



# The Clean Development Mechanism and Its Failure in Delivering Sustainable Development

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**ABSTRACT.** The main purpose of this paper is to critically analyse and assess the functions of the Clean Development Mechanism (CDM) in the context of the expressed expected outcomes versus actual outcomes. The CDM as a market mechanism is argued to function to perfection, but seems to fail in terms of delivering the expected development benefits. This paper attempts to delineate why the CDM undermines its sustainable development component of its dual objective and, to some extent, why it was too optimistic to assume in the first place that the CDM per se would deliver sustainable development. This is primarily done through an empirical framework by explaining the functions of the CDM, how it is structured, and illustrating the criticism of the CDM with some theoretical considerations deployed. Ultimately, the paper argues that there is a serious built-in flaw with the CDM, which at present is not addressed.

## **Introduction**

The CDM is one of the three flexibility mechanisms<sup>1</sup> established under the Kyoto Protocol in 1997 in which projects under the CDM label enable countries committed to the protocol to earn saleable certified emission reduction credits (CER) (Kyoto Protocol: Article 12). The credits are generated from activities, which boost the environment's capacity to absorb carbon, and through investment in sustainable development projects that reduce emissions in a developing country itself or by a developed country active in a developing country. These credits can be traded, sold or used by industrialised countries to meet their targets under the Kyoto Protocol (UNFCCC 2011). Any CDM project or activity must be regarded as achieving sustainable development in developing countries, as well as reducing greenhouse gas emission by the CDM Executive Board<sup>2</sup> and the host country in which the CDM project is located in order to achieve the ultimate objective of the Kyoto Protocol itself (Kyoto Protocol: Article 12).

However, the CDM's abilities to successfully fulfil its dual objective has been questioned many times since its implementation, especially by a number of international radical environmental and development organisations, and larger internationally acknowledged organisations that have, either directly or indirectly, accused or criticised the CDM for contributing to the inequalities in the South (Blok 2010: 18-22). The criticism of the CDM incorporates a wider ethical skepticism ranging from how the CERs are traded against each other, i.e., the luxury emissions of the West versus the survival emissions of the South, to the fear of so-called low-hanging fruits<sup>3</sup> dominating the carbon-market, resulting in a new carbon colonialism (Blok 2010: 18-22). This brings forward a number of interesting questions related to the structure of the CDM, the political, institutional and ideological landscape surrounding the CDM and the expectations of the CDM.

This paper takes as its point of departure the criticism of the CDM. The hypothesis laid forward here is founded on the argument that the CDM suffers from an embedded structural flaw which can be seen in the unbalance between what the CDM was expected to deliver and how the tool to deliver these expected benefits was ultimately structured. More simply, this paper argues that the CDM fails in delivering sustainable development because it was structured as a market mechanism, and a successful one at that, of which the role is to guarantee low-cost solutions and not sustainable development.

This paper attempts to prove this hypothesis valid by analysing the structure of the CDM, its functions, and why it was structured as a market mechanism with a dual objective. In doing so, this paper questions if it is possible to fuse conventional and non-conventional thinking on development, and whether the institutional framework for the CDM can guarantee win-win benefits on behalf of all states involved. It questions whether it was somehow utopian to assume that the pitfalls of the modernisation paradigm and the capitalist system will be diminished or even abolished just by rhetorically altering the expected outcome – here referring specifically to the expected development side benefits. It questions to what extent the CDM represents an actual paradigm shift in the perceptions of how to achieve sustainable development, or whether the CDM essentially is some cosmetic alteration in order to maintain business as usual.

For the purpose of understanding the issues related to the CDM's functionality, a reflection on the conceptualisations of the terms development and sustainable development is included as discursive background knowledge to be used in later discussion and analysis. This section is followed by a deeper reflection and analysis of the CDM's structure and functionality. The analysis can roughly be divided into two main sections: the first revolves around the CDM's favouritism of certain areas and certain project types; and the second focuses primarily on political and discursive aspects related to the CDM. The paper concludes with a brief summary and reflection of key issues.

### **Development Versus Sustainable Development: Where Does the CDM Fit?**

Development theory has, since its critique of the feudal society in the 18<sup>th</sup> century,<sup>4</sup> come to encompass and represent many different ideas and perspectives ranging from the invisible hand of Adam Smith, to the notion of development without growth in terms of redistribution. Each theory reflects the contexts out of which they arose and

the ‘political positions of their proponents, the places where they developed, their philosophical perspective, and whether they are predominantly economic, sociological, anthropological, historical, geographic, and so on’ (Peet and Hartwick 2009: 21; Larrain 1989: 1).

