring renewable energy companies, the international community can ensure that companies are taking into serious consideration their responsibilities to protect human rights. This will help to promote sustainable energy transitions, guaranteeing that the transition to a more sustainable energy future is not achieved at the expense of human rights of traditional communities.

Raising awareness not only about the state and the corporate responsibility to protect human rights but also on the possible negative impacts of wind (and other renewables) energy is urgent in building a culture of respect for traditional communities' rights. By promoting this, energy transitions will be implemented considering justice and sustainability aspects, as well as the needs and perspectives of all stakeholders. It is important to remember that wind energy transitions have the potential to bring significant benefits, including access to clean energy, improved health and environmental outcomes, and economic benefits. However, these benefits must be balanced with the rights of traditional communities, who are often among the most affected by adverse effects.

³⁰⁸ United Nations, 'The 17 Goals'

³⁰⁹ A.B. Setyowati, 'Mitigating Inequality with Emissions? Exploring Energy Justice and Financing Transitions to Low Carbon Energy in Indonesia' ['Mitigating Inequality with Emissions?'], *Energy Research & Social Science* 71 (January 2021), 101817, doi:10.1016/j.erss.2020.101817

³¹⁰ Setyowati, 'Mitigating Inequality with Emissions?'

National: in addition to the Fundo e Fecho de Pasto communities demands made during the workshop cycles and public hearing (chapters 3 and 4), which encompass, for instance, the repeal of Normative Instruction 01/2020³¹¹, the Brazilian government has several obligations to comply in order to guarantee that the rights of the FFP communities are protected. These obligations include complying with international and regional human rights, traditional peoples' and environmental conventions, which Brazil has duly ratified. The government should also integrate specifically the case of the Fundo e Fecho de Pasto communities within national policies, which already happens in the case of other traditional communities (i.e. Quilombolas and Indigenous peoples), for instance, by including them in the recently created Ministry of Native Peoples (Ministério dos Povos Originários), which would grant the FFP more attention and resources from the federal government. The federal and state governments should also certify that the FFP receive the legal recognition of traditional communities and that their rights to land, resources, and culture are protected by law: this includes providing better support for the regularization of traditional lands and speed up the certification of recognition processes. The principle of free, prior, and informed consent should be implemented in all stages of wind energy development to ensure that the rights of communities are protected. The Bahian government should also consider the allocation of resources to support the development of wind energy in a responsible and respecting manner, which includes rigorous environmental and, especially, socio-economic impact assessments, without relying on the wind energy companies' resources. The government should also establish and enforce mechanisms to monitor and address human rights violations in the context of energy transitions, not only on the state level through Bahia's Public Prosecutor's Office and SEPRMI but also on the national level through the Brazil's Public Prosecutor's Office and the Ministry of Human Rights and Citizenship. It is the responsibility of the Brazilian and Bahian government to address the negative impacts of wind energy transitions on the Fundo e Fecho de Pasto communities and to promote just and sustainable energy transitions that respect the rights and well-being of communities and the environment.

Corporate: the corporate responsibility to protect human rights can play a key role in addressing the negative impacts of wind energy transition on the Fundo e Fecho de Pasto communities. Wind companies can implement initiatives that focus on supporting the FFP

³¹¹ Santos et al., *Dossiê: Energias Renováveis Na Bahia: Caminhos e Descaminhos*, 48–51

communities and addressing the negative impacts of wind energy projects on them. They must also engage with the communities and thoroughly involve them in the planning and implementation of wind energy projects, which can include regular consultation and communication with the FFP and consider their input in project design. Wind companies must also conduct not only environmental but also comprehensive socio-economic impact assessments prior to the implementation of wind energy projects, to identify and address potential negative effects on the FFP community, including on women and other vulnerable groups. Corporations also have to be transparent about the social and environmental impacts of wind energy projects and take accountability for any negative issues that may occur. This can include reporting to the respective institution on the progress and impact of wind energy projects, and providing regular updates to all stakeholders, including the FFP community. It is also important to collaborate with all relevant stakeholders, including government agencies, civil society organizations, and local communities, to promote just and sustainable energy transitions that respect the rights of the FFP communities. Lastly, but most importantly, to review abusive lease contracts firmmed with the FFP communities in accordance with respect to their human rights.

Civil society and academia: civil society organizations and academia have a very important role in helping to address the negative impacts of wind energy transitions on the Fundo e Fecho de Pasto communities, and to achieve this, a range of interventions can be implemented. Advocacy and campaigns should focus on raising awareness about the rights and struggles of the Fundo e Fecho de Pasto communities and ensuring that the negative impacts of the wind energy transition are addressed. Assist in the organization of meetings and Public Hearings to discuss the impacts, as well as the positive and negative sides of renewable transition. Research and analysis on a human rights level can provide evidence-based recommendations for policy and practice and a better understanding of the socio-economic impacts of wind energy transitions on the Fundo e Fecho de Pasto communities. Collaboration with relevant stakeholders, including government agencies, civil society organizations, and the private sector, is crucial to promote a just and sustainable energy transition in Bahia that respects the rights of traditional communities and the environment. Education and awareness-raising activities are essential in educating the public and policymakers about the importance of respecting the rights and well-being of traditional communities, and the negative impacts of wind energy transitions on them.

Cultural/artistic: artistic interventions can also address the negative impacts of wind energy transition on the Fundo e Fecho de Pasto. Art has the power to bring attention to important issues in a unique and thought-provoking manner. The Theater of the Oppressed (TO)³¹² could be a useful intervention to address the impacts of wind energy expansion on the human rights of the Fundo e Fecho de Pasto communities. The TO is a participatory form of theater that aims to empower oppressed communities to explore their realities and work towards social change. This technique was created by Brazilian artist Augusto Boal, who believed that theater could be used as a tool for social and political activism. This technique provides a safe space for community members to express their concerns, ideas, and feelings about the impact of wind energy expansion on their lives. It can also help to empower community members about their rights and the potential consequences of wind energy expansion. The Theater of the Oppressed has been used in various contexts to address human rights issues and social injustices.³¹³ By engaging community members in a participatory and empowering process of theater-making, the Theater of the Oppressed can help these communities to build solidarity, raise awareness, and develop strategies for resistance and advocacy. Additionally, another way of incorporating arts to address the human rights of FFP is through woodcut printmaking (Port. xilogravura), which has a deep-rooted cultural and historical significance in Bahia, Brazil, where it has been used for centuries as a means of artistic expression, resistance, and social mobilization. Woodcut printmaking involves carving a design into a block of wood and then printing the design onto paper or fabric. It is a process that requires patience, skill, and creativity, and it can be used to create powerful visual images that communicate a message to a wider audience. By using this technique to portray issues related to wind energy expansion and traditional communities can raise awareness of these issues and contribute to social justice. Brazilian artist Pita Paiva³¹⁴, who participated in the workshops that have been analyzed throughout this thesis, was invited by the Brazilian civil society organizations to depict his interpretation of the renewable energy expansion in the territories of traditional communities, which represented in Figure 13. Both the Theater of the Oppressed and woodcut printmaking are powerful tools for empowering

