

INDIGENOUS PEOPLE ENVIRONMENTAL RIGHTS VULNERABILITY TO CARBON TRADING MECHANISM: A LESSON LEARNED FOR INDONESIA

Davilla Prawidya Azaria¹
Rianda Dirkareshza²
Ali Imran Nasution³

¹Faculty of Law, University of Pembangunan Nasional Veteran Jakarta
E-mail: dp.azaria@upnvj.ac.id

²Faculty of Law, University of Pembangunan Nasional Veteran Jakarta
E-mail: riandadirkareshza@upnvj.ac.id

³Faculty of Law, University of Pembangunan Nasional Veteran Jakarta
E-mail: aliiimran.nst@upnvj.ac.id

ABSTRACT

Developed countries are strictly obligated to reduce carbon emissions due to their industrial activities, contributing to a major concentration of greenhouse gases in the atmosphere. This paper aims to provide a basic overview of carbon reduction provisions under Kyoto Protocol and climate change frameworks development through the years. Practically in developing countries, its provision requires funding and transferring technology schemes by developed countries. The carbon markets emerged from Clean Development Mechanism (CDM) as a so-called eco-friendly project which potentially turns into a new form of capitalism in developing countries along with a tendency to depend on funding and transferring technology itself. Indigenous people are targeted groups directly affected by CDM projects and often neglect their fundamental rights. State is obligated to provide a forum for indigenous people to participate in the level of socializing, consultation, and law-making process of CDM as its nature being the most vulnerable group.

Keywords: Carbon trade; climate change; environmental rights; indigenous people

INTRODUCTION

Over the last decade, climate change has not only become a written agenda among countries all over the world. Environmental problems are now increasingly affecting society at all levels. In Developed countries where the

industrial sector is the primary source of income, massive amounts of carbon emissions disposal are inevitably released into the atmosphere though with consideration of significant consequences for environment. On the other hand, developing countries largely depend on

environmental sustainability in all sectors of life, ranging from an individual scale to a country's economic development. However, the tug-of-war between industrial carbon emissions and the environmental sustainability functions in climate change will continuously evolve in developed and developing countries' policies.

Global public awareness began to rise fully since a series of world conferences on the environment were held, then reached its milestone with the Stockholm Declaration on the Human Environment in 1972 and the Rio Declaration on Environment and Development in 1992 became globally recognized.¹ The principles manifested in this Declaration transformed into the primary basis for countries to draft environmental policies both at the international and domestic levels. Furthermore, these principles will later become the international community's main long-term agenda, contrived the Sustainable Development Goals (SDGs), which seek commitment from every UN country nowadays. In line with the United Nations Framework Convention on

Climate Change (UNFCCC) or the Climate Change Convention 1992 that came into force on March 21, 1994. The UNFCCC demands high concerns from international community that the earth is now facing an environmental crisis marked by increasing temperatures due to greenhouse gases rebounded from fossil fuel emissions carried out by industrial activities over the centuries since the discovery of machines to support modern humans.

The UNFCCC calls on progressive steps from industrial countries to directly impact reducing the concentration of greenhouse gases in the earth's atmosphere. The Kyoto Protocol further explains the strict obligations of industrial countries which are members of Annex I, Annex B and Annex II countries. The carbon trading mechanism was established to reduce carbon gas emissions by calculating the number of carbon credits traded. Carbon trading mechanism opens up opportunities for developed countries to obtain carbon credits by involving developing countries through various financing and technology transfer programs called Clean Development Mechanism (CDM) program. CDM then evolved into a new trend of 'environmentally friendly' trade between

¹ Gunther Handl, *Introductory Note of Declaration of the United Nations Conference on the Human Environment (Stockholm Declaration) 1972 and the Rio Declaration on Environment and Development 1992*, 2012.

industrially developed and developing countries.