Though each theory of development is characterised by its own specific characteristics and addresses specific contexts over time, many agree that development theories do share similar ideas and assumptions, and can therefore be roughly divided into two opposing groups: conventional theories of development and non-conventional theories of development (Peet and Hartwick 2009: 21). There are those who implicitly identify development with economic growth (Sachs 2010: x) and essentially accept the existing capitalist system as the best system for society because it is natural, inevitable, and to some extent unchangeable. The accumulation of wealth, even if it is only by a few, is seen as ‘spurring the entrepreneurship and innovation they see motivating the development effort’ (Peet and Hartwick 2009: 21). From this perspective, inequality becomes the inevitable price of progress and poverty the unfortunate, but eventually rectifiable, consequence of growth (Peet and Hartwick 2009: 21). On the other side, there are those who identify development with more rights and resources for the poor and powerless (Sachs 2010: x). These non-conventionals or critics see the existing capitalist system as “fundamentally flawed, ‘ethically challenged’, morally wrong, and dangerous to people and the planet” (Peet and Hartwick 2009: 141). What these theories seem to have in common is an emphasis on “well-conceived development rather than more growth” and some even speculate that global development may be achieved without growth by redistributing production, income and consumption from places in surplus to those who have too little (Peet and Hartwick 2009: 141).

The term development—what it means and how to achieve it—has also become a much contested issue. The concept of development has been accused of being a tool of marginalisation and disempowerment (Beer and Swanepoel 2001: xv) to being defined as ‘making a better life for everyone’ and ‘changing the world for the better’ (Peet and Hartwick 2009: 1-2). Some argue that development in the latter perspective becomes a powerful emotive tool because it appeals to the best in people and it becomes optimistic and something to strive for (Peet and Hartwick 2009: 1). Others believe development to be a concept of “monumental emptiness, carrying a vaguely positive connotation”, which has been used to disguise a *Westernisation of the World* (Sachs 2010: vii; Mehmet 1999: 1). According to Wolfgang Sachs, the core of the problem is to be found in the semantic confusion brought about by the concept of development: “after all, development can mean just about anything” (Sachs 2010: x).

Development’s offspring is sustainable development, which seems to suffer from the same fate. Environmental and ecological issues began to influence ways of thinking in relation to development during the 1970s. Until then, modernisation theories had managed to maintain their foothold as the most predominant discourse on development, and had focussed attention on strategies that promoted more growth. As Sachs stated, “it is the legacy of the twentieth century that the desires of nations for a better tomorrow are predominantly directed towards development-as-growth” (Sachs 2010: x). The publication of *The Limits to Growth* in 1972, however, raised questions about the assumption that growth could continue indefinitely and explored various global concerns which could lead the world to a crisis of catastrophic proportion (De Beer and Swanepoel 2001: 50). Such questioning eventually called for the international society to address environmental and ecological issues in relation to development. The Brundtland Report from 1987 popularised the notion and concept

of sustainable development on the political agenda (Kolhus et al. 2001: 9), and underlined that environmental issues and development were closely interconnected (De Beer and Swanepoel 2001: 50; Greene 2006: 457).<sup>5</sup>

However, it also became a representation of what has been referred to as “a major rescue operation for the development idea” in which the main priority was to figure out how to “protect nature while keeping on competing and growing economically” (Sachs 1999: xi). This “implicit agenda of many efforts to reconceptualise development” (Sachs 1999: xi) was only scrutinised by those who essentially saw growth as the problem and not the solution to development issues (Sachs 1999: xi).

Since the publication of the Brundtland Report, nations, governments and various corporations have made an effort in promoting sustainable operations, whilst the international community through the United Nations and non-governmental organisations are engaging in activities and projects designed to make sure development activities are sustainable (Campbell and Mollica 2009: xvii). But similar to the term development, sustainable development has come to encompass very broad and diverse applications to such an extent that it “has allowed many social actors to adopt a cosmetic approach to development projects that does not assure substantial changes in their treatment of environmental problems” (Trzyna 1995: 72; Sachs 2010: x). As a result, the term has suffered from a great deal of criticism over the past couple of decades, ranging from accusations of being “radically incomplete” – as it has no specific content and puts no limits on what sorts of things can be regarded as sustainable or for how long – to being a “vague and almost meaningless idea” (Campbell and Mollica 2009: xv).