³¹² A. Boal, *Theatre of the Oppressed*, trans. A. Charles, L.M. Maria-Odilia, and F. Emily, New edition., Get Political 6 (London, 2008)

³¹³ M.L. Ferreira and D. Devine, 'Theater of the Oppressed as a Rhizome: Acting for the Rights of Indigenous Peoples Today' ['Theater of the Oppressed as a Rhizome'], *Latin American Perspectives* 39, no. 2 (March 2012), 14–18, doi:10.1177/0094582X11427888

³¹⁴ Reportagem, 'Pita Paiva, o Mestre Da Xilogravura', *Meus Sertões*, 1 September 2021, accessed 10 February 2023, <https://www.meusertoes.com.br/2021/09/01/15574/#:~:text=Lindomar%20Paiva%2C%20conhecido%20como%20Mestre,%2C%20no%20entanto%2C%20pouco%20sabia.>

the FFP communities and addressing issues related to human rights. By engaging with these art forms, individuals and communities can create meaningful change.



Figure 13: Renewable energy expansion in traditional communities territories, 2022, Pita Paiva.

Individual: it is important to be aware of the rights and struggles of traditional communities like the Fundo e Fecho de Pasto (FFP) and support their causes through advocacy and activism. This involves being informed about the socio-economic and environmental impacts of wind energy projects and being critical about their implementation. Additionally, engaging with the FFP community can promote intercultural exchange and provide the opportunity to learn more about their traditions and ways of life.

7. Conclusions

The research conducted aimed at understanding the impacts of the wind energy expansion on the human rights of the traditional community of Fundo e Fecho de Pasto (FFP). The study was carried out applying a theoretical framework of energy justice and decolonial thinking through a methodological approach of system thinking, qualitative content analysis and framing analysis. The findings of the study reveal that the wind energy transition has had significant negative impacts on the human rights of the FFP community. These impacts encompass a range of human rights issues, including those related to their traditionally

occupied lands and their self-determination/recognition as a traditional community, as well as consequential impacts caused by the wind energy expansion, such as those related to the right to health and to a healthy environment, right to work, and women's rights.

The Traditional Communities of Fundo e Fecho de Pasto (FFP) have a rich history that has been shaped by their struggle for land and formal recognition. Over the years, they have built and reinforced their identity as a traditional community and as a political entity that resists injustices perpetrated against them. These injustices are exercised both by the state and capitalist interests, which encompass ingrained practices of coloniality. The FFP communities live sustainably and in harmony with the environment. However, despite their environmentally conscious lifestyle, they must constantly resist against several politico-economic interests. Despite the good intention of both the federal government of Brazil and the state of Bahia in reducing greenhouse gas emissions and addressing the climate crisis, the FFP communities must also be part of inclusive policies so that they can defend their rights and way of life from the adverse effects of negative wind energy projects. Brazil has significant wind potential and should invest in it, as long as it also distributes equally both the benefits and burdens of the wind energy expansion, including taking the FFP's needs and voices in decision and policymaking into account, highlighting possible structural and institutional aspects of coloniality, thus guaranteeing and exercising human rights. The FFP community's struggle is a confirmation to their commitment to justice and their desire to be recognized as a vital and valuable part of society. The findings of this study underscore the need for a just transition that prioritizes the rights and well-being of traditional communities like the FFP and acknowledges the important role that these communities play in the fight against the climate crisis and the promotion of energy justice. It also has significant implications for the way that wind energy transitions will be approached and executed in the future. The findings highlight the need for a more nuanced and interdisciplinary approach to renewable energy transitions that considers the socio-economic, environmental, cultural, and political impacts of these projects. This includes considering the historical and ongoing injustices faced by traditional communities and working to address and prevent these injustices in future projects. Furthermore, the findings call for a decolonization not only of the energy sector but also in human rights law, which requires recognizing the role of coloniality aspects in shaping the unequal distribution of power and resources and starting to dismantle these structures, especially in the global South.

Moreover, this study has made several contributions to the field of energy transitions and energy justice. It highlighted the negative impacts of wind energy transitions on the human

rights of traditional communities, like the FFP. It advanced the theoretical frameworks of energy justice and decolonial thinking by applying them to the case of the FFP communities and demonstrating their usefulness in understanding the impacts of wind energy expansion on traditional communities. It provided an interdisciplinary approach, which contributed to the broader discourse on energy justice and the promotion of human rights in the energy sector, highlighting the need for a more inclusive and participatory approach to energy transitions that prioritizes the rights of traditional communities, recognizes their important role in the wind energy expansion, and addresses aspects of coloniality.

Given the limitations, there are other areas for future research that may expand upon the current findings. Future research could focus on the long-term impacts of wind energy expansion on traditional communities and explore ways to mitigate or prevent these impacts. Additionally, researchers could investigate ways to make energy transitions more inclusive and participatory, with a focus on the human rights of traditional communities. Best practices for just and sustainable energy transitions that prioritize the rights of traditional communities, and the environment could also be explored. Furthermore, it is important to examine the colonial roots of the injustices faced by traditional communities in renewable energy expansion and assess the role of decolonial thinking in addressing these issues. Finally, researchers could study the experiences of other traditional communities in Brazil as well as other countries to inform the development of more just and sustainable wind, and other renewable, energy expansions and transitions.

