

Challenges of Integrating SDGs in Market-Based Climate Mitigation Projects Under the Paris Agreement

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The first objective of this paper is to identify ways by which to integrate Sustainable Development Goals (SDGs) in climate mitigation projects within the framework of the 2015 Paris Climate Change Agreement (PA) to further the objective of promoting sustainable development and environmental integrity under Article 6. The second is to apply lessons learned from the implementation of the Clean Development Mechanism (CDM) under the 1997 Kyoto Protocol to better articulate the PA's proposed Sustainable Development Mechanism (SDM) such that the shortcomings of the CDM are averted or at least ameliorated. The various social criticisms of the CDM warrants a re-think of the design of sustainable development

parameters under the SDM. One very important concern in this regard will be how to disperse sustainable development principles across the SDM agenda. The paper suggests that in drawing up the SDM rules, it would matter to clarify the concept of sustainable development as applicable in the climate context and as a rule of thumb for mitigation and adaptation projects. The paper also recommends the assurance of equity in the distribution of sustainable development projects around the world. However, for this to happen it should be clarified whether there is a need to integrate additional equity objectives within the SDM rules beyond simply curbing greenhouse gas emissions and ensuring sustainable development.

Le premier objectif de ce document est d'identifier les moyens d'intégrer les objectifs de développement durable (SDG) dans les projets d'atténuation du climat en vertu de l'Accord de Paris (AP) de 2015, à contribuer à la réalisation de l'objectif de développement durable et d'intégrité environnementale en vertu de l'article 6. La seconde consiste à appliquer les enseignements tirés de la mise en œuvre du mécanisme de développement propre (MDP) dans le cadre du protocole de Kyoto (1997) afin de mieux formuler le mécanisme de développement durable (MDP) proposé par l'AP de manière que ces déficiences devront être résolues ou au moins atténuer les lacunes du MDP. Les diverses critiques sociales du MDP justifient une révision de la conception des paramètres de développement durable dans le

cadre du MDP. Une préoccupation très importante à cet égard sera de savoir comment disperser les principes du développement durable dans le programme du MDP. Le document suggère que lors de l'élaboration des règles du MDP, il serait important de clarifier le concept de développement durable tel qu'il s'applique dans le contexte climatique et en tant que règle empirique pour les projets d'atténuation et d'adaptation. Le document recommande également de garantir l'équité dans la répartition des projets de développement durable dans le monde. Toutefois, pour atteindre ces objectifs, il convient de préciser s'il est nécessaire d'intégrer des objectifs d'équité supplémentaire dans les règles du MDP, bien au-delà de la simple réduction des émissions de gaz à effet de serre et assurer un développement durable.

Titre en français : *Les défis de l'intégration des SDG dans les projets d'atténuation du climat basés sur le marché en vertu de l'accord de Paris*

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1. INTRODUCTION

The first objective of this paper is to identify ways by which to integrate Sustainable Development Goals (SDGs) in climate mitigation projects within the framework of the 2015 Paris Climate Change Agreement (PA) to further the objective of promoting sustainable development and environmental integrity under Article 6. The second is to apply lessons learned from the implementation of the Clean Development Mechanism (CDM) under the 1997 Kyoto Protocol to better articulate the PA's proposed Sustainable Development Mechanism (SDM) such that the shortcomings of the CDM are averted or at least ameliorated. The paper deals with the concept of sustainable development only as it relates to market-based measures and approaches.

The implementation of Kyoto's CDM mechanism attracted various criticisms, two of which stand out. The first was that the mechanism lacked social and accountability safeguards for projects, thereby leading to inadequate domestic consultations with affected populations and serious human rights abuses.¹ The second was that its "market-centeredness" created an uneven playing field, and prescribed some difficult standards in certain geographical contexts. How the proposed SDM under the PA addresses these two major concerns (among others) remains to be seen, since the outlines of the new mechanism are yet to be agreed to by the Conference of Parties.

¹ See e.g. John H Knox, "Human Rights and Safeguards in the New Climate Mechanism established in Article 6, paragraph 4 of the Paris Agreement" (2016), online (pdf): *OHCHR* <www.ohchr.org/Documents/Issues/Environment/Letter_to_SBSTA_UNFCCC_May2016.pdf> [perma.cc/8LYY-BTQS] ("It is not surprising that the one climate mechanism that most obviously lacks effective social and environmental safeguards, the Clean Development Mechanism, is also the one that has been dogged by the strongest accusations of supporting projects with serious human rights abuses" at 4); see also Damilola S Olawuyi, "Climate Justice and Corporate Responsibility: Taking Human Rights Seriously in Climate Actions and Projects" (2016) 34:1 *J Energy & Nat Resources* L 27.

Given the above analysis, the paper addresses (1) which specific SDGs could be implicated by market-based climate change mitigation projects given the PA's overwhelming focus on those goals, and (2) how the said SDGs could be integrated or impacted by climate change mitigation projects. This paper will explore how well-founded criticisms and shortcomings of the CDM can be addressed under the SDM. Section 2 discusses what sustainable development could mean in the context of climate change mitigation projects and how that meaning feeds into market-based policies. Section 3 traces the history of sustainable development from the Kyoto Protocol to the Paris Agreement and explores how information from the former informs negotiations on operationalizing the latter. Section 4 draws from the lessons of Kyoto's CDM to highlight blind spots in the integration of market principles in climate mitigation policies. The last section concludes by providing recommendations and insights as to what to expect on this issue in the near future.

2. UNDERSTANDING SUSTAINABLE DEVELOPMENT IN THE CONTEXT OF CLIMATE CHANGE MITIGATION

The Paris Climate Change Agreement (PA), which was adopted in December 2015 and came into force in November 2016, placed significant emphasis on the goal of sustainable development. In its 29 Articles, the agreement mentioned the concept at least 22 times.² This includes the identification of sustainable development as a broad, over-arching goal underpinning the agreement in the preamble, as well as an element in the agreement's major objective of holding global average temperatures to well below 2° C pre-industrial levels.³ Sustainable development also provides a significant objective for specific measures designed to mitigate greenhouse gas emissions or adapt to the impacts of climate change. For example, under Article 6 of the agreement, market and non-market-based mechanisms for mitigation and adaptation actions are required to follow a path that promotes sustainable development.⁴

Almost all of the Articles in the agreement referring to sustainable development do so in aspirational terms, often in an abstract fashion. To give a few examples, in Article 2 on common goals, strengthening global response to the threat of climate change and holding down global average temperatures at the stated level is to be done "in the context of sustainable development",⁵ the same objective is stated in Article 4 for ensuring early peaking of greenhouse gas emissions through preparation and communication by states of nationally determined contributions (NDCs) that they intend to achieve.⁶ While Article 5 emphasizes the "sustainable" management of forests, Article 6 used the concept six times in a variety of ways in relation to actions that "promote" sustainable development (Articles 6.1 & 6.2), those

² Marion Verles, "Sustainable Development: From Kyoto to Paris and Beyond" (April 2017) at 2, online (pdf): *The Gold Standard* <www.goldstandard.org/sites/default/files/documents/marion_verles_sd_kyoto_paris_beyond.pdf> [perma.cc/MJ7T-4LKN].

³ See *Paris Agreement to the United Nations Framework Convention on Climate Change*, 12 December 2015, 16 TIAS 1104 (entered into force 4 November 2016), art 2(1)(a).

⁴ *Ibid.*, art 6(1) "Parties recognize that some Parties choose to pursue voluntary cooperation in the implementation of their nationally determined contributions to allow for higher ambition in their mitigation and adaptation actions and to promote sustainable development and environmental integrity".

⁵ *Ibid.*, art 2(1).

⁶ *Ibid.*, arts 4(1) & (2).

that “support” sustainable development (6.4) and “foster” it (6.4.a), as well as in relation to “non-market approaches to sustainable development” (6.9).