The ambiguity associated with concepts such as development and sustainable development is only further complicated by the existence of different values and perspectives on what is *better* for society and its people – an innate ambiguity that has clear implications for how any operations labelled sustainable are evaluated and assessed. This naturally also applies to any assessment of the CDM’s functionality.<sup>6</sup>

When superficially glancing at the CDM, it seems very obvious that the CDM is rooted in modernisation theory and the assumption that free market forces can generate development in terms of economic growth. However, the CDM’s objective of addressing climate change and promoting sustainable development is, from the outset, far from the conventional ideas of promoting or reinforcing “the hegemony of the economic worldview” (Sachs 2010: x), which is interesting because it seems to indicate a contradiction between rhetoric and actual intentions. It is interesting because one cannot help but wonder if the CDM in fact was meant as an economic development tool, emphasising conventional Western values of economic growth, and that the concept of sustainable development was only added because contemporary discourse on development would never allow the notion of sustainability being left out of the equation. In other words, because the term sustainable development has come to mean just about everything, it has now become acceptable in contemporary discourse on development that economic growth is sustainable development.

### **The CDM, Its Structure, and Why This Structure Was Chosen**

At the time of the launching of the CDM, the international society had long witnessed a conflict between the North’s focus on climate change as a global environmental problem and the South’s focus on climate change as a development problem (Olsen 2005: 3). The negotiations under the United Nations Framework Convention on

Climate Change (UNFCCC) were indeed characterised by a North-South dichotomy in which the South had a *development first* agenda, which means that facing the challenge of meeting basic development needs are prioritised (Winkler et al. 2002: 61), and the North had a *climate first* priority, rooted in the characterisation of climate change as a development problem in the South, but an environmental problem in the North (Wright 2007: 42). Reaching consensus was further complicated by the historically contingent greenhouse gas (GHG) emission and related development gap between the North and the South. The less developed South wanted the industrialised North to take prime responsibility for the global climate change and address development issues in the South before committing to GHG reduction. Climate change, it was argued, “had been caused mainly by the developed countries who had the corresponding responsibility to solve it within their own territories. If measures were needed in poorer countries the wealthier countries could pay for these too” (UNFCCC 2004: 13). The divergent views on how to structure the CDM and for what primary goal, ultimately resulted in the US rejecting the Kyoto Protocol and would have jeopardised the endeavour all together had it not been for the transformative EU (Grubb 2002: 139-141; De La Torre 2006: 6). Perhaps, this also explains the high expectations surrounding the Kyoto Protocol and, in extension, the CDM and why it has been hailed as being “a masterpiece of compromise” (Wilkins 2002: 1).

The dual objective of the CDM and the architecture of the processes of approval can, in fairness, be regarded as a compromise between the industrialised North and the developing South, but also as an attempt to create a balance in the prioritisations of these different levels of interests.<sup>7</sup> By incorporating priorities of the North and the South, the UNFCCC, the Kyoto Protocol, and ultimately the CDM, become an institutional framework in which all parties are engaged because they have assessed such to be beneficial for all – the institution as well as the nation states. The cost-benefit notion from neorealism (Keohane 1984: 73) is a good illustration for the considerations expressed during the negotiations and how the agreements ultimately panned out as the acknowledgement of the developing countries’ domestic issues became an important factor in establishing the CDM. The developing countries agreed to the CDM only as long as the primary goal of the mechanism was that of achieving sustainable development (Figueres 2006: 3). The institutional setting of the CDM and the interactions within it indeed illustrates that concerns related to national sovereignty, national self-determination, and national issues of providing for one’s own citizens are many times prioritised over international cooperation, unless the benefits outweigh any losses.<sup>8</sup> This is to some extent underlined by the fact that host countries of CDM projects are responsible for determining and assessing what sustainable development constitutes based on their individual needs, as this illustrates that domestic concerns and potential loss of national sovereignty were very important and influential factors in the establishment of the CDM, despite the assumed functions of the institution.<sup>9</sup>

The establishment of the CDM brought with it high expectations. The perceived outcomes the CDM was able to produce are founded on a number of underlying assumptions on how to address international issues such as climate change and development. It has been argued that the CDM implicitly perpetuates a “long-standing agenda of capitalist modernity for the global South” and that it to some extent revives the “developmental ethos of the recent past,” despite current trends away from grand, macro theories of development (Wright 2007: 23). As mentioned, the CDM is in many ways influenced by modernisation theory and neoclassical thinking on development when considering its structure as a market mechanism, the expectations

that market forces will generate development, and that developing countries want to develop. The North-South dichotomy seems to illustrate a scenario in which the North is the primary source for transferring knowledge and the tools for change, whilst the South is the target for change and development (Wright 2007: 23) – a scenario which also underlines the assumption that development is a shared objective by the North and South alike, and presupposes that the less developed countries want to catch up with the West. It is argued that modernisation theories also include the basic premise that “competitive behaviour and technological improvements coordinated through free markets lead to economic growth and, eventually, material benefits for everyone” (Wright 2007: 24) and looking at the CDM from a comparative angle illustrates that the CDM promotes similar approach to development, as it is assumed that the CDM market will generate economic benefits and ultimately generate development in the receiving host countries.<sup>10</sup>