8. References

8.1. Bibliography

- Almeida, S., *Racismo Estrutural*, São Paulo, Sueli Carneiro; Pólen, 2019.
- de Alcântara, D., and G.I. Germani, ‘Fundo de Pasto: um conceito em movimento’, *Espaço e tempo: complexidade e desafios do pensar e do fazer geográfico* (presented at the VIII Encontro Nacional da ANPEGE, Curitiba, Paraná, 2009), 15.
- , ‘Fundos de Pasto: espaços comunais em terras baianas’ (presented at the X Encontro de Geógrafos da América Latina, São Paulo, 2005), 25.
- , ‘Há Uma Lei No Meio Do Caminho: Luta Para Permanecer Na Terra Dos Fundos e Fechos de Pasto Na Bahia’, *Terra Livre*, 2, no. 37 2, no. 37 (2011), 183.
- Almiron, N., and C. Faria, ‘Climate Change Impacts on Free-Living Nonhuman Animals. Challenges for Media and Communication Ethics’, *Studies in Media and Communication*, 7, no. 1 7, no. 1 (29 May 2019), 37. doi:10.11114/smc.v7i1.4305.
- Amnesty International, ‘Decolonising Human Rights’, [Website], 22 May 2018. <https://www.amnesty.org/en/latest/news/2018/05/decolonizing-human-rights-salil-shetty/>.
- An-Naim, A.A., *Decolonizing Human Rights*, 1st ed., 1st ed. (Cambridge, 2021). doi:10.1017/9781108264921.
- Articulação Estadual das Comunidades Tradicionais de Fundo e Fecho de Pasto, ‘Articulação Estadual de Fundo e Fecho de Pasto lança nota pública’ [‘AATR’], [Website], *Associação de Advogados de Trabalhadores Rurais*, 2020. <https://www.aatr.org.br/post/articula%C3%A7%C3%A3o-estadual-de-fundo-e-fecho-de-pasto-lan%C3%A7a-nota-p%C3%BAblica>.
- , ‘Nota Pública: Movimento Fundo e Fecho de Pasto’, [Website], *Serviço de Assessoria a Organizações Populares e Rurais*, 2020. <https://sasop.org.br/2020/08/nota-publica-movimento-fundo-e-fecho-de-pasto/>.
- Baker, S., S. DeVar, and S. Prakash, *Initiative for Energy Justice: The Energy Justice Workbook*, December 2019. <https://iejusa.org/wp-content/uploads/2019/12/The-Energy-Justice-Workbook-2019-web.pdf>.
- Ballestrin, L., ‘América Latina e o giro decolonial’, *Revista Brasileira de Ciência Política*, no. 11 no. 11 (2013), 89–117. http://www.scielo.br/scielo.php?script=sci_arttext&pid=S0103-33522013000200004&lng=pt&tlng=pt.
- Birk, M., and W. Suntinger, ‘A Systemic Approach to Human Rights Practice’, in ed. M. Nowak, H. Tretter, P. Hladschik, and F. Steinert, *Menschenrechten Gestalt Und Wirksamkeit Verleihen: Making Human Rights Work* (Wien, Graz, 2019).
- Bjärstig, T., I. Mancheva, A. Zachrisson, W. Neumann, and J. Svensson, ‘Is Large-Scale Wind Power a Problem, Solution, or Victim? A Frame Analysis of the Debate in Swedish Media’, *Energy Research & Social Science*, 83 83 (2022). doi:10.1016/j.erss.2021.102337.
- Boal, A., *Theatre of the Oppressed*, trans. A. Charles, L.M. Maria-Odília, and F. Emily, New edition., New edition., Get Political 6 (London, 2008).
- Bouzarovski, S., and N. Simcock, ‘Spatializing Energy Justice’, *Energy Policy*, 107 107 (August 2017), 640–648. doi:10.1016/j.enpol.2017.03.064.
- Bragato, F., and G. Mantelli, ‘Comentário ao Capítulo 2: “A Pós-Colonialidade do Direito Internacional” – Abordagens Pós-Coloniais e Descoloniais no Direito

- Internacional’, in ed. M. Badin, F. Morosini, and A. Giannattasio, *Direito Internacional: leituras críticas*, 2019, 101–112.
- Burke, R., ‘Decolonization, Development, and Identity: The Evolution of the Anticolonial Human Rights Critique, 1948-78’, in by J.H. Quataert and L. Wildenthal, ed. J. Quataert and L. Wildenthal, *The Routledge History of Human Rights*, 1st ed., 1st ed. (London, 2019), 222–240. doi:10.4324/9780429324376-12.
- Carruthers, D.V., ‘Introduction’, in ed. D.V. Carruthers, *Environmental Justice in Latin America: Problems, Promise, and Practice*, Urban and Industrial Environments (Cambridge, Massachusetts, 2008).
- Centers for Disease Control and Prevention, ‘Parasites - American Trypanosomiasis (Also Known as Chagas Disease)’, CDC. Accessed 20 February 2023. https://www.cdc.gov/parasites/chagas/gen_info/detailed.html#:~:text=Chagas%20disease%20is%20caused%20by,referred%20to%20as%20American%20trypanosomiasis.
- Chevron Corporation and Texaco Petroleum Company v. The Republic of Ecuador, 2007-02/AA277 2007-02/AA277 (Permanent Court of Arbitration ongoing).
- Código Civil Brasileiro, Lei n. 10.406*, 2002.
- ‘Correio Da Bahia’, [Website], n.d. <https://www.correio24horas.com.br/>.
- Djerf-Pierre, M., J. Cokley, and L.J. Kuchel, ‘Framing Renewable Energy: A Comparative Study of Newspapers in Australia and Sweden’ [‘Framing Renewable Energy’], *Environmental Communication*, 10, no. 5 10, no. 5 (2 September 2016), 634–655. doi:10.1080/17524032.2015.1056542.
- Edmondson, B., and S. Levy, *Climate Change and Order: The End of Prosperity and Democracy [Climate Change and Order]*, Energy, Climate and the Environment (Basingstoke, 2013).
- Estado da Bahia, *Constituição Do Estado Da Bahia*, 1989. https://www2.senado.leg.br/bdsf/bitstream/handle/id/70433/CE_BA_EC_29-2022.pdf?sequence=11&isAllowed=y.
- Fausto, B., *História Concisa do Brasil*, 1st., 1st. (São Paulo, 2001).
- , ‘O Brasil Colonial (1500-1822)’, *História Do Brasil*, 2nd., 2nd. (São Paulo, 1995).
- Ferreira, M.L., and D. Devine, ‘Theater of the Oppressed as a Rhizome: Acting for the Rights of Indigenous Peoples Today’ [‘Theater of the Oppressed as a Rhizome’], *Latin American Perspectives*, 39, no. 2 39, no. 2 (March 2012), 11–26. doi:10.1177/0094582X11427888.
- Filgueiras, A., and T.M.V. e Silva, ‘Wind Energy in Brazil—Present and Future’, *Renewable and Sustainable Energy Reviews*, 7, no. 5 7, no. 5 (October 2003), 439–451. doi:10.1016/S1364-0321(03)00068-6.
- Fox-Kirk, W., R.A. Gardiner, and H. Finn, ‘Genderwashing: The Myth of Equality’, *Human Resource Development International*, 23, no. 5 23, no. 5 (19 October 2020), 586–597. doi:10.1080/13678868.2020.1801065.
- Fraser, N., and A. Honneth, *Redistribution or Recognition? A Political-Philosophical Exchange [Redistribution or Recognition?]* (London, New York, 2003).
- Gilbert, J., ‘Land Rights as Human Rights: The Case for a Specific Right to Land’, *Sur: International Journal on Human Rights*, 10, no. 18 10, no. 18 (2013), 32.
- Gonzales, L., ‘Racismo e sexismo na cultura brasileira’, *Temas e Problemas da População Negra no Brasil* (presented at the IV Encontro Anual da Associação Brasileira de Pós-graduação e Pesquisa nas Ciências Sociais, Rio de Janeiro, 1980), 223–244.