These references to sustainable development do not indicate the meaning assigned to the concept of sustainable development in each specific context that it is used in the agreement. They also do not provide any parameters or indicate ways of integrating sustainable development into specific mechanisms and processes of implementing the agreement. Such parameters would be helpful in determining the meaning assigned to “sustainable development” in order to make its integration easier in the contexts that it is used in the agreement.

To be clear, in this article, sustainable development is assigned the same meaning as under the report of the Brundtland Commission.⁷ This is to say that sustainable development means “development that meets the needs of the present without compromising the ability of future generations to meet their own needs.”⁸ As to the operative parameters of sustainable development relevant to the article, I will rely on the definition contained in Article 3(1) of the Antigua Convention in which sustainable development is defined as “the process of progressive change in the quality of life of human beings, which places it as the centre... of development, by means of economic growth with social equity and the transformation of methods of production and consumption patterns, and which is sustained in the ecological balance...”⁹

The assigned meanings indicate that, unlike the Millennium Development Goals (MDGs)¹⁰ that they replaced, the SDGs are not merely about development simpliciter.¹¹ Rather, they are intended to promote sustainable development at three levels – economic, social and environmental.¹² In other words, sustainable development rests on the three pillars of society, economy and the environment.¹³ There could be overlap as well as tension among these pillars of sustainable development such that what might seem to be progress towards

⁷ See Brundtland Convention, *Our Common Future* (Oxford: Oxford University Press, 1987). Also available online (pdf): [Oxford University Press <sustainabledevelopment.un.org/content/documents/5987our-common-future.pdf>](http://Oxford%20University%20Press%20sustainabledevelopment.un.org/content/documents/5987our-common-future.pdf) [perma.cc/D299-KH82].

⁸ *Ibid* at 41. See also Jacobus A Du Pisani, “Sustainable Development: Historical Roots of the Concept” (2006) 3:2 *Env Sci* 83; Erling Holden, Kristin Linnerud & David Banister, “Sustainable Development: Our Common Future Revisited” (2014) 26 *Global Env Change* 130 at 132.

⁹ See *Convention on the Protection and Sustainable Development of the Marine and Coastal Environment of the North East Pacific*, 18 February 2002, art 3(1).

¹⁰ See United Nations Development Program, “Transitioning from the MDGs to the SDGs” (9 November 2016), online (pdf): [UNDP <www.undp.org/content/dam/undp/library/SDGs/English/Transitioning%20from%20the%20MDGs%20to%20the%20SDGs.pdf>](http://www.undp.org/content/dam/undp/library/SDGs/English/Transitioning%20from%20the%20MDGs%20to%20the%20SDGs.pdf). See also Dave Griggs, “From MDGs to SDGs: Key Challenges and Opportunities” (2016), online (pdf): www.sustainabledevelopment.un.org/content/documents/3490griggs.pdf.

¹¹ See Rakhyn E Kim, “The Nexus Between International Law and the Sustainable Development Goals” (2016) 25:1 *RECIEL* 15.

¹² *Ibid* at 19. See also Casey Stevens & Norichika Kanie, “The Transformative Potential of the Sustainable Development Goals” (2016) 16 *Intl Environmental Agreements: Politics L & Economics* 393 at 394.

¹³ Andrea J Read et al, “Post-2015 Sustainable Development Goals Still Neglecting their Environmental Roots in the Anthropocene” (2017) 77 *Environmental Science & Policy* 179 at 179.

attaining one goal could negatively impact the attainment of other goals.¹⁴ For example, achieving food security (SDG 2) may require “greater demand for fertilizers, which in turn will increase pollutant or nutrient run-off into terrestrial or marine ecosystems” (SDGs 14 and 15).¹⁵

Having arrived at the understanding of sustainable development in its economic, environmental, and social dimensions, the next issue to address is how to ensure its integration in climate mitigation based on the PA. Inevitably, the lack of conceptual clarity leaves a lot of room for uncertainty regarding how to explain sustainable development and break it down into concrete actions or processes. This was a foremost challenge in articulating sustainable development parameters in mechanisms of the Kyoto Protocol, especially the CDM. Ongoing discussions at the Conference of Parties to the UNFCCC (COP) in the post-Paris Agreement environment again raises a proper framing of sustainable development as a fraught point.

There is an indication that sustainable and low carbon development can be pursued simultaneously such that global and national objectives in this regard converge on the tripartite goals of protecting the environment generally, achieving economic development and reducing global warming.¹⁶ In the first instance, this could be done through a recognition that the *benefits* of sustainable development from climate mitigation actions are relevant to development in general terms, beyond just their bearing on climate change.¹⁷ The emphasis here, therefore, is on those benefits which include “additional health, social, environmental and macro-economic as well as equity benefits”.¹⁸ It is a case of pursuing sustainability at the same time as (or in addition to) fighting climate change.¹⁹ For example, closing a coal-fired power plant and establishing a hydro-powered one inevitably reduces GHG emissions. Importantly, there are additional benefits such as introducing new technology to local communities, improved air quality with positive implications for public health and investment that produces jobs and therefore economic empowerment.²⁰

Kyoto’s CDM had two main objectives. Its first objective was to assist developing countries in achieving sustainable development and the second was to assist industrialized countries in

¹⁴ See Joyeeta Gupta & Courtney Vegelin, “Sustainable Development Goals and Inclusive Development” (2016) 16 *Intl Env’l Agreements* 433.

¹⁵ Kim, *supra* note 11 at 19.

¹⁶ See Christof Arens et al, “Reforming the CDM SD Tool: Recommendations for Improvement” (2015) at 5, online (pdf): *German Emissions Trading Authority* <orbit.dtu.dk/files/115264238/Reforming_the_CDM_SD_Tool.pdf> [perma.cc/SLB8-N8FN].

¹⁷ *Ibid.*

¹⁸ *Ibid.* See also Damilola S Olawuyi, “Achieving Sustainable Development in Africa through the Clean Development Mechanism: Legal and Institutional Issues Considered” (2009) 17:2 *African J Intl & Comparative L* 270 (sustainable development in the context of the environment should lead to “cleaner air and water, reduced deforestation, soil conservation, and biodiversity protection” at 278. In relation to the CDM specifically, these benefits would include “transfer of technology and financial resources; sustainable ways of energy production; increased energy efficiency and conservation; poverty alleviation through income and employment generation; and local environmental side benefits” at 278).

¹⁹ Sarah Burch & Sara Harris, *Understanding Climate Change: Science, Policy, and Practice* (Toronto: University of Toronto Press, 2014) at 262.

²⁰ *Ibid* at 263–264.

achieving compliance with their greenhouse gas (GHG) emission reduction commitments under the protocol.²¹ As such, rather than being a mere requirement of the CDM, sustainable development was deemed its main driver in attracting the interest of developing countries to participate in CDM projects.²² The reasoning is that, apart from reducing GHG emissions, those projects produced added positive benefits in the host countries, including economic and social development for the local environment.