Along with the development of CDM as large funds circulate on financing programs in developing countries, broad opinions have emerged regarding CDM practices in developing countries said to be getting far away from human rights promotion and environment conservation itself.² It is relatively easy to find harmful CDM practices toward indigenous people's habitation and environment. In 2011, there were attacks on local farmers due to the CDM Biogas Recovery Palm Oil Honduras project.³ On September 3, 2012, United Nations Development Program (UNDP) discovered the fact that CDM Panama Barro Blanco Dam project on the Tabasará River damaged environmental ecosystem of the Ngäbe indigenous community group with flooding occurring on the land, residences, and cultural and religious objects of the indigenous community from the project.⁴ To be worse, apartheid practices that are grave violations of human rights discrimination can occur in a CDM

project in Durban, South Africa not only generating environmental damage but also endangering human health.⁵

Carbon trading mechanisms regulations in the Climate Change Convention and its supplementary agreements must be reviewed more profoundly and evaluation of new agreements can be undertaken. As a binding obligation for industrial countries, the carbon trading mechanism presumably turns into a new form of 'capitalism' wrapped by 'environmentally friendly' projects in developing countries. Moreover, this mechanism even incentivizes companies to increase carbon production to produce carbon credits.⁶ The carbon offset mechanism, which requires large areas of land for its implementation, will undoubtedly threaten the lives of indigenous people's environment. Indigenous peoples as the most vulnerable affected group to the direct consequences of climate change, will be increasingly threatened by carbon trading practices in developing countries. The state needs to progressively accommodate security and promote the protection of environmental rights of indigenous peoples.

² Kate Ervine, *Trading Carbon: Offsets, Human Rights, and Environmental Regulation*, in *Beyond Free Trade*, 2015, https://doi.org/10.1057/9781137412737_14.

³ FIDH, *Honduras: Human Rights Violations in Bajo Aguán*, 2011.

⁴ CIEL, *UN Representative on Indigenous Peoples Asked to Investigate Human Rights Violations Caused by Panama's Barro Blanco Dam*, 2013.

⁵ Patrick Bond et al., *The CDM Cannot Deliver the Money to Africa*, *EJOLT*, 2012.

⁶ Gilles Dufrasne, *The Clean Development Mechanism (CDM): Local Impacts of a Global System*, Carbon Market Watch, 2018.

This research discusses carbon emission reduction mechanisms in the climate change convention regime to understand how implementing carbon trading can potentially threaten and loot indigenous peoples of their environmental rights. A significant role is needed for the state as the duty bearer to fulfill human rights to assure the protection of the environmental rights of indigenous peoples by providing space for participation as a fundamental part of the carbon trading mechanism in developing countries through various authorities owned by the state. It could broaden the vision of Indonesian government to take action as the carbon market will become a new actor in national economic development.

Method

This article is a normative research with a literature study that analyzes data qualitatively. The data is secondary with primary legal material in the Climate Change Convention, Kyoto Protocol, and Paris Agreement. Meanwhile, secondary legal materials come from books, scientific journals, and scholar's doctrines. Using statute approach and a conceptual approach carried out with qualitative descriptive analysis by selecting study

materials relevant to the research from various reference sources. Problems that the author relies on are then described to provide answers regarding the implementation of carbon emission reduction mechanisms in developing countries in relation to the protection of the rights of indigenous peoples, where gaps often arise in their implementation.

RESULTS AND ANALYSIS

1. Carbon Emissions Reducing Mechanisms in the Climate Change International Framework

The initial effort made by the international community in dealing with environmental problems was to establish a specifically and globally agreed framework as a forum for environmental policy negotiations and diplomacy for countries in the world. In the 1980s, through the UN General Assembly Resolution, Protection of the Global Climate for Present and Future Generation of Mankind⁷, a multilateral agreement was agreed upon and legally binding for the UN member countries. The United Nations Framework Convention on Climate Change (UNFCCC) is a UN forum focusing on mitigating environmental change problems and

⁷ United Nations, *Resolution on the Protection of Global Climate for Present and Future Generations of Mankind A/RES/43/53*, 1988.

formulating a policy framework for world countries to implement in their domestic policies.

Since it is widely recognized that human activities have a prominent role in escalating the concentration of greenhouse gases in the earth's atmosphere, which triggers an increase in the earth's temperature, the UNFCCC focuses on the goal of *“to achieve, in accordance with the relevant provisions of the Convention, stabilization of greenhouse gas concentrations in the atmosphere at a level that would prevent dangerous anthropogenic interference with the climate system. Such a level should be achieved within a time frame sufficient to allow ecosystems to adapt naturally to climate change, to ensure that food production is not threatened and to enable economic development to proceed in a sustainable manner”*.⁸ For a real commitment, Article 4 of the UNFCCC orders things that UN countries must do to achieve the goals in Article 2. Industrial countries are obligated to make domestic policies and take concrete climate change mitigation steps by limiting greenhouse gases disposal into the atmosphere.