- Governo da Bahia, *Atlas Eólico Da Bahia*, 2013.
<http://www.infraestrutura.ba.gov.br/arquivos/File/publicacoes/atlaseolicobahia2013.pdf>.
- Governo do Estado da Bahia, *Atlas Eólico*. Accessed 23 September 2022.
<http://www.infraestrutura.ba.gov.br/arquivos/File/publicacoes/atlaseolicobahia2013.pdf>.
- , *Lei n. 12910*, 2013. <https://cpisp.org.br/lei-n-o-12-910-de-11-de-outubro-de-2013/#:~:text=O%20GOVERNADOR%20DO%20ESTADO%20DA,pelas%20Comunidades%20Remanescentes%20de%20Quilombos>.
- Heffron, R.J., ‘Applying Energy Justice into the Energy Transition’, *Renewable and Sustainable Energy Reviews*, 156 156 (March 2022), 111936.
 doi:10.1016/j.rser.2021.111936.
- Heffron, R.J., and D. McCauley, ‘The Concept of Energy Justice across the Disciplines’, *Energy Policy*, 105 105 (June 2017), 658–667. doi:10.1016/j.enpol.2017.03.018.
- Hermansen, E.A.T., and G. Sundqvist, ‘Top-down or Bottom-up? Norwegian Climate Mitigation Policy as a Contested Hybrid of Policy Approaches’ [‘Top-down or Bottom-Up?’], *Climatic Change*, 171, no. 3–4 171, no. 3–4 (April 2022), 26.
 doi:10.1007/s10584-022-03309-y.
- Hinman, L.M., *Ethics: A Pluralistic Approach to Moral Theory [Ethics]*, 4th ed., 4th ed. (Australia ; Belmont, CA, 2008).
- Human Rights Council, *The Human Right to a Clean, Healthy and Sustainable Environment*, Resolution A/HRC/RES/48/13, 18 October 2021. <https://documents-dds-ny.un.org/doc/UNDOC/GEN/G21/289/50/PDF/G2128950.pdf?OpenElement>.
- Instituto Brasileiro de Geografia e Estatística, ‘Pesquisa Nacional Por Amostra de Domicílios Contínua Trimestral’ [‘IBGE’], [Website]. Accessed 11 February 2023. <https://educa.ibge.gov.br/jovens/conheca-o-brasil/populacao/18319-cor-ou-raca.html>.
- International Labor Organization, *Indigenous and Tribal Peoples Convention, 169*, 1989. https://www.ilo.org/dyn/normlex/en/f?p=NORMLEXPUB:12100:0::NO::P12100_ILO_CODE:C169.
- , ‘Ratifications of C169: Indigenous and Tribal Peoples Convention, 1989 (N. 169)’ [‘ILO’], [Website], *Normlex: Information System on International Labor Standards*, n.d. https://www.irena.org/-/media/Files/IRENA/Agency/Publication/2022/Sep/IRENA_Renewable_energy_and_jobs_2022.pdf?rev=7c0be3e04bfa4cddaedb4277861b1b61.
- International Renewable Energy Agency, and International Labor Organization, *Renewable Energy and Jobs: Annual Review 2022 [Annual Review 2022]* (Abu Dhabi and Geneva, 2022). https://www.irena.org/-/media/Files/IRENA/Agency/Publication/2022/Sep/IRENA_Renewable_energy_and_jobs_2022.pdf?rev=7c0be3e04bfa4cddaedb4277861b1b61.
- IPCC, ‘Climate Change and Land’, [Website], *The Intergovernmental Panel on Climate Change*, n.d. <https://www.ipcc.ch/srccl/>.
- Jackson, M.C., *Critical Systems Thinking and the Management of Complexity* (Oxford, 2019).
- Jenkins, K., D. McCauley, R. Heffron, H. Stephan, and R. Rehner, ‘Energy Justice: A Conceptual Review’ [‘Energy Justice’], *Energy Research & Social Science*, 11 11 (January 2016), 174–182. doi:10.1016/j.erss.2015.10.004.
- Júnior, L.A., and M. Bursztyn, ‘À margem de quatro séculos e meio de latifúndio: Razões dos Fundos de Pasto na história do Brasil e do Nordeste (1534-1982)’ (presented at the IV Encontro Nacional da Anppas, Brasília, 2008).