Taking the Kyoto Protocol—the overall framework for the CDM—into consideration and its “common but differentiated responsibilities” objective (The Kyoto Protocol: Article 10), one could argue that the CDM, in order to satisfy all needs of the parties involved, and secure the cooperation between these parties – and to some extent secure the institutional framework itself – has attempted to fuse conventional and non-conventional thinking in relation to development. It is conventional because it is a market mechanism expected to generate an economic flow and development side benefits for everyone, and because it is established within a Western institution. It is non-conventional because it recognises that development is multidimensional and that, to some extent, the North and the South have different responsibilities in relation to climate change, i.e., that the North should take responsibility for the underdevelopment of the South.

However, as the CDM has been highly criticised for not providing sustainable development, one could question this attempt to fuse two divergent perspectives on development. Perhaps what we are witnessing is an example of Sachs’ suspicion “that the Western development model is fundamentally at odds with both the quest for justice among the world’s people and the aspiration to reconcile humanity and nature” that ecology and social fairness are “incompatible with the worldwide rule of economism” (Sachs 1999: x).

### **Why the CDM is Failing in Delivering Sustainable Development**

Since the establishment of CDM, the international society has witnessed the growth of not only the carbon market in general, but the CDM market in particular and CDM projects rise all over the South. The number of CDM projects has risen from 100 CDM projects moving through the formal process of approval in May 2005 (Cosbey et al. 2005) to a total of 4,753 CDM projects approved as of October 2012 (CDM 2012). One could argue this illustrates just how rapidly the CDM carbon market has developed.

However, the CDM encompasses a number of weaknesses in terms of ethical and political dilemmas and problems visualised by the dysfunctionality of the CDM, the discourse on the CDM, and the political deliberation on the CDM. The potential seen in the CDM and what it can deliver ultimately depends on how the entities involved chooses to interact and to what extent both objectives of the CDM’s overall goal are prioritised equally. Unfortunately, the CDM continuously finds itself in the midst of controversy and projects – such as the so-called HFC-23 CDM projects in China and

the Plantar project in Brazil – have to a great extent become the visual images of what critics of the CDM initially feared would happen.<sup>11</sup>

### **The Dysfunctionality of the CDM**

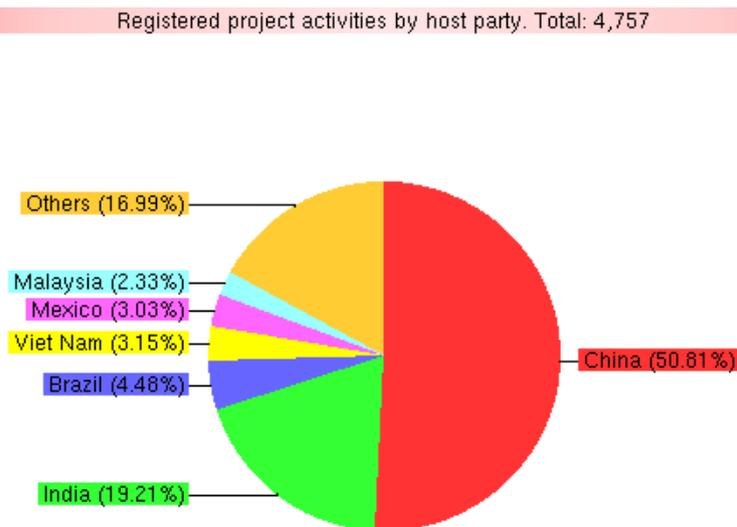
There are several indicators of the CDM's functionality that seem to suggest that the CDM focuses on certain aspects while neglecting others. Only four years after the establishment of the CDM, there was a tendency, both in the literature and in general, to focus extensively and almost exclusively on the issue of assisting industrialised countries in the North in achieving target compliance. This could be seen in the large number of estimates on GHG abatement potential combined with hardly any focus on how the CDM would contribute to sustainable development or to what degree (Kolshus et al. 2001: 1). This focus is in many ways underlined by the many projects that are attractive only in terms of GHG abatement. According to core observers, CDM activities indicate that most projects are single, isolated attempts to access GHG emission reduction and “that most industrialised country governments and corporations are using the CDM merely to reduce the costs of complying with their Kyoto targets and as such are searching for projects that deliver large volumes of cheap credits” (Pearson 2007: 247; Figueres 2006: 1). The reason, it is argued, is to be found in the structure of the CDM because as a market mechanism it will automatically search for least-cost carbon credits, and thereby sideline projects like renewables by not rewarding the multiple benefits they provide (Pearson 2007: 247). These arguments rely on framing the CDM's ability to promote sustainable development in terms of whether the CDM is promoting renewables in developing countries and thereby assisting them in a transition away from fossil fuels (Pearson 2007: 247). This also means that the arguments are dependent on data that indicates or illustrates that certain projects are more favoured than others because they deliver large volumes of cheap credits. With regard to certain project types, it is widely recognised that certain projects such as large so-called F-gas projects, and other end-of-pipe options for capturing and decomposing non-CO<sub>2</sub> GHGs like N<sub>2</sub>O and CH<sub>4</sub> – which have high global warming potentials – do not produce any direct development benefits and are merely attractive from a low-cost emission reduction perspective (Olsen 2005: 13). These projects are, according to Pearson, the most common projects despite the fact that these projects “merely shift the location at which emissions reduction are made ... without delivering additional sustainable development benefits to host countries and do not help catalyse fundamental shifts in energy production and use” (Figueres 2006: 1; OECD 2004: 31).