Common but differentiated responsibilities and respective capabilities

⁸ United Nations, *United Nations Framework Convention on Climate Change*, 1992.

are the fundamental principles in shaping the UNFCCC. Accordingly, industrial and developing countries have different obligations to reduce greenhouse gas emissions and adjust to each country's capacity for environmental mitigation. Regarding to follow-up the Framework, several conferences were established to provide a policy-making forum where the member countries can negotiate the exercise and supervise the Framework effectively. The Conference of Parties (COP) was first held in Berlin, Germany, which resulted in a more detailed agreement on reducing emissions mechanisms implemented by developed countries. Since the first conference, participating countries in the Framework began negotiating and later agreed on the Kyoto Protocol in 1997, yet it came into force in 2005 when a sufficient number of ratified countries achieved.⁹

The Kyoto Protocol is considered an evolution in constructing the international environmental regime by establishing legally binding provisions for participating countries. The Kyoto Protocol explains the absolute liability of industrial countries to reduce greenhouse

⁹ Usha Tandon, *Carbon Trading and Climate Change: An Overview of Legal and Policy Measures*, *Politics & Energy EJournal*, no. 1 (2015): 49–73.

gas emissions by 5% compared to carbon emission levels in 1990. The Protocol provisions paved the way for inventing suitable schemes to reduce carbon emissions and new commodity markets at one blow.¹⁰ his new scheme was agreed on the Marrakech Accord when COP 7 was held in 2001. Generally, the carbon emission is reduced by industrial countries can be traded internationally. Then, it led to the emergence of international carbon markets measured by the carbon equivalent of one of the greenhouse gas emissions with the highest concentration in the atmosphere.

Carbon dioxide (CO₂) is a persistent greenhouse gas trapped in the atmosphere and causes earth warming. CO₂ concentration plays a significant role in climate change, mainly emitted from fossil combustion and deforestation. Apart from carbon dioxide, Intergovernmental Panel on Climate Change (IPCC) lists several other greenhouse gases that contribute to global warming and as the commitment's targets to reduce carbon emissions in the Kyoto Protocol, i.e. methane (CH₄), nitrodioxide (N₂O), perfluorocarbon (PFC),

hydrofluorocarbon (HFC), and sulfur hexafluoride (SF₆). These anthropogenic or human-made gas emissions remain in the atmosphere for long periods, especially carbon dioxide and methane which are flue gases produced in large quantities from industrial processes.

The Kyoto Protocol aims to stabilize the concentration of greenhouse gases in the atmosphere at a certain level, thereby preventing dangerous disturbances to the earth's climate system.¹¹ This goal is imposed on industrial countries listed in Annex I of the UNFCCC and Annex B of the Kyoto Protocol, totaling 41 industrial countries, including semi-developed industrial countries that joined the Organization for Economic Cooperation and Development (OECD) in 1992, as well as Economic in Transition (EIT) countries. Annex I countries that have ratified the convention agreed to commit to reducing greenhouse gas emissions with the condition of carbon emission concentrations in 1990 in these countries as a baseline for the target achievement. Meanwhile, Annex II of the UNFCCC comprises developed countries in the Annex I sub-group, obliged to pay

¹⁰ Julien Chevallier, *Econometric Analysis of Carbon Markets, Econometric Analysis of Carbon Markets*, 2012, <https://doi.org/10.1007/978-94-007-2412-9>.

¹¹ UNFCCC, *Kyoto Protocol Reference Manual on Accounting of Emissions and Assigned Amount*, United Nations Framework Convention on Climate Change, 2008, <https://doi.org/10.5213/jkcs.1998.2.2.62>.

industrial countries when they cannot reduce carbon emission levels. Lastly, those included in Non-Annex I are developing countries that in the UNFCCC are not burdened with direct restrictions on reducing carbon gas emissions.

Carbon trading, as formulated in the UNFCCC and described in more detail in the Kyoto Protocol, provided three mechanisms: Clean Development Mechanism (CDM); Joint Implementation (JI); and Emissions Trading (ET). The CDM regulated in Article 12 of the Kyoto Protocol provides a market mechanism for industrial countries burdened with carbon emission reduction and reduces greenhouse gas carbon concentrations in developing countries by transferring technology through industrial country financing. CDM carbon credits called Certified Emission Reduction (CER) will be given based on the amount of emissions reduced by the financing and technology transfer program. One credit is equivalent to one ton of reduced carbon dioxide emissions, and private sectors can be involved in the CER transaction scheme with the permission of participating countries.¹² The CDM projects implemented in developing countries, equivalent to carbon credits and

CERs, can be converted through a transfer process between developing and developed countries as fulfillment of the obligations of Annex I countries towards their commitment to reduce carbon emissions. CDM is known as an offset international trade mechanism.