- https://geografar.ufba.br/sites/geografar.ufba.br/files/2008a_ferraro_e_bursztyn.pdf
- , ‘Tradição e Territorialidade Nos Fundos de Pasto Da Bahia: Do Capital Social Ao Capital Político’ (presented at the IV Encontro Nacional Anppas, Brasília, 2008). <http://portalyfade.mma.gov.br/fundo-e-fecho-de-pasto-biblioteca>.
- Kaminski, I., ‘Brazilian Court World’s First to Recognise Paris Agreement as Human Rights Treaty’, [Website], *Climate Home News*, 7 July 2022. <https://www.climatechangenews.com/2022/07/07/brazilian-court-worlds-first-to-recognise-paris-agreement-as-human-rights-treaty/>.
- Lacey-Barnacle, M., R. Robison, and C. Foulds, ‘Energy Justice in the Developing World: A Review of Theoretical Frameworks, Key Research Themes and Policy Implications’ [‘Energy Justice in the Developing World’], *Energy for Sustainable Development*, 55 55 (April 2020), 122–138. doi:10.1016/j.esd.2020.01.010.
- Mayagna (Sumo) Awas Tingni Community v. Nicaragua Mayagna (Sumo) Awas Tingni Community v. Nicaragua (Inter-American Court of Human Rights 2001).
- Mayring, P., ‘Qualitative Content Analysis: Theoretical Foundation, Basic Procedures and Software Solution’, [Website], *Social Science Open Access Repository*, 2014. <https://www.ssoar.info/ssoar/handle/document/39517>.
- Melo, M., ‘Recent Advances in the Justiciability of Indigenous Rights in the Inter-American System of Human Rights’, *Sur: International Journal on Human Rights*, 4, no. 3 4, no. 3 (2006). <https://sur.conectas.org/en/recent-advances-justiciability-indigenous-rights-inter-american-system-human-rights/>.
- Mignolo, W., *Desobediencia Epistémica: Retórica de La Modernidad, Lógica de La Colonialidad y Gramática de La Descolonialidad*, Razón Política (Argentina, 2010).
- Mignolo, W., and C. Walsh, *On Decoloniality: Concepts, Analytics, Praxis*, On Decoloniality (Durham, 2018).
- Ministério de Minas e Energia, *Plano Nacional de Energia 2050*. Accessed 23 September 2022. <https://www.epe.gov.br/sites-pt/publicacoes-dados-abertos/publicacoes/PublicacoesArquivos/publicacao-227/topico-563/Relatorio%20Final%20do%20PNE%202050.pdf>.
- Nussbaum, M., ‘Capabilities as Fundamental Entitlements: Sen and Social Justice’, *Feminist Economics*, 9, no. 2–3 9, no. 2–3 (January 2003), 33–59. doi:10.1080/1354570022000077926.
- Oliveira, L., ‘Jornalismo Cultural: uma análise do jornal Correio da Bahia’ (Universidade Federal da Bahia, 2009).
- Oxfam, *Informe Da Oxfam Brasil*, [Website], 2016. https://oxfam.org.br/wp-content/uploads/2019/08/relatorio-terrenos_desigualdade-brasil.pdf.
- Page, E.A., ‘Distributing the Burdens of Climate Change’, *Environmental Politics*, 17, no. 4 17, no. 4 (August 2008), 556–575. doi:10.1080/09644010802193419.
- Poder 360, ‘Operação Faroeste’, 2022. <https://www.poder360.com.br/tag/operacao-faroeste/>.
- Porto-Gonçalves, C.W., L. Wanderley, A. Ribeiro, P. Leão, and V. Silva, ‘Expropriação, Violência e R-Existência: Uma Geografia Dos Conflitos Por Terra No Brasil (2021)’, in ed. Comissão Pastoral da Terra, *Conflitos No Campo: Brasil* (Goiânia, 2022), 271. <https://www.cptnacional.org.br/downlods?task=download.send&id=14271&catid=41&m=0>.

- Quijano, A., ‘Coloniality of Power, Eurocentrism, and Latin America’, trans. M. Ennis, *Nepantla: Views from the South*, 1, no. 3 1, no. 3 (2000), 533–580. muse.jhu.edu/article/23906.
- Rawls, J., *A Theory of Justice*, Revised Edition., Revised Edition. (Cambridge, Massachusetts, 1999).
- reFUEL (BOKU), ‘ReFUEL’, [Website], n.d. <https://refuel.world/>.
- Reportagem, ‘Pita Paiva, o Mestre Da Xilogravura’, *Meus Sertões*, 1 September 2021. <https://www.meussertoes.com.br/2021/09/01/15574/#:~:text=Lindomar%20Paiva%2C%20conhecido%20como%20Mestre,%2C%20no%20entanto%2C%20pouco%20sabia>.
- República Federativa do Brasil, *Constituição Federal*, 1988.
- Ribeiro, C., and G. de Oliveira, ‘Terras Públicas, Comunidades Tradicionais e Corredores de Vento: Caminhos Da Energia Eólica Na Bahia’, in ed. J. Marques, F. Barrero, and Í. Maia, *O Cárcere Dos Ventos: Destruição Das Serras Pelos Complexos Eólicos*, vol. 3, 1st., vol. 3, 1st. (Paulo Afonso, Bahia, 2021).
- Ribeiro, D., *O Povo Brasileiro: a formação e o sentido do Brasil*, 2nd ed., 2nd ed. (São Paulo, 1995).
- Rodriguez, I., ‘Latin American Decolonial Environmental Justice’, in ed. B. Coolsaet, *Environmental Justice*, 1st ed., 1st ed., Key Issues in Environment and Sustainability (New York NY, 2020). <https://www.taylorfrancis.com/books/9780429642333/chapters/10.4324/9780429029585-8>.
- Santos, A., C. Ferreira, C. Silva Ribeiro, C. Cloves dos Santos Araújo, G. Inez Germani, Í. Fernanda Salles, J. Schmidt, et al., *Dossiê: Energias Renováveis Na Bahia: Caminhos e Descaminhos*, 20 July 2022. <https://www.dossienergiasrenovaveis.com.br/dossie.pdf>.
- Santos, B., ‘A Ecologia Dos Saberes’, *A Gramática Do Tempo: Para Uma Nova Cultura Política*, vol. 4, 2nd ed., vol. 4, 2nd ed., Para Um Novo Senso Comum (São Paulo, 2008).
- Santos, B. de S., ed., *Another Knowledge Is Possible: Beyond Northern Epistemologies, Reinventing Social Emancipation: Toward New Manifestos 3* (London, New York, 2008).
- Sarlet, I., and T. Fensterseifer, ‘Guardian of the Amazon: On the Brazilian Supreme Court’s “Climate Fund Case” Decision’, [Blog], *Verfassungsblog: On Matters Constitutional*, 6 July 2022. doi:10.17176/20220707-052522-0.
- Secretaria de Desenvolvimento Econômico, Secretaria de Desenvolvimento Rural, Coordenadoria de Desenvolvimento Agrário and Procuradoria Geral do Estado, *Instrução Normativa Conjunta*, 2020. <http://www.sda.sdr.ba.gov.br/sites/default/files/2020-07/INSTRU%C3%87%C3%83O%20NORMATIVA%20-%20%20C3%81REAS%20ENERGIA%20EOLICA.pdf>.
- Sen, A., *Development as Freedom*, 1st. ed., 1st. ed. (New York, 1999).
- , ‘Justice: Means versus Freedoms’, *Philosophy & Public Affairs*, Vol. 19, no. N. 2, Spring Vol. 19, no. N. 2, Spring (1990), 111–121.
- Senado Federal, *Código Civil Brasileiro*, 2002, n.d. [https://www2.senado.leg.br/bdsf/bitstream/handle/id/70327/C%C3%B3digo%20Ci vil%20%20ed.pdf](https://www2.senado.leg.br/bdsf/bitstream/handle/id/70327/C%C3%B3digo%20Civil%20%20ed.pdf).
- Setyowati, A.B., ‘Mitigating Inequality with Emissions? Exploring Energy Justice and Financing Transitions to Low Carbon Energy in Indonesia’ [‘Mitigating Inequality