While there may be disagreement over a broadly acceptable definition of sustainable development as a concept, under the CDM, sustainable development objectives could be met through increased energy efficiency and conservation, transfer of technology/financial resources, and access to cleaner air and water. In the specific context of developing countries, the United Nations Development Programme (UNDP) estimates that the CDM could bring about improved health and reduced air pollution, poverty alleviation and equity through employment and income generation, sustainable energy production, and public and private sector capacity development.²³ The projects are, however, implemented on market-based principles as the goal also is to reduce emissions at the lowest possible cost by taking advantage of the lower marginal cost of doing so in developing countries.²⁴

In energy production and the development of new technology, for example, a range of sustainable development benefits have been ascribed to CDM projects in different regions. Some of these benefits include direct financial incentives for proving the competitiveness of new technologies for energy reduction, renewable energy generation, and the increase of energy efficiency, such as sustainable energy technologies. Other benefits are development of policy initiatives, increased understanding and acceptance of the importance and application of sustainable energy technologies, and dissemination of best-practice techniques. CDM projects also strengthened local institutional, financial and technological capacity, led to enhanced and sustainable foreign investment and also increased access to sustainable energy services.²⁵

Sustainable development that is based on requirements of the market as envisaged under the CDM is fraught with controversies. It has been argued, for example, that market principles cannot co-exist with the intensive application of sustainable development objectives because

²¹ See Anne Olhoff et al, "CDM Sustainable Development Impacts" (2004) at 7, online (pdf): *United Nations Environment Programme* <cd4cdm.org/Publications/CDM%20Sustainable%20Development%20Impacts.pdf> [Olhoff].

²² See generally *Kyoto Protocol to the United Nations Framework Convention on Climate Change*, 11 December 1997, 2303 UNTS 162 (entered into force 16 February 2005) ("The purpose of the Clean Development Mechanism shall be to assist Parties not included in Annex I in achieving sustainable development and in contributing to the ultimate objective of the Convention, and to assist Parties included in Annex I in achieving compliance with their quantified emission limitation and reduction commitments under Article 3" at art 12(2)).

²³ See Olhoff et al, *supra* note 21 at 10–11; see also Douglas R Brown et al, "Poverty Alleviation and Environmental Restoration using the Clean Development Mechanism: A Case Study from Humbo, Ethiopia" (2011) 48 *Environmental Management* 322 at 322.

²⁴ See UNCTAD, *An Implementation Guide to the Clean Development Mechanism*, UNCTAD/DITC/TED/2003/1, 2003 at 3.

²⁵ See Christina Voigt, "Is the Clean Development Mechanism Sustainable? Some Critical Aspects" (2008) 7:2 *Sustainable Development L & Policy* 15 at 9 [Voigt].

by their nature, markets are suited for single, rather than multiple, objectives.²⁶ For this reason, it is further argued that the sustainable development provisions of the CDM were kept at a minimum in order not to create barriers to the market.²⁷ It is unclear whether this view of the markets and sustainable development under the CDM holds equally true of their relationship under the PA.

Therefore, before exploring whether CDM projects under Kyoto achieved sustainable development, there is a need to contrast its textual provisions with those of the PA. Article 6 of the PA speaks of a “mechanism” involving “the use of internationally transferred mitigation outcomes towards nationally determined contributions” to GHG emissions reduction. This mechanism is likened to the CDM under Kyoto to the extent that it is intended to create markets where GHG emissions reduction credits could be bought and sold. This is done under the new procedure known as Sustainable Development Mechanism (SDM) which “promotes GHG mitigation efforts above [and beyond] what a nation commits to under its NDC.”²⁸ Accordingly, “all GHG emission reductions achieved under the SDM will therefore have to be in addition to those that would have otherwise occurred in the host party’s jurisdiction.”²⁹

It has also been argued that the conclusion that Article 6 of the PA is “CDM 2.0...”³⁰ should be handled cautiously. The reason for this is that “while it [Article 6] may eventually offer such a service, to limit it to this and no more may turn out to be very short-sighted. In the first instance, the text [of Article 6] does not mention project activity or identify developing countries as the beneficiaries of the activities undertaken. This contrasts with Article 12 of the Kyoto Protocol, which clearly identified such a role for the CDM.”³¹ As such, under this Article, a project could be located and implemented anywhere in the world under market-based conditions. This removes the binary of host (developing) state and investor (developed) state as under Kyoto’s CDM.

Carbon Market Watch has made some suggestions as to how Article 6 could be implemented to achieve these goals.³² They broke the Article into three components: cooperative approaches

²⁶ See Verles, *supra* note 2 at 3; see also David Driesen, “Economic Instruments for Sustainable Development” in Benjamin Richardson & Stepan Wood, eds, *Environmental Law and Sustainability* (Portland, OR: Hart Publishing, 2006) 277.

²⁷ See Verles, *Ibid.*

²⁸ Crowell & Moring, “The Paris Agreement on Climate Change: A Practical Guide” (15 December 2015), online: *Crowell & Moring* <crowell.com/NewsEvents/AlertsNewsletters/all/The-Paris-Agreement-on-Climate-Change-A-Practical-Guide> (describing the SDM as “a successor-in-interest of sorts to the regulatory infrastructure established under the Kyoto Protocol’s Clean Development Mechanism (CDM)” at 3.

²⁹ *Ibid.*

³⁰ See David Hone, “Paris Agreement: Developing Article 6” (22 February 2016), online: *The Energy Collective* <theenergycollective.com/davidhone/2322758/developing-article-6>.

³¹ *Ibid.*

³² Carbon Market Watch, “Recommendations for Article 6 of the Paris Agreement: Prepared for the Bonn Climate Change Conference 16-26 May 2016” (2016), online (pdf): *Carbon Market Watch* <carbonmarketwatch.org/wp-content/uploads/2016/05/CMW_Statement-Art-6.pdf> [Carbon Market Watch Paris Agreement].

(Article 6.1 to 6.3), sustainable development mechanism (SDM), (Article 6.4 to 6.7),³³ and non-market mechanisms (Article 6.8 to 6.9). For each of these components, they identify various expectations at the levels of transparency, environmental integrity, sustainable development, and governance. In relation to the SDM provisions, they have been interpreted as encompassing several objectives including [1] designing a mechanism that is also a tool for results-based finance, [2] ensuring environmental integrity, contributing to transformational change, and avoiding perverse incentives that undermine mitigation ambition, [3] defining, monitoring, reporting, and verifying real, measurable and long-term sustainable development and mitigation benefits, [4] establishing an SDM oversight body, [5] establishing an institutional grievance process, [6] ensuring effective public and local stakeholder participation, and [7] adapting, reforming and building beneficial existing CDM infrastructure.³⁴

3. FROM CDM TO SDM: CURRENT STATE OF PLAY

At COP 21, beyond adopting the Paris Agreement, parties requested the Subsidiary Body for Scientific and Technical Advice (SBSTA) to develop and recommend rules, modalities and procedures for the mechanism established by Article 6, paragraph 4, of the Paris Agreement for consideration and adoption at the first Conference of the Parties serving as the Meeting of the Parties to the agreement (CMA 1)³⁵. Subsequently, the SBSTA 45 invited Parties to submit their views on the elements in Article 6 to be addressed. Such elements included operationalization, the rules, modalities and procedures for the mechanism established by Article 6 (4), and other overarching issues such as the relationships between Article 6, paragraphs 4–6, and other provisions of the Paris Agreement, the UNFCCC, and its related legal instruments.³⁶

The SBSTA collated the submissions of parties and some of them contain important insights into how state parties view the concept of sustainable development in the context of PA's Article 6.4.³⁷ Firstly, while it might be true that the concept is contested and a bit controversial in the UNFCCC negotiation context, the parties themselves (or at least those from the developing world) seem to have a relatively unified sense of what sustainable development could mean in relation to the PA. As an example, submissions on behalf of Like-Minded Developing Countries (LMDC), noted that sustainable development is a “primary provision”

³³ See IETA Climate Challenges Market Solutions, “A Vision for the Market Provisions of the Paris Agreement” (May 2016), online (pdf): [IETA <ieta.org/resources/Resources/Position_Papers/2016/IETA_Article_6_Implementation_Paper_May2016.pdf>](http://ieta.org/resources/Resources/Position_Papers/2016/IETA_Article_6_Implementation_Paper_May2016.pdf) (The Paris Agreement did not use “Sustainable Development Mechanism” the same way the Kyoto Protocol used the Clean Development Mechanism. Instead it requires sustainable development as a co-benefit of projects which is a major goal of the Agreement as well as purpose of the mechanism at 8).