Joint Implementation is regulated in Article 6 of the Kyoto Protocol, allowing trading mechanisms in certain carbon credits among UNFCCC Annex I countries. Credits called Emissions Reduction Units (ERU) are traded by Annex I countries that have succeeded in reducing greenhouse gas carbon emissions. In this mechanism, industrial countries must actively carry out carbon emission reduction programs by involving the private sector. Lastly, Emission Trading (ET) stated in Article 17, is a mechanism for countries participating in Annex B to trade their emission reserves with countries that exceed their carbon emission reduction levels. In this case, a new commodity was created by reducing or disposing of gas emissions with carbon dioxide as the primary greenhouse gas emission, often called carbon trading.¹³ It is clearly stated that Joint Implementation and Emission Trading are cooperation mechanisms that can be implemented only

¹² United Nations, *United Nations Framework. Conv. Clim. Chang.*

¹³ Tandon, *Carbon Trading and Climate Change: An Overview of Legal and Policy Measures.*

by industrial countries, whilst CDM is a cooperation mechanism between developed countries and developing countries.

The Kyoto Protocol was effectively implemented in 2005 with a First Commitment period from 2008 to 2012, followed by a Second Commitment from 1 January 2013 to 31 December 2020. The UNFCCC has determined that carbon emission reduction programs and the issuance of carbon credits will continue to be carried out after 2012 via CDM. However, this will become an obstacle when the Kyoto Protocol does not clearly set up the emission targets that participating countries must achieve so it will result in few buyers or even no one buying CER after 2012.¹⁴ Following the Kyoto Protocol and the UNFCCC, the COP continues discussing and complying on carbon emission reduction policies. On 12 December 2015, the Paris Agreement was consented as a result of COP 26 in Paris, then came into force on 4 November 2016. This agreement has more ambitious goals to bind the participating countries to reduce global temperature to below 2°C and limit the increase to 1.5 °C

compared to the earth's temperature conditions before the industrialization era.

The Paris Agreement demands a high and long-term commitment from participating countries to reduce carbon emissions while simultaneously adapting to the environmental change that the world faces. It also sets a foundation for industrial countries to assist developing countries in mitigating climate change whilst formulating a clear monitoring framework for each country to ensure its reduction targets. It also becomes a pilot in the net-zero emission program, which is vital to sustainable development goals or SDGs.¹⁵ Every five years, all participating countries are expected to report their domestic action plans as set in the Nationally Determined Contribution (NDC) document.

The enactment of the Paris Agreement as a renewal of multilateral sustainable effort from its predecessor instrument has become a new compass for world countries to lead commitments to reduce carbon emissions in their domestic laws. Article 6 of the Paris Agreement needs to be carefully exercised when it provides cooperation to form a carbon

¹⁴ Green Clean Guide, *Want to Earn Carbon Credit but Confused about the Future Carbon Credits?*, 2012.

¹⁵ United Nations, *Paris Agreement to the United Nations Framework Convention on Climate Change* (2015), <https://www.un.org/en/climatechange/paris-agreement>.

market mechanism to achieve the common goals in this instrument. There are three cooperation mechanisms contained in Article 6: internationally transferred mitigated outcomes (ITMOs); Sustainable Development Mechanism (SDM); and non-market mechanisms.¹⁶ If these three mechanisms are well-designed, they will help countries achieve the NDC and common goals of the convention, which is to keep the earth's temperature rise to no more than 1.5°C. However, if poorly planned and implemented, it will not only result in a high increase in global temperature but also significant environmental damage and the potential for human rights violations.¹⁷

2. The Threat of Depriving Indigenous Peoples' Environmental Rights in Developing Countries

CDM is one of the carbon trading mechanisms under the Kyoto Protocol that appears to be a visible solution related to climate change mitigation efforts. CDM is expected to provide dual results by transferring technology and knowledge on the one hand and achieving low-cost emission reduction goals through

cooperation with developing countries on the other hand. The CDM program involves forestry management, replanting, and reforestation, use of biomass resources, and other carbon absorption that have the potential to advance sustainable growth for developing countries, as well as the involvement of indigenous peoples' land use in its processing systems. However, there is still a lack of understanding that implementing CDM programs can negatively affect traditional land use and customary land ownership as well as the risk of pollution from developed countries.