- with Emissions?'], *Energy Research & Social Science*, 71 71 (January 2021), 101817. doi:10.1016/j.erss.2020.101817.
- Silva, A., C. Santos, C. Ribeiro, C. Araújo, G. Germani, Í. Salles, J. Schmidt, et al., 'Energias Renováveis: Caminhos e Descaminhos', [Website], 2022. <https://www.dossienergiasrenovaveis.com.br/>.
- Sluga, G., 'René Cassin: Les Droits de l'homme and the Universality of Human Rights, 1945–1966', in ed. S.-L. Hoffman, *Human Rights in the Twentieth Century* (Cambridge, 2011), 107–124.
- Smith, L.T., *Decolonizing Methodologies: Research and Indigenous Peoples*, 2nd., 2nd. (London & New York, 2012).
- Snyder, H., 'Literature Review as a Research Methodology: An Overview and Guidelines', *Journal of Business Research*, no. 104 no. 104 (2019). doi:10.1016/j.jbusres.2019.07.039.
- Sovacool, B.K., S.E. Bell, C. Daggett, C. Labuski, M. Lennon, L. Naylor, J. Klinger, K. Leonard, and J. Firestone, 'Pluralizing Energy Justice: Incorporating Feminist, Anti-Racist, Indigenous, and Postcolonial Perspectives' ['Pluralizing Energy Justice'], *Energy Research & Social Science*, 97 97 (February 2023), 102996. doi:10.1016/j.erss.2023.102996.
- Sovacool, B.K., M. Burke, L. Baker, C.K. Kotikalapudi, and H. Wlokas, 'New Frontiers and Conceptual Frameworks for Energy Justice', *Energy Policy*, 105 105 (June 2017), 677–691. doi:10.1016/j.enpol.2017.03.005.
- Sovacool, B.K., and M.H. Dworkin, 'Energy Justice: Conceptual Insights and Practical Applications' ['Energy Justice'], *Applied Energy*, 142 142 (March 2015), 435–444. doi:10.1016/j.apenergy.2015.01.002.
- , *Global Energy Justice: Problems, Principles, and Practices [Global Energy Justice]*, 1st ed., 1st ed., 2014. doi:10.1017/CBO9781107323605.
- Sovacool, B.K., R.J. Heffron, D. McCauley, and A. Goldthau, 'Energy Decisions Reframed as Justice and Ethical Concerns', *Nature Energy*, 1, no. 5 1, no. 5 (May 2016), 16024. doi:10.1038/nenergy.2016.24.
- Sullivan, W.M., and P. Rabinow, 'The Interpretive Turn: A Second Look', in ed. P. Rabinow and W.M. Sullivan, *Interpretive Social Science: A Second Look*, revised., revised. (Berkeley, 1987).
- Tornel, C., 'Decolonizing Energy Justice from the Ground up: Political Ecology, Ontology, and Energy Landscapes', *Progress in Human Geography* (10 October 2022). doi:10.1177/03091325221132561.
- Turkovska, O., G. Castro, M. Klingler, F. Nitsch, P. Regner, A.C. Soterroni, and J. Schmidt, 'Land-Use Impacts of Brazilian Wind Power Expansion', *Environmental Research Letters*, 16, no. 2 16, no. 2 (1 February 2021). doi:10.1088/1748-9326/abd12f.
- UNESCO, 'Human Rights: Back to the Future', *The UNESCO Courier*, 2018. <https://unesdoc.unesco.org/ark:/48223/pf0000265904>.
- United Nations, 'International Covenant on Civil and Political Rights' ['ICCPR'], 16 December 1966. <https://www.ohchr.org/en/instruments-mechanisms/instruments/international-covenant-civil-and-political-rights>.
- , 'Sustainable Development Goals' ['The 17 Goals'], [Website], n.d. <https://sdgs.un.org/goals>.
- United Nations Framework Convention on Climate Change, *Paris Agreement*, 2016. https://unfccc.int/sites/default/files/english_paris_agreement.pdf.
- United Nations Human Rights Office of the High Commissioner, *Guiding Principles on Business and Human Rights [UNGPHR]* (New York and Geneva, 2011).

- https://www.ohchr.org/sites/default/files/documents/publications/guidingprinciplesbusinessshr_en.pdf.
- United Nations Sustainable Development Group, *United Nations Sustainable Development Cooperation Framework*, 3 June 2019. <https://unsdg.un.org/sites/default/files/2022-06/UN%20Cooperation%20Framework%20Internal%20Guidance%20--%201%20June%202022.pdf>.
- Universidade Federal da Bahia, Geografar, ‘Publicações’, [Website], n.d. <https://geografar.ufba.br/publicacoes>.
- Visvanathan, S., *A Carnival for Science: Essays on Science, Technology and Development [A Carnival for Science]* (Oxford, 1997).
- , ‘The Search for Cognitive Justice’, [Website], 2009. https://www.india-seminar.com/2009/597/597_shiv_visvanathan.htm.
- Zeneratti, F.L., ‘O acesso à terra no Brasil: reforma agrária e regularização fundiária’ [‘O acesso à terra no Brasil’], *Revista Katálysis*, 24, no. 3 24, no. 3 (December 2021), 564–575. doi:10.1590/1982-0259.2021.e79558.

8.2. Legal sources

Legislation

- Governo do Estado da Bahia, *Lei n. 3.038*, 1972.
- , *Lei n. 3.665*, 1973.
- , *Constituição Estadual*, 1989.
- , *Lei n. 12910*, 2013.
- República Federativa do Brasil, *Constituição Federal*, 1988.
- , *Código Civil Brasileiro, Lei n. 10.406*, 2002.

Case Law

- Mayagna (Sumo) Awas Tingni Community v. Nicaragua (Inter-American Court of Human Rights 2001).

8.3. List of interviews

Interviews				
Ref.	Date	Institution	Description	Interview location
I/01	2022-07-08	SEPROMI	Secretariat for the Promotion of Racial Equality in the State of Bahia	Salvador, Bahia
I/02	2022-07-11	PGE-BA	Office of the Attorney General of the State of Bahia	Salvador, Bahia
I/03	2022-07-11	CDA	Agrarian Development Coordination of the State of Bahia	Salvador, Bahia
I/04	2022-07-12	AATR	Lawyers Association for Rural Workers (NGO)	Online
I/05	2022-07-14	SDE	Secretariat of Economic Development of the State of Bahia	Salvador, Bahia

8.4. List of workshops and public hearing

Ref.	Date	Topic	Workshop format
W/02	2021-08-02	Initial topics	Online
W/03	2021-11-05	Impacts	Online
W/04	2021-12-10	<i>Grilagem</i> and Contracts	Online
W/06	2022-04-08	Economic Impacts	Online
W/07	2022-05-10	Moving Forward	Online
PB/01	2022-07-20	Public Hearing	In person, in Senhor do Bonfim, Bahia, and Online