³⁴ *Ibid* at 3, 9.

³⁵ See United Nations Framework Convention on Climate Change, “Taking the Paris Agreement Forward: Tasks Arising from Decision 1/CP.21” (March 2016) at para 38, online (pdf): [UNFCCC <unfccc.int/files/bodies/cop/application/pdf/overview_1cp21_tasks.pdf>](http://unfccc.int/files/bodies/cop/application/pdf/overview_1cp21_tasks.pdf).

³⁶ United Nations Framework Convention on Climate Change, *Report of the Subsidiary Body on Scientific and Technical Advice on its Forty-fifth Session held in Marrakech from 7 to 15 November 2016*, 45th Sess, FCCC/SBSTA/2016/4 (2017) at 20, online (pdf): [UNFCCC <unfccc.int/resource/docs/2016/sbsta/eng/04.pdf>](http://unfccc.int/resource/docs/2016/sbsta/eng/04.pdf) [UN SBSTA 1].

³⁷ *Ibid*.

of Article 6, thus highlighting its centrality in the discussion.³⁸ In conference materials, the group often noted the diverse regional conceptualizations of sustainable development, but also reiterated the common sentiment that it is necessary to harmonize the three central dimensions of sustainable development: economic, environmental and social.³⁹ Furthermore, the group also asserted what elements of sustainable development they deemed relevant to their understanding of the concept, including aspects like financial support and technology transfers.⁴⁰

This is similar to the position of South Africa which in its submission stated that the SD criteria “must be defined at a national level and progress must be monitored and judged... [and] should be within the ambit of the broad guiding pillars covering social, economic and environmental integrity.”⁴¹ Saudi Arabia and the Arab Group were also on the same page when they said in their submission that “sustainable development needs to harmoniously progress on three fronts: social, economic as well as environmental.”⁴² Specifically, this group would prefer that sustainable development be realized gradually “through a manageable, sustainable transition” and that, in implementing the cooperative approaches for climate mitigation envisaged in Article 6, steps should be taken to “identify and address [their] negative social and economic impacts.”⁴³

This position substantially supports the view of *Carbon Watch*, which had argued that the emphasis on “sustainable development, transparency and environmental integrity” in Article 6, and in relation to “Cooperative Approaches” means that carbon markets must consider the wider social and environmental implications of mitigation projects rather than just the amount of carbon being traded.⁴⁴ However, the Arab group added an important qualification to its understanding of how sustainable development should be pursued under the Article. The group advised that the criteria for sustainable development “must be defined at the national

³⁸ See the Republic of Ecuador on behalf of LMDC, “Submission on Items Related To Article 6 of the UNFCCC’s Paris Agreement” (19 October 2017) online (pdf): <www.perma.cc/KK9N-NQVV>.

³⁹ See e.g. “Like-Minded Developing Countries’ Views on Article 6.2” PowerPoint delivered at SBSTA 47 Roundtable (5 November 2017) online (pdf): *UNFCCC* at 4 <www.unfccc.int/files/paris_agreement/application/pdf/lmdcs__art_6.2_rev.pdf>

⁴⁰ See e.g. Meenakshi Raman & Chee Yoke Ling, “The climate change battle in Paris: putting equity into action” online (pdf): *Third World Network* <www.2030spotlight.org/sites/default/files/contentpix/spotlight/pdfs/spotlight_ch2_13.pdf> at 105. See also Lorenz Moomann et al, “Implementing the Paris Agreement –New Challenges in View of the COP 23 Climate Change Conference” (October 2017) Study for the ENVI Committee completed by the Policy Department for Economic and Scientific Policy of the European Parliament at 80.

⁴¹ See “Submission by South Africa on Rules, Modalities and Procedures for the Mechanism established by Article 6, Paragraph 4, of the Paris Agreement” (April 2017), at 2 online: <perma.cc/3NZY-JLDH>.

⁴² See “Saudi Arabia’s Submission on Behalf of the Arab Group on Articles 6.2 and 6.4” 18 October 2017, online: <www4.unfccc.int/sites/SubmissionsStaging/Documents/102_344_131528208729884421-Arab%20Group%20Submission%20on%20Articles%206.2%20and%206.4%20of%20the%20Paris%20Agreement%20by%20KSA.pdf> at 2.

⁴³ *Ibid.*

⁴⁴ Carbon Market Watch Paris Agreement, *supra* note 32 at 2.

level” especially “to ensure the preservation of national prerogatives as they relate to sustainable development.”⁴⁵

Contrary to the position adopted by the above-discussed states and groups, the more advanced states either paid little attention to sustainable development in their submissions or avoided mentioning the concept altogether. This attitude seems to feed the narrative that developed countries that mostly push for market-based measures tend to view the idea of integrating sustainable development as a detriment to the smooth functioning of market principles.⁴⁶ As Verles noted, during the design and launch of the CDM Sustainable Development Tool, advocates of markets lobbied strongly to see the concept remain optional.⁴⁷ These advocates argued that sustainable development would otherwise create an unnecessary market barrier.⁴⁸

Canada’s submissions to the SBSTA shine some interesting light in this regard. Often, the submissions make minimal or no mention of sustainable development.⁴⁹ Even when addressing Article 6.2, which is heavily related to sustainable development, the concept is missing among talks of double counting and technical issues.⁵⁰ This is, however, not to suggest that the country’s failure to mention sustainable development in its submissions means that it certainly views the concept as detrimental to the market. It may well be that the country did not consider the concept a priority in its context.

Furthermore, submissions from Australia simply note that sustainable development is one of the major goals of Article 6.2, without adding anything further in terms of how the concept might be interpreted or could inform the SDM processes.⁵¹ On the other hand, Malta’s statement on behalf of the European Union (EU) was slightly more detailed, even as it underlined environmental integrity and sustainable development as among the core over-

⁴⁵ See Saudi Arabia’s Submission, *supra* note 40 at 1.

⁴⁶ In a study that examined the contribution of some CDM projects to sustainable development, it was found that un-mediated market competition greatly minimized concern for sustainable development objectives. According to the authors, “The absence of international sustainable development standards alongside a highly competitive supply side of the CDM is likely to cause a trade-off in favour of the cost-efficient emission reduction objective. Neither Annex I [developed] countries nor single non-Annex I [developing] parties have direct incentives to implement strict sustainable development criteria.” See Christoph Sutter & Juan Carlos Parreño, “Does the Current Clean Development Mechanism deliver its Sustainable Development Claim? An Analysis of Officially Registered CDM Projects” (2007) 84 *Climate Change* 75 at 76.

⁴⁷ See Verles, *supra* note 2 at 3.

⁴⁸ *Ibid.*

⁴⁹ See e.g. Canada’s Submission to SBSTA on “Matters related to methodological issues under the Paris Agreement” (November 2019) online (pdf): [UNFCCC <www4.unfccc.int/sites/SubmissionsStaging/Documents/201911191603---Canada%20Transparency%20Submission%20\(EN\).pdf>](http://www4.unfccc.int/sites/SubmissionsStaging/Documents/201911191603---Canada%20Transparency%20Submission%20(EN).pdf) [Canada Submission]. See also “Canada’s Presentation on Article 6 paragraph 2” presented at SBSTA 47 Roundtable (5 November 2017) online (pdf): [UNFCCC <www.unfccc.int/files/paris_agreement/application/pdf/canada_cop23_6.2_roundtable_unfccc.pdf>](http://www.unfccc.int/files/paris_agreement/application/pdf/canada_cop23_6.2_roundtable_unfccc.pdf) [Canada’s Art 6.2 Presentation].

⁵⁰ See Canada’s Presentation on Art 6.2 *supra* note 47.