As of February 2022, the United Nations Clean Development Mechanism (UNCDM) has recorded at least 11,700 CDM projects with a total value of more than 2 billion carbon credits called CER.¹⁸ Even though CER trading weakened during the Second Commitment period, the CDM project continued while extending new strategies. The offsets scheme in carbon trading allows industrial countries to fulfill their obligated carbon reduction targets by financing and transferring technology to developing countries. Due to the large financing scheme of the CDM project, much criticism has been directed towards low

¹⁶ United Nations.

¹⁷ Center for International Environmental Law, *Integrating Human Rights in the Modalities Related to Carbon Markets Established under Article 6 of the Paris Agreement*, 2019.

¹⁸ UNCDM, *CDM Registry Issuance Report as per 28 February 2022*, 2022.

environmental integrity and often ignoring the protection of human rights in sequences of CDM implementation strategies.¹⁹

For instance, the case in Panama's Tabasará River as facts discovered by the UNDC fact-finding mission stated that the Panama Barro Dan CDM project had damaged the livelihoods and daily lives of the Ngäbe indigenous people with major flooding destroyed land, houses and cultural objects of Ngäbe community.²⁰ Then, there is the case in Durban, South Africa, where a CDM project operates to decompose methane and electronic waste by Bisasar Road. The project is considered to have health loss due to high cases of respiratory disease and cancer caused by disposing of heavy metals and other hazardous substances into the local water supply system.²¹ The case above illustrates how human rights are neglected, particularly in local indigenous communities.

A similar case was also found in Guatemala's largest hydroelectric power plant, the Xacbal Project. The projects aim

to optimize the use of local hydraulic resources, reduce CO₂, improve forest coverage in the river basin, and lessen soil degradation through activities established in Xacbal River Management Basin Plan. This project has run into multiple problems and severely affected communities. It has damaged natural resources such as water and forest, blocked access to sacred sites, and created social tensions among local communities. It has also generated deforestation, impairment of water and river resources, and landslides. Apart from that, access to the Panchita archaeological site was also restricted, which is used by the Ixil community to access clean water because the area was designated as part of the Xacbal project. Physical damage has also occurred with the tragic death of two young people from Santa Cecilia la Pimienta who were dragged by water released from the machine due to the lack of information regarding the plant's operation.²² This case shows how important it is to facilitate dialogue with local communities before, during, and after the implementation of the CDM project in the area where it will be directly affected.

¹⁹ Ervine, *Trading Carbon: Offsets, Human Rights, and Environmental Regulation*.

²⁰ CIEL, *UN Representative on Indigenous Peoples Asked to Investigate Human Rights Violations Caused by Panama's Barro Blanco Dam*."

²¹ Bond et al., *The CDM Cannot Deliver the Money to Africa*."

²² Dufrasne, *The Clean Development Mechanism (CDM): Local Impacts of a Global System*.

Indigenous communities and community organizations argue that carbon reduction financing programs in developing countries have encouraged the privatization of natural resources and diminished the role of communities in traditional land use.²³ As portrayed in a bigger picture, it is excessively criticized that carbon credit financing using so-called eco-friendly mechanisms has perpetuated the dominance of developed countries over natural resources exploitation in developing countries.²⁴ Hence, it should not be appropriate to legitimize any dictating practices to control traditional ecosystems owned by indigenous people as if justifying climate change mitigation goals in the international environmental regime.

To ensure an equitable development process in climate change mitigation, CDM must be able to make initial provisions as a reconciliation²⁵ by respecting the traditional land use of indigenous communities who had settled

for generations. It is crucial to understand that indigenous communities produce the lowest carbon footprint because of their traditional and spiritual bonding characteristics with the environment. Therefore, by nature being, these communities are a group who are directly affected by climate risk.²⁶ Referring to Principle 22 of the 1992 Declaration on Environment and Development (Rio Declaration), indigenous peoples have a vital role in environmental management and development because of their knowledge and traditional practices. Furthermore, this Principle calls for the State to recognize and duly support indigenous peoples' identity, culture and interests and enable their effective participation in achieving sustainable development goals.