8.5. List of Newspaper Sample

Ref.	Author/Journalist	Date Published	Article Title (hyperlink)	ID
N/01	Carmen Vasconcelos	2019-01-21	Energia movida a vento vai gerar 24 mil empregos na Bahia	2019-01-21_EE_Energia movida a vento gera empregos na Bahia
N/02	Armando Avena	2019-04-19	As fazendas de vento	2019-04-19_EE_As fazendas de vento
N/03	Eduardo Athayde	2019-04-30	Bahia lidera o Brasil na corrida dos ventos	2019-04-30_EE_Bahia lidera o Brasil na corrida dos ventos
N/04	Donaldson Gomes	2019-05-19	Valor agregado: Bahia exporta turbinas de R\$ 600 milhões para os EUA	2019-05-19_EE_Valor agregado Bahia exporta turbinas para os EUA
N/05	Donaldson Gomes	2019-06-17	Engie vai investir mais R\$ 1,6 bi em energia eólica na Bahia	2019-06-17_EE_Engie vai investir em energia eólica na Bahia
N/06	Donaldson Gomes	2019-07-08	Restrição a navios estrangeiros na cabotagem atrapalha empresas	2019-07-08_EE_Restrição a navios estrangeiros na cabotagem
N/07	Geraldo Bastos	2019-09-10	Senai e Engie lançam curso gratuito na área de manutenção de parques eólicos	2019-09-10_EE_Senai e Engie lançam curso gratuito manutenção de parques eólicos
N/08	Donaldson Gomes	2019-10-04	Cimatec Industrial já tem data de inauguração	2019-10-04_EE_Cimatec Industrial já tem data de inauguração
N/09	Geraldo Bastos	2019-11-12	Com investimento de R\$ 87 milhões, Senai Cimatec Park entra em operação	2019-11-12_EE_Com investimento Senai Cimatec Park entra em operação
N/10	João Gabriel Galdea	2019-12-05	Com financiamento europeu, Neoenergia investirá R\$ 1,2 bi em eólicas no Nordeste	2019-12-05_EE_Neoenergia investirá em eólicas no Nordeste
N/11	Redação	2020-01-31	Petrobras inicia processo de venda de fatias em empresas de energia eólica	2020-01-31_EE_Petrobras inicia processo de venda de fatias de energia eólica
N/12	Eduardo Athayde	2020-04-13	Inovação e sustentabilidade - [Covid-19] e o futuro da mineração	2020-04-13_EE_Inovação e sustentabilidade
N/13	Redação	2020-09-18	Nova ponte sobre o Rio São Francisco ligará Xique-Xique a Barra	2020-09-18_EE_Nova ponte sobre o rio sao francisco
N/14	Redação	2020-10-08	Novos investimentos devem trazer R\$ 28 bilhões para a Bahia	2020-10-08_EE_Novos Investimentos para Bahia
N/15	Vitor Villar	2021-01-30	ESG: é possível investir se preocupando com o meio-ambiente e o social	2021-01-30_EE_Investir se preocupando com o meio ambiente e o social
N/16	Victor Lahiri	2021-03-11	Através de cursos rápidos, mulheres ganham espaço em profissões antes dominadas por homens	2021-03-11_EE_Mulheres ganham espaço em profissões antes dominadas por homens
N/17	Donaldson Gomes	2021-04-16	Tecnologia: GE estreia aerogerador brasileiro em parques eólicos baianos	2021-04-16_EE_GE estreia aerogerador brasileiro em parques eólicos baianos
N/18	Donaldson Gomes	2021-05-07	Parque eólico em Campo Formoso que vai fornecer energia para Braskem entra em operação	2021-05-07_EE_Parque Eolico Campo Formoso Braskem
N/19	Estúdio Correio	2021-05-27	Braskem fortalece iniciativas de eficiência energética	2021-05-27_EE_Braskem fortalece iniciativas de eficiência energética
N/20	Renée Pereira, Estádio Conteúdo	2021-06-13	Matriz elétrica ainda depende de volume de chuvas	2021-06-13_EE_Matriz elétrica ainda depende de volume de chuvas
N/21	Redação	2021-06-24	5 cidades do interior da Bahia terão cerca de 4 mil novos empregos	2021-06-24_EE_Cidades do interior da Bahia terão cerca de 4 mil novos empregos

N/22	Redação	2021-07-13	<u>Sítios arqueológicos são identificados em cidades do norte da Bahia</u>	2021-07-13_EE_Sítios arqueológicos são identificados em cidades do norte da Bahia
N/23	Donaldson Gomes	2021-08-13	<u>Intermarítima conquista nova área para contêineres no Porto de Salvador</u>	2021-08-13_EE Intermarítima conquista nova área para contêineres no Porto de Salvador
N/24	Donaldson Gomes	2021-09-10	<u>Consumo nas classes C e D na Bahia cresce pela primeira vez no ano</u>	2021-09-10_EE_Consumo nas classes C e D na Bahia cresce pela primeira vez no ano
N/25	Donaldson Gomes	2021-10-15	<u>MP da Crise Hídrica desconsidera energia renovável do Nordeste</u>	2021-10-15_EE_MP da Crise Hídrica desconsidera energia renovável do Nordeste
N/26	Pepita Ortega	2021-11-24	<u>Justiça eleitoral aceita denúncia contra Ricardo Barros e mais quatro por propina</u>	2021-11-24_EE_Justiça eleitoral aceita denúncia contra Ricardo Barros por propina
N/27	Kirk Moreno	2021-12-22	<u>Morro do Chapéu: Gestão inovadora tem recuperado auto estima da população com reestruturação do município</u>	2021-12-22_EE_Gestão inovadora tem recuperado auto estima da população com reestruturação do município
N/28	Carmen Vasconcelos	2022-01-24	<u>Vagas o ano todo: pesquisa indica aumento de 419% no comércio e serviços</u>	2022-01-24_EE_vagas o ano todo
N/29	Donaldson Gomes	2022-03-11	<u>Complexo eólico baiano terá apenas mulheres na operação e manutenção</u>	2022-03-11_EE_Complexo eólico baiano terá apenas mulheres na operação e manutenção
N/30	Hugo Brito	2022-05-06	<u>Energia e poluição</u>	2022-05-06_EE_Energia e poluição
N/31	Redação	2022-05-20	<u>Encargos e tributos vão manter as tarifas caras</u>	2022-05-20_EE_Encargos e tributos vão manter as tarifas
N/32	Estúdio Correio	2022-05-25	<u>Indústria baiana avança em ações que consolidam os critérios de ESG</u>	2022-05-25_EE Indústria baiana avança em ações que consolidam os critérios de ESG
N/33	Redação	2022-05-27	<u>Indústria precisa de educação, infraestrutura e mais inovação</u>	2022-05-27_EE_Indústria precisa de educação infraestrutura e mais inovação
N/34	Murilo Gitel	2022-06-27	<u>Uso de Resíduos: destaque na cadeia produtiva da mineração</u>	2022-06-27_EE_Uso de Resíduos: destaque na cadeia produtiva da mineração
N/35	Eduardo Athayde	2022-07-25	<u>Valor dos ventos globais e locais</u>	2022-07-25_EE_Valor dos ventos globais e locais
N/36	Alô Alô Bahia	2022-07-28	<u>Unigel investirá US\$120 milhões em fábrica de hidrogênio verde no Polo de Camaçari</u>	2022-07-28_EE_Unigel investirá em fábrica de hidrogênio verde no Polo de Camaçari
N/37	Eduardo Athayde	2022-08-18	<u>Energias renováveis para a mineração</u>	2022-08-18_EE_Energias renováveis para a mineração
N/38	Alô Alô Política	2022-09-23	<u>Ao estilo 'tanto faz', Lula diz que vai conversar com todos os governadores eleitos, independente do partido</u>	2022-09-23_EE_Lula diz que vai conversar com todos os governadores eleitos independente do partido
N/39	Donaldson Gomes	2022-10-19	<u>Empresas buscam resultados além do lucro</u>	2022-10-19_EE_Empresas buscam resultados além do lucro
N/40	Redação	2022-11-18	<u>Congresso Impulsione reúne especialistas do setor de energias renováveis em Salvador</u>	2022-11-18_EE_Congresso Impulsione reúne especialistas do setor de energias renováveis em Salvador