⁵¹ See Australian Government, “Submission on the content of the guidance for Article 6.2, including the structure and areas, issues and elements to be addressed” (October 2017) online (pdf): [Gov’t of Australia <perma.cc/R2SX-TU35>](http://govt.australia/perma.cc/R2SX-TU35).

arching issues. The group sought a balanced incorporation of these concepts in interpreting and operationalizing the PA as they reflect on more general principles established in several other Articles of the Agreement and therefore should guide work being done under Article 6 in general.⁵²

As well, while the submissions already considered in this section implicitly recognized the changed context of the Paris Agreement relative to the old processes under the Kyoto Protocol, the EU states explicitly referred to this changed scenario in their submission.⁵³ First, the submission noted that all state parties were now making mitigation contributions. Second, there is a new set of relationships between NDCs, reporting, accounting, and crediting established under the agreement. Third, and finally, though the Article 6 provisions reflect familiar language, they incorporate new requirements such that implementation of these familiar concepts (such as sustainable development) must account for the new context.⁵⁴

The EU also stated that specific guidance is required for the provisions to deliver in this new context and proceeded to identify promoting mitigation of GHG emissions as well as fostering sustainable development as one area where the suggested guidance would be most needed.⁵⁵ The new context within which this objective is to be met, according to the EU, is the agreement of new Sustainable Development Goals. It is unclear why they included this statement, because prior to the adoption of the Paris Agreement in December of 2015, the UN General Assembly had adopted the 2030 Agenda for Sustainable Development in September of that same year containing what has now gained popularity as the United Nations Sustainable Development Goals.⁵⁶ The 13th goal in this agenda aims to “take urgent action to combat climate change and its impacts”.⁵⁷ The EU’s proposal therefore appears on face value to accept that the SDGs as articulated under the UN system provide the best basis to integrate sustainable development in climate action. This is similar to the position of the LMDCs discussed above. Additionally, having been agreed upon prior to the Paris Agreement, it could be questioned whether the SDGs (and specifically SDG 13) need to be agreed to again in designing the SDM mechanism in Article 6.4. This is important because the UN SDGs and sustainable development in the PA do not equate to the same thing.

Apart from understanding sustainable development in the context of climate mitigation policies under the Paris Agreement and the need to bridge the divide between developed and developing countries in its framing, there is also the issue of how the transition from Kyoto’s CDM to the PA’s SDM could be effectively handled. Judging by recent COP events, while negotiators debated the rules, civil society and industry constituencies have been occupied with

⁵² See Maltese Presidency of the Council of the EU, *Submission by the Republic of Malta and the European Commission on behalf of the European Union and its Member States*, (Valetta: Malta, 2017) online: <www4.unfccc.int/sites/SubmissionsStaging/Documents/783_322_131347311876248243-MT-03-23-EU%20APA4%20Adaptation%20Communication%20Submission.pdf>.

⁵³ *Ibid.*

⁵⁴ *Ibid* at 10.

⁵⁵ *Ibid* at 11.

⁵⁶ *Transforming Our World: The 2030 Agenda for Sustainable Development*, GA Res A/Res/70/1, UNGAOR, 7th Sess, UN Doc E/16301 (2015) online: <www.un.org/ga/search/view_doc.asp?symbol=A/RES/70/1&Lang=E>.

⁵⁷ *Ibid* at 14.

the current state of CDM projects under the Kyoto Protocol.⁵⁸ These meetings also discussed how the transition from CDM to SDM could be effectively implemented.

In a meeting jointly organized by the University of Zurich and *Climate Policy*, participants addressed themselves to some of the uncertainties surrounding how countries will use international Certified Emissions Reduction credits (CERs)⁵⁹ pre- and post-2020, and how existing CDM projects could be supported by future international climate finance.⁶⁰ The meeting also discussed how to enable the continuation of mitigation activities. Speakers at the side event included African negotiators and project developers, as well as researchers working in the field.

As indicated, the discussion focused mostly on the challenges facing sustainable development projects initiated under Kyoto's CDM and how those projects could be effectively transitioned into the Paris Agreement's SDM.⁶¹ One of the speakers noted that registered CDM projects currently face substantial challenges due to record low CER prices such that implemented projects may no longer be able to cover their operational and/or transactional costs. The presenter added that under the Paris Agreement, operating a yet to be defined but potentially different regime, CDM projects might not be implemented; they may be shut down or modified for continuation outside the CDM.

That a different mechanism was deemed necessary in spite of the CDM necessitates an inquiry into the major CDM shortcomings. As of 1 September 2015, there were 7,947 projects including 283 Programme of Activities registered under the CDM in some 110 host countries.⁶² Pending final articulation and adoption of the Rules Book for the implementation Article 6.4 of the PA, it remains unclear what changes are coming through the SDM process that will replace the CDM. It is therefore still too early to identify the similarities and differences between the two, beyond the mere fact that they are market-based mechanisms for GHG emissions reduction based on sustainable development expectations. While the question of why the CDM was not very effective dominates the discourse on this topic at times, answering it could provide insights as to why some states might consider its marriage to sustainable development a somewhat unhealthy convenience. Criticisms of the CDM tend to sharpen what could be described as the mechanism's unsustainable development credentials. Earlier in

⁵⁸ See New Climate Institute, "Bonn Challenge Conference – Official Side Event: From CDM to International Climate Finance – Ensuring Continuity of Mitigation Action" (2017), online (pdf): newclimateinstitute.files.wordpress.com/2017/05/from-cdm-to-international-climate-finance-11-may-16h45-flyer.pdf.

⁵⁹ These were "official carbon credits issued as part of the UN's Clean Development Mechanism (CDM) carbon offset initiative. CDM-approved projects were issued with Certified Emission Reductions (CERs) based on the extent to which the project delivers independently verified cuts in greenhouse gas emissions", see www.businessgreen.com/bg/glossary/1807132/certified-emission-reductions-cers.

⁶⁰ *Ibid.*

⁶¹ See e.g. Sandra Greiner et al, "CDM Transition to Article 6 of the Paris Agreement: Options Report" (16 March 2017), online (pdf): www.climatefocus.com/sites/default/files/CDM%20Transition%20Options%20Report%20v2.0.pdf.

⁶² See Carsten Warnecke, Thomas Day & Ritika Tewari, "Impact of the Clean Development Mechanism: Quantifying the Pre-2020 Climate Change Mitigation Impact of the CDM" (2015) New Climate Institute Working Paper No 14004 at 1, online (pdf): [newclimate_impacts-of-the-cdm_2015.pdf](http://newclimateinstitute.files.wordpress.com/2015/11/newclimate_impacts-of-the-cdm_2015.pdf).

this paper, some unproven or unsupportable myths associated with sustainable development in a market context were highlighted. Noticeably, some of those myths mirror in various ways the main criticisms of the CDM as well as illustrate long-standing tensions between social considerations and market-based policies.

Recall that one of those myths concerned the so-called incompatibility between sustainable development and the procedures of the marketplace. There is intimate interaction of international investment business and trade rules.⁶³ It comes therefore as no surprise that a major concern with the CDM was its market-centric characteristics. The reason for this market-centeredness was apparently to create uniform standards across carbon markets and therefore avert the subjectivity of multiple market factors.⁶⁴ Though this made sense at the time of its conception, in hindsight it raised additional questions and concerns. While it created uniform interpretation of market rules, it failed to integrate multiple interpretations of sustainable development according to particularized social, political, and geographical contexts. The result was that CDM projects were unevenly distributed, favouring only a handful of states that seemed to get market rules right and leaving behind others with more urgent sustainable development needs but lacking the social, legal, and legal infrastructure of the CDM marketplace.