The effective participation of indigenous communities mentioned in Principle 22 is linked with Principle 10, which broadly describes the concept of participation of all communities by providing access to comprehensive information about hazardous materials and overall activities regarding environmental

²³ Larry Lohmann, *Carbon Trading: A Critical Conversation on Climate Change, Privatisation and Power OR - Dag Hammarskjöld Foundation, Development Dialogue*, 2006.

²⁴ Emily Richman, *Emission Trading and the Development Critique: Exposing the Threat to Developing Countries*, New York University Journal of International Law and Politics, n.d.

²⁵ Martin Burian, *The Clean Development Mechanism, Sustainable Development and Its Assessment*, HWWA Report No. 264, no. 264 (2006): 119.

²⁶ Center for International Environmental Law International Indigenous Peoples Forum on Climate Change, *Indigenous Peoples and Traditional Knowledge in the Context of the UN Framework Convention on Climate Change*, 2018, 56.

projects by public authorities, as well as emphasizing the participation of indigenous communities in the decision-making process. As an international mandatory basis for the state to duly accommodate participation for indigenous peoples, Principle 22 insufficiently identifies indigenous peoples as inalienable right-holders to traditional land use. On the other hand, the participation of indigenous communities in law-making process is only due to practical agenda of land use by the external sector (state and/or private). Therefore, the state is not only burdened with the obligation to enable effective participation but also assure indigenous peoples have institutional rights in the decision-making process on agendas that will directly impact them, as stated in the United Nations Declaration on the Rights of Indigenous People (UNDRIP).²⁷

More binding provisions regarding the practical inclusion rights of indigenous peoples can also be found in Article 27 of the International Covenant on Civil and Political Rights (ICCPR) which states, “*in those State in which ethnic, religious or linguistic, minorities exist, persons belonging to such minorities shall not be*

denied the right, in the community with the other members of the group, to enjoy their own culture, to profess and practice their own religion, or to use their own language.” Corresponding to Article 27, the state is also obligated to carry out cultural protection manifested in various forms, such as indigenous peoples' unique ways of life as minority groups regarding managing natural resources.²⁸

CDM projects should not harm the environment in developing countries, at any rate. The potential ecosystem damage can arise from reforestation activities aligned with the Kyoto Protocol and the Convention on Biological Diversity (CBD). As Article 8 (j) of the CBD expresses, countries shall consult with indigenous peoples to enable involvement in the policy-making process and sharing of traditional ecological knowledge from indigenous peoples. Furthermore, Article 18 (4) of the CBD can be transformed into domestic regulations and state policies, encouraging partnership cooperation and collaboration with indigenous communities in carbon reduction projects as being the main goals of the sustainable development agenda.

²⁷ United Nations, *United Nations Declaration on the Rights of Indigenous Peoples. Resolution 61/295*, United Nations General Assembly, 2007.

²⁸ Office of the High for Human Rights Commissioner, *CCPR General Comment No. 23: Article 27 (Rights of Minorities)*, II (1994).

Human rights violation cases caused by carbon trading mechanisms in several developing countries underline the vulnerable characteristic of indigenous peoples, which their traditional rights can be easily neglected. Indeed, it became a valuable lesson for Indonesia, a heterogeneous society that recognized indigenous people as an integral part of the nation. Carbon trading is a new aspect in driving Indonesia's economic markets; its development and leverage have yet to occur significantly. Nevertheless, the carbon market in the future presumably will become popular and strategic and then require a well-designed climate justice regulation without leaving behind the vulnerable indigenous peoples' welfare. It can be concluded that the lack of public participation causes most human rights violation cases against indigenous peoples in CDM projects, from the planning process to the complaint mechanism if violations occur.

CONCLUSION

The carbon trading mechanism was designed in more detail in the Kyoto Protocol as a manifestation of the UNFCCC, then broadly developed to be more comprehensive mechanism regulations in the 2015 Paris Agreement. The involvement of private actors in the

carbon trading mechanism needs to be carefully considered so that the new form of capitalism disguised as an environmentally friendly mechanism will not become a new backfire for developing countries. Vulnerable indigenous communities undoubtedly are the front group that is affected by the climate crisis in all aspects of their lives and are prone to be threatened with having their traditional rights looted away by carbon trading mechanisms. As a duty-bearer, the state has obligations to protect, promote, and fulfill indigenous peoples' human rights. The state should proactively ensure public participation involving indigenous communities, starting from the planning consultation, negotiations, policy-making, supervision, and grievance procedures. Strengthening regulations that proactively voice people's environmental rights is essential when the private sector is widely involved.

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