Annex I

Questions of the semi-structured interviews:

1. Could you explain what are ‘vacant’ lands and what peculiarities are found in the State of Bahia?
2. Could you explain the current legal challenges regarding the regularization of state vacant lands, especially between the Land Law of the State of Bahia No. 3,038, of 1972, and the state and federal constitutions?
3. Could you explain the role of [institution] with regards to the process of implementing renewable energy projects, especially of wind sources, in vacant lands?
4. Regarding Normative Instruction 01/2020, could you explain the reasons why it was made?
5. Still on the NI, this instrument was made together with the CDA, SDE and SDR. Would you be able to inform how this alliance developed and why bodies such as SEPROMI were not represented?
6. What guarantees does the NI provide, especially for the Fundo e Fecho de Pasto communities?
7. Could you inform the role of the [institution] in land ownership processes and what would be the role of the [institution] in cases of doubts about the legitimacy of titles?
8. NGOs such as the CPT and AATR emphasize that the rights of traditional communities are violated by the NI, as this instrument provides for a procedure that ignores the existence of the right to prior, free and informed consultation, which is guaranteed by Convention 169 of the OIT. In addition, they emphasize that the proposal is incompatible with State Law No. 12.910/2013, because with regard to Article 2 of this Law, wind activity is not among the activities allowed in traditional territories. Could you comment on this from your point of view?

Erklärung / Declaration

Eidesstattliche Erklärung:

Ich erkläre hiermit, dass ich vorliegende Abschlussarbeit selbstständig verfasst, keine anderen als die angegebenen Quellen und Hilfsmittel genutzt und mich auch sonst keiner unerlaubten Hilfen bedient habe, dass vorliegende Abschlussarbeit weder im In- noch Ausland (einer*einem Beurteiler*in zur Beurteilung) in irgendeiner Form als Prüfungsarbeit vorgelegt wurde, und, dass dieses Exemplar mit der beurteilten Arbeit übereinstimmt.

Declaration of academic honesty:

I hereby declare that this thesis has been created by myself, none other than the quoted sources nor any other aids have been used and I have not drawn on any other type of assistance. My thesis has not in any way been submitted (to a supervisor for assessment) either domestically or abroad and this copy is identical to the assessed copy of my thesis.

Datum / Date

22. März/March 2023

Unterschrift / Signature

Patricia Gabres Denolle Huber

Abstract

[English] This master thesis examines the relationship between wind energy expansion and land and human rights violations in the semi-arid region of the state of Bahia, in Brazil. The study focuses on the Traditional Communities of Fundo e Fecho de Pasto (FFP), who have been facing challenges in terms of land entitlement, formal recognition (self-determination), health and environment, work opportunities, and women's rights in the context of wind energy development. The research applies an integrative framework of energy justice and decolonial thinking, placing the communities' needs and experiences at the center of the analysis. It aims to understand the underlying issues of human rights against the FFP in the context of wind energy expansion, considering the high potential of the Brazilian Northeast region for renewable energy production, and the fact that many of the potential areas are located on 'vacant' public land that traditionally occupied by the FFP communities. The study provides suggestions for interventions that can contribute to a more just and sustainable energy system, serving as a call to action for the application of human rights, decolonial thinking, and the importance of community involvement in the wind energy expansion process.

[Deutsch] In dieser Masterarbeit wird der Zusammenhang zwischen dem Ausbau der Windenergie und der Verletzung von Land- und Menschenrechten in der semiariden Region des brasilianischen Bundesstaates Bahia untersucht. Die Studie konzentriert sich auf die traditionellen Gemeinschaften der Fundo e Fecho de Pasto (FFP), die im Zusammenhang mit der Entwicklung der Windenergie mit Herausforderungen in Bezug auf Landansprüche, formale Anerkennung (Selbstbestimmung), Gesundheit und Umwelt, Arbeitsmöglichkeiten und Frauenrechte konfrontiert sind. Die Forschung wendet einen integrativen Rahmen von Energiegerechtigkeit und dekolonialem Denken an und stellt die Bedürfnisse und Erfahrungen der Gemeinschaften in den Mittelpunkt der Analyse. Sie zielt darauf ab, die zugrundeliegenden Menschenrechtsprobleme gegenüber den FFP im Zusammenhang mit dem Ausbau der Windenergie zu verstehen. Dabei wird das hohe Potenzial der brasilianischen Nordostregion für die Erzeugung erneuerbarer Energien berücksichtigt und die Tatsache, dass viele der potenziellen Gebiete auf „freiem“ öffentlichen Land liegen, das traditionell von den FFP-Gemeinschaften genutzt wird. Die Studie liefert Vorschläge für Interventionen, die zu einem gerechteren und nachhaltigeren Energiesystem beitragen können, und dient als Aufruf, Menschenrechte zu garantieren, dekoloniales Denken anzuwenden und die Beteiligung von Gemeinschaften am Prozess der Windenergieerweiterung zu ermöglichen.