4. LESSONS FROM KYOTO'S CDM

A closer look at the history and structure of the CDM is necessary at this point. The original idea of this mechanism from Brazil was to establish a Clean Development Fund (CDF) into which financial penalties would be paid by developed states that failed to meet their emission reduction targets.⁶⁵ Money pooled into the CDF would then be used to fund climate change mitigation and adaptation projects in developing countries. Developed countries led by the United States, while they agreed with the flexibility of the mechanism, demurred at its penal requirements.⁶⁶ This led to a revision of the language from a punitive fund to an investment mechanism for states and corporations.⁶⁷ Once CDM projects were viewed through the lens of international investments, they had to conform to the rules of the marketplace in addition to the formal eligibility requirements prescribed under the UNFCCC process.

The formal requirements were relatively objective and straightforward. First requirement was that both host and investor states must have ratified the Kyoto Protocol.⁶⁸ Second was that participation in the CDM project must be voluntary for both states. Finally, the host state

⁶³ See Christina Voigt, *Sustainable Development as a Principle of International Law: Resolving Conflicts between Climate Measures and WTO Law* (Leiden: Martinus Nijhoff Publishers, 2009) at 233.

⁶⁴ *Ibid.*

⁶⁵ See Olawuyi, *supra* note 18 at 275; see also Michael Grubb & Duncan Brack, *Kyoto Protocol: A Guide and Assessment* (London: Earthscan Publishers, 1999) at 101.

⁶⁶ See Larry Lohmann, "Financialization, Commodification and Carbon: The Contradictions of Neoliberal Climate Policy" (2012) 48 *Socialist Register* 85 at 86.

⁶⁷ See Olawuyi, *supra* note 18 at 275.

⁶⁸ See "Modalities and Procedures for a Clean Development Mechanism", *Annex to Report of the Conference of the Parties serving as the meeting of the Parties to the Kyoto Protocol on its first session, held at Montreal from 28 November to 10 December 2005*, UNFCCC Dec 3/CMP.1, FCCC/KP/CMP/2005/8/Add.1, 30 March 2006, online: <cdm.unfccc.int/Reference/COPMOP/08a01_abbr.pdf> at paras 28–30.

government must designate a national authority for the CDM project.⁶⁹ The market eligibility or host country attractiveness requirements were more subjective and therefore also more controversial. With the CDM operating as a market for investors, it meant that developed countries had broad latitude to decide where to invest. The host states chosen invariably turned out to be countries that were considered politically safe and that guaranteed the most profit at the lowest costs.⁷⁰ The market requirements therefore included such elements as the potential of the envisaged project to lead to appropriate mitigation results, the overall investment climate in the host country and the legal and institutional capacity of the country to be an effective project host.⁷¹ The shortcomings of these subject market factors were evident in at least two major areas in the CDM implementation, namely in the inequitable distribution of projects and lack of accountability which produced huge social costs, including serious human rights violations. I will discuss these two issues in turn.

4.1. INEQUITABLE PROJECTS DISTRIBUTION

The original Brazilian idea was to provide a mechanism that provided “incentive for governments and companies in industrialized countries to invest in GHG reduction projects” and simultaneously promoting “sustainable development in developing countries hosting such projects.”⁷² It could be argued that such neutral objectives embedded a measure of fairness in the development and location of such GHG reduction projects. However, once market calculations became significant in the American iteration of the CDM idea, that anticipated fairness could no longer be guaranteed. The result was that CDM projects were unevenly spread out, with some regions gaining more than what would be a fair share in a less subjective process. The graph below shows the percentage distribution of current CDM projects for the various geographical regions of the world.

⁶⁹ *Ibid.*

⁷⁰ Olawuyi, *supra* note 17 at 281; see also Franck Lecocq & Philippe Ambrosi, “The Clean Development Mechanism: History, Status, and Prospects” (2007) 1:1 *Rev Environmental Economics & Policy* 134; Tek Narayan Maraseni, “Evaluating the Clean Development Mechanism” in Timothy Cadman, ed, *Climate Change and Global Policy Regimes: Towards Institutional Legitimacy* (New York: Palgrave Macmillan, 2013) 96 at 102; Ariel Dinar, Donald Larson & Shaikh Raiman, *The Clean Development Mechanism (CDM): An Early History of Unanticipated Outcomes* (Singapore: World Scientific Publishing, 2013) at 178-180.

⁷¹ *Ibid*; see also Martina Jung, “Host Country Attractiveness for CDM Non-Sink Projects” (2005) Hamburg Institute of International Economics Discussion Paper No 312 at 4, online (pdf): <econstor.eu/bitstream/10419/19284/1/312.pdf>.

⁷² Olawuyi, *supra* note 18 at 272.

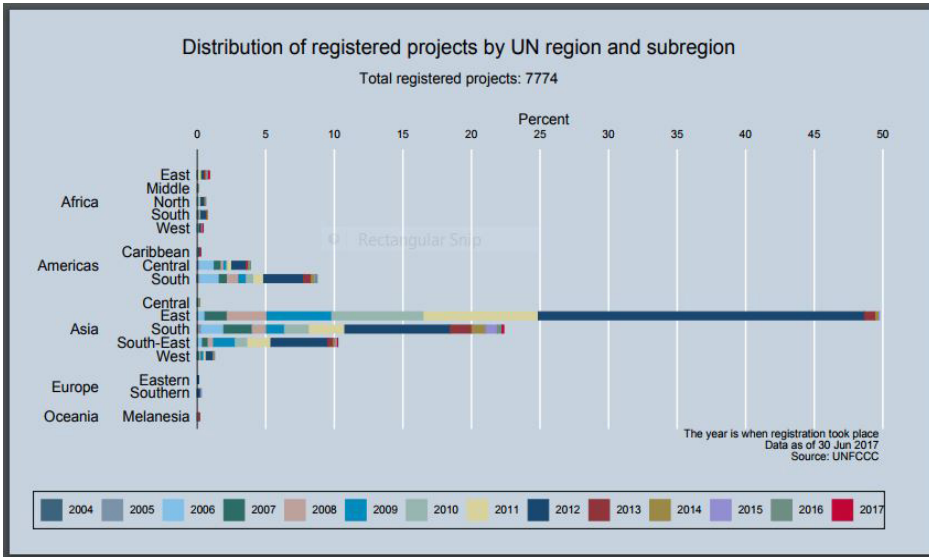


Figure 1: UNFCCC, "Distribution of Registered Projects by UN Region and Subregion", available online: <www.cdm.unfccc.int/Statistics/Public/files/201706/proj_reg_bySubregion.pdf>.

The graph (Figure 1) demonstrates that a lion’s share of the registered projects is in the Asia region, which accounts for well over 80% of all projects followed by the Americas, including the Caribbean with a little under 12%. Africa lags well behind these other regions in the number of projects that it hosts, which stands at 3%. The skewed distribution of these projects will be explained further in the next section.

Using Africa as an example, there is temptation to blame its poor showing– in terms of CDM project locations– on the continent’s lack of overall development. However, as some scholars argue, this would be an incomplete detail.⁷³ Instead, the factor of lack of development must be joined to the fact of the very specific lack of capability to start CDM partnerships on the continent.⁷⁴ Röttgers and Grote do a great job of showing that low opportunity for GHG emissions reduction, size of an economy and the relationship between GDP and GDP per capita as determinants of citing CDM projects do not explain why, for example, China alone has a seven-fold advantage over the rest of the world in attracting those projects.⁷⁵ Nor do they account for the fact that a mechanism that was primarily intended to create sustainable development projects in the developing world ended up being implemented in a fashion that favoured a country that does not fit any textbook definition a developing state. This led to

⁷³ See Dirk Röttgers & Ulrike Grote, “Africa and the Clean Development Mechanism: What Determines Project Investments?” (2014) 62 World Dev 201 at 201.

⁷⁴ *Ibid.*

⁷⁵ *Ibid* at 202; see also Florens Flues, “Who Hosts the Clean Development Mechanism? Determinants of CDM Project Distribution” (2010) University of Zurich Centre for International & Comparative Studies Working Paper No 53 at 2.

the coining of the phrase “more-developed developing nations” to differentiate, according to developmental levels, between and among the clusters of developing states.⁷⁶

It cannot be that the investment and market rules embedded in the CDM framework dictated this outcome. The importance of a welcoming business and economic climate as well as good governance and political stability to the attraction of CDM projects have been hypothesized.⁷⁷ While these factors seem objective on first intention, they are defined practically in ways that engender subjective elements outside the control of potential CDM host states in the developing world. The conclusion therefore is that CDM-applicable countries must reach a minimum level of development to foster an environment conducive to implementation of the mechanism.⁷⁸ The assumption is that market conditions would determine when this minimum developmental threshold is reached. The parameters are unclear, as the rules do not tailor market-based instruments to various levels of social development.⁷⁹

4.2. LACK OF ACCOUNTABILITY AND HUMAN RIGHTS CONCERNS

The injection of market considerations in the CDM process— in addition to the inequitable project distribution discussed above— also produced other social impacts. The rules of international investments and the marketplace are often seen as being overly antipathetic to social safeguards and sustainable development.⁸⁰ CDM projects were not only designed to generate emissions credits for meeting Kyoto commitments but also to foster sustainable development. This required, as some argued, strong safeguards aimed at discouraging a disproportionate focus on maximizing the generation of carbon credits to the detriment of sustainable development.⁸¹

⁷⁶ Ann E Prouty, “The Clean Development Mechanism and its Implications for Climate Justice” (2009) 34 Colum J Envtl L 513 (arguing that “As developed nations select CDM projects, two characteristics of more-developed developing nations like India, Brazil, and China, make them more desirable CDM project hosts. First, the more-developed non-Annex I countries are preferable because they have the institutional structure required to both implement high-yield projects and reassure investors that their investments will not be lost because of instability in the developing country...Second, ... less-developed developing nations will be at a disadvantage in attracting CDM projects because the Kyoto Protocol requires environmental additionality, meaning that each project must reduce GHG emissions below the level that would be achieved without the project in place” at 523) [Prouty].

⁷⁷ See e.g. John Fay & Umesh Kumar, “Market-based Incentives in Developing Countries: Geographical Dispersion, Antecedents and Implications of the Clean Development Mechanism” (2017) 9 Climate & Dev 164.

⁷⁸ *Ibid* at 175.

⁷⁹ *Ibid* at 164; see also Charlotte Streck & Jolene Lin, “Making Markets Work: A Review of CDM Performance and the Need for Reform” (2008) 19 Eur J Int’l L 409 at 412, 420.

⁸⁰ See David Richards & Ronald Gelleny, “Money with a Mean Streak? Foreign Economic Penetration and Government Respect for Human Rights in Developing Countries” (2001) 45 Int’l Stud Q 219; see also William Greider, “The Global Marketplace: A Closet Dictator” in Ralph Nader, ed, *The Case Against Free Trade: GATT, NAFTA and the Globalization of Corporate Power* (San Francisco, Earth Island Press & North Atlantic Books, 1993).

⁸¹ See Voigt, *supra* note 25 at 7.

The CDM process and the investments carried out under it did not escape criticisms for lacking social safeguards and being weak on accountability.⁸² It followed that even though CDM projects tended to produce unsatisfactory social outcomes,⁸³ the mechanism neither had any built-in safeguards to avert those negative outcomes nor guaranteed accountability and remedies at that level. The complaint in many cases was that local populations were not consulted prior to commencement of CDM projects.⁸⁴ This is blamed on a playing field that is unequal between CDM investors and funders and developing countries without much bargaining power and who for that reason could welcome exploitative and procedurally flawed projects.⁸⁵ It is marked by the union of a well-funded CDM investor and a weak, developing country regime that closes its eyes to corporate mis-behaviour so not to be perceived as fostering a volatile investment climate.

A few examples could be given of CDM projects where anticipated economic and developmental benefits clashed with social considerations. First is the Barro Blanco, a 28.84 megawatts hydro dam project in Panama that the CDM Board approved in 2011.⁸⁶ While the project was to be operated by a Panamanian company GENISA, funding for it came from the German Investment Corporation (DEG), the Netherlands Development Finance Company (FMO) and the Central American Bank for Economic Integration (CABEI).⁸⁷ Prior to the approval and even thereafter, the native Ngäbe peoples protested the project, pleading inadequate consultation in the design as well as fears that water from the reservoir would flood surrounding lands, putting lives at risk.⁸⁸ The project was ultimately deregistered, the first for any CDM project over social concerns anywhere in the world.⁸⁹

Similar protests over the violation of indigenous rights dogged the Santa Rita hydro dam project in Guatemala which the CDM Board registered in 2014.⁹⁰ License for the project was given to the Hidroeléctrica Santa Rita S.A. Corporation by the Guatemalan government in 2010. Financing came from the private equity fund Latin Renewables Infrastructure Fund (LRIF) while investors in the fund included again Germany's DEG, the Netherlands FMO,

⁸² See Knox, *supra* note 1; see also Marie Blevin, "The Clean Development Mechanism and the Poverty Issue" (2011) 41 *Env L* 777 at 788. As a way of addressing these criticisms, the World Wildlife Fund and other NGOs in 2003 issued the "Gold Standard Principles" for carbon market projects. See e.g. "The Gold Standard Principles" *WWF*, online: <www.goldstandard.org/sites/default/files/the-gold-standard-principles-final-270513.pdf>.

⁸³ Blevin, *ibid.*

⁸⁴ See Prouty, *supra* note 76 at 529, 533.

⁸⁵ *Ibid* at 524.

⁸⁶ See "Project 3237: Barro Blanco Hydro Electric Power Plant Project" (July 28, 2015), online: *UNFCCC* <cdm.unfccc.int/Projects/DB/AENOR1261468057.59/view>.

⁸⁷ See generally Ariadni Chatziantoniou & Kelsey Alford-Jones, "Panama withdraws Problematic Barro Blanco Dam Project from CDM Registry" (12 December 2016), *CIEL* (blog), online: <www.ciel.org/panama-withdraws-problematic-barro-blanco-dam-project-cdm-registry/>.

⁸⁸ See Carbon Market Watch, "Campaigns: Barro Blanco – Large Hydro Project, Panama" (16 July 2015), online: <carbonmarketwatch.org/publications/re-request-to-support-due-implementation-of-cdm-rules-re-3237-barro-blanco-hydroelectric-project/>.

⁸⁹ See Chatziantoniou & Alford-Jones, *supra* note 87.

⁹⁰ See "Project 9713: Santa Rita Hydroelectric Plant" (January 2014), online: *UNFCCC* <cdm.unfccc.int/Projects/DB/ICONTEC1375474606.31/view>.

the World Bank through the International Finance Corporation (IFC), the Spanish Agency for International Cooperation (AECID) and the Swiss Investment Fund for Emerging Markets (SIFEM).⁹¹ From its inception, numerous communities in the Alta Verapaz region that will be affected by the project opposed it because it will impair access to water, threaten food supplies, and lead to a breakdown of social cohesion.⁹² In this project, as in the Barro Blanco before it, multilateral financial institutions like the World Bank channeled what should ordinarily be international development funding through private banks and equity funds. Oxfam believes that this “hands off” development financing model places communities where projects are located at risk because of “weaker social and environmental protections”.⁹³

The final example is the Agua Zarca Dam project in Honduras which became notorious following the murder in 2015 of environmental activist Berta Caceres apparently arising from her opposition to the project.⁹⁴ Prior to her murder, Caceres had received several death threats related to her activism against the project.⁹⁵ The project was a partnership between the Honduran company Desarrollos Energeticos S.A. (DESA), which owns the government concession, and the Sinohydro Corporation of China, which was committed to developing the hydro-electric power dam. The claim is that investor-friendly legislation and support was offered by the Honduran government, which in turn empowered the companies to violate social protections with impunity.⁹⁶ The project was funded by CABEI, Finland’s Finnish Fund for Industrial Cooperation, Honduran bank FICOHSA, Germany’s FMO. Following Caceres’ murder, FinnFund and FMO suspended funding for the project.⁹⁷ Two persons linked to the project developers, DESA have been arrested in connection to the activist’s murder.

Many more examples of similar projects could be given. The Business and Human Rights Resource Centre has established a project that tracks and documents case studies of the human

⁹¹ See “Santa Rita Dam Conflict in Guatemala” (2019), online: *ECC Platform Library* <library.ecc-platform.org/conflicts/santa-rita-dam>; see also “Project 9713: Santa Rita Hydroelectric Plant” (20 January 2014) online: *UNFCCC* <cdm.unfccc.int/Projects/DB/ICONTEC1375474606.31/view>.

⁹² See Carbon Market Watch, “Santa Rita CDM Hydro Dam in Guatemala: The Need for Safeguards in Climate Finance Flows” (March 2015), online: <carbonmarketwatch.org/wp-content/uploads/2015/03/Fact-Sheet-FINAL-ENG1.pdf>.

⁹³ See Kate Geary, “The Suffering Others: The Human Cost of the International Finance Corporation’s Lending through Financial Intermediaries” (April 1, 2015), online: *Oxfam* <www.oxfam.org/en/research/suffering-others>.

⁹⁴ See “Honduras: Agua Zarca Dam impacts indigenous people by Gualcarque River” (2019) online: *Business and Human Rights Resource Centre* <www.business-humanrights.org/en/honduras-agua-zarca-dam-impacts-indigenous-people-by-gualcarque-river>.

⁹⁵ See Danielle Marie Mackey, “Drugs, Dams, and Power: The Murder of Honduras Activist Berta Caceres” (11 March 2016), online: *The Intercept* <theintercept.com/2016/03/11/drugs-dams-and-power-the-murder-of-honduran-activist-bertha-caceres/>.

⁹⁶ See Lauren Carasik, “Honduras: Where the Blood Flows and the Rivers are Damned” (6 August 2013), online: *Aljazeera* <www.aljazeera.com/indepth/opinion/2013/08/20138510295334159.html>.

⁹⁷ See Peter Bosshard, “European Funders Suspend Funding for Agua Zarca Dam” (16 March 2016), online: *International Rivers* <www.internationalrivers.org/blogs/227/european-funders-suspend-support-for-agua-zarca-dam>.

and social costs of renewable energy projects initiated under the CDM mechanism.⁹⁸ Concerns have been raised regarding projects in Chile, Colombia, Ethiopia, India, Kenya and even France.⁹⁹ They indicate a thin line that CDM projects must walk in reducing GHG emissions and leading to sustainable development. It is a balance that those projects must strike, as one goal cannot be sacrificed for the other. The structure and implementation of CDM projects from its inception would suggest that generating emission credits from them tended to trump sustainable development considerations.

Besides, the prevalent understanding of sustainable development tends to rest primarily on only economic calculations.¹⁰⁰ It does not appear as if projects implementing corporations and funders give as much attention to the social costs as they do to financial goals, at least from the perspective of communities within which the projects are located. Could these costs be factored into sustainable development parameters? This is obvious given some of the case studies. For example, the economic costs of dispensing with community consultations or conducting them in an unsatisfactory manner are significant and clearly avoidable. More examples could be given in terms of other areas where social objectives could be incorporated into climate mitigation projects.

5. CONCLUSION

Given the foregoing analysis, it remains to couple the current CDM processes with on-going discussions regarding the SDM to fashion a coherent way forward in terms of instituting a satisfactory transition and integrating sustainable development much more than had been the case previously. One very important concern in this regard will be how to disperse sustainable development principles across the SDM agenda. The way that the PA emphasized sustainable development in several of its operative Articles does indicate that the concept is much more than a marginal issue. It is very central to the goals of the PA and the post-2020 global climate objectives. This means that more than under the CDM, sustainable development must be at the core of the SDM process.

It is recommended that, based on lessons learned from the CDM mechanism, effective implementation should happen at two levels. First is that in drawing up the SDM rules, it would matter to define sustainable development as applicable in the climate context and as a rule of thumb for mitigation and adaptation projects. Some of the recent submissions before the SBSTA¹⁰¹ suggest that this should be done to clear up misconceptions about the concept as well as bridge geopolitical understanding. Second, relatedly, is that a conceptual clarification in practical terms would ease the contrived tension often assumed to exist between sustainable development and market requirements. This is very crucial. Economic progress means little, unless it is balanced with social progress as well. As some corporations are beginning to realize,

⁹⁸ See Business and Human Rights Resource Centre, “Case Studies: Renewable Energy and Human Rights” (2019), online: <business-humanrights.org/en/case-studies-renewable-energy>.

⁹⁹ *Ibid.*

¹⁰⁰ See e.g. Driesen, *supra* note 26.

¹⁰¹ See e.g. UN SBSTA 1, *supra* note 36. See also Canada Submission, *supra* note 49.

while economic growth is necessary to achieve global goals (such as the UN SDGs), this “is far from sufficient.”¹⁰²

There is a pressing need to assure equity in the distribution of sustainable development projects around the world. To do this will first require to clarify whether there are additional motivations beyond curbing emissions and ensuring sustainable development. Under the CDM, it seemed to have been the case that these two objectives were divorced from a need to ensure even spread of projects around the world’s various geopolitical regions. This turned out to be controversial, even in a situation where the Kyoto Protocol mandated that those projects be established only in developing countries. Under the PA, such projects could now be established anywhere regardless of the geographical location or economic status of the hosting state. As of yet, there are no guarantees that lopsided project distribution (as was the case under the CDM) would not worsen under current conditions. One way of providing the guarantees could be by incorporating equity principles that could moderate simple market considerations and ensure a more balanced distribution of SDM projects once they are green-lighted.

A way out might be to also clarify if these projects are characterized as foreign direct investments per se, or whether they could be understood to have, in addition, development assistance-related elements. Developed states that are both investors and financiers of CDM projects prior to the PA seem to favour the former (investment-centred) description, while developing states interpret the sustainable development expectations of those projects as justification for an understanding of those projects in the latter sense. If they are simply investments, there should not be constraints on investors regarding fairness or equity considerations in terms of where to establish mitigation projects or their sustainable development objectives. Investors take their investments where they will earn the most returns at the least cost. However, if there are development assistance calculations to be made, then questions of fairness in project distribution cannot be avoided. There is no doubt that CDM was, and SDM could potentially be, a leverage for development in the broadest sense.¹⁰³

¹⁰² See Michael Green, “Forward - Social Progress in 2030: Developing Beyond Economic Growth – A Report for Social Progress Imperative” (2015), *Deloitte* online (pdf): <www2.deloitte.com/content/dam/Deloitte/sg/Documents/about-deloitte/sea-about-social-progress-in-2030-report-noexp.pdf>; the Social Progress Imperative (SPI) was defined to include: nutrition and basic health and wellness, water and sanitation, shelter, personal safety, access to basic knowledge, personal rights, personal freedom, tolerance and inclusion, ecosystem sustainability, and access to information and communications; see also Robert Goodland, “The Concept of Environmental Sustainability” (1995) 26 *Annu Rev Ecol Syst* 1, where he asserts that “poverty reduction is the primary goal of sustainable development” at 2.

¹⁰³ See Sandrine Mathy et al, “Clean Development Mechanism: Leverage for Development?” (2001) 1 *Climate Pol’y* 251.