Furthermore, when comparing generated credit volumes in order to judge what type of credits are the most popular in terms of being traded and sold, only 10% of the total credits issued were from renewables despite the fact that renewables accounted for the majority of all project types (Pearson 2007: 248).<sup>12</sup> Today, it is estimated by the UNFCCC that 1,017,900,920 Certified Emission Reductions (CERs) have been issued (CDM 2012), but attaining detailed information about how many of these are generated from renewable projects seems to be a far more difficult task. The UNFCCC has no figures or statistics of such nature, and similar calculations have not been made since 2006<sup>13</sup> by the UNDP.<sup>14</sup> The challenge in attaining such information brings forth another aspect of questioning, as one could wonder why such information is not made available by the UNFCCC itself. In many ways, it seems that the CDM on the surface promotes projects that emphasise renewables and thereby sustainable

development, but an in-depth investigation may indicate that the CDM market in fact is concentrated on CERs from projects where the contribution to sustainable development can be questioned. It is a difficult assessment to make, due to lack of reliable information.

Another indicator can be seen in the CDM's tendency to favour certain locations for implementation of CDM project activities (see Figure 1). The majority of CDM projects are located in countries where a certain level of development has already been reached and where this level of development can be argued to represent lower implementation costs related to the CDM. In December 2011, only 14 out of the 48 countries classified as least developed by the UNFCCC<sup>15</sup> had projects approved by the CDM Executive Board (EB), thereby representing only a total of 35 CDM projects located in least developed countries. In comparison, it is worth mentioning that China alone and its 2,417 CDM projects represent more than 50 per cent of all CDM projects (CDM 2012). Data such as these numbers seem to support the criticism from NGOs, such as the CDM Watch (2012), that the CDM is geographically biased. Comparing the credit volumes generated from these projects illustrate an even more skewed image (see Figure 2). China alone generates almost 60% of all CERs, thereby arguably also attaining far more foreign investment than any other participating country.

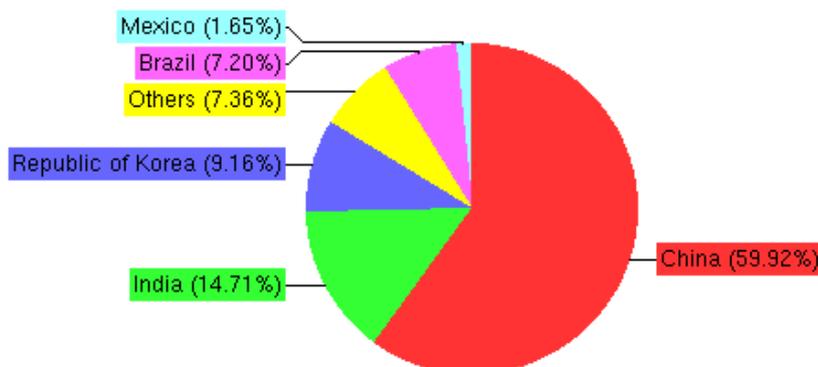
Figure 1



<http://cdm.unfccc.int> (c) 12.10.2012 14:55

Figure 2

CERs issued by host party. Total 1,016,691,098



<http://cdm.unfccc.int> (c) 12.10.2012 14:57

From a developmental aspect, it is interesting to note that those who have so far benefitted are countries that were already in transition and therefore not necessarily those countries which needed such investment the most. The fact that there are bilateral and multilateral development agencies working only to direct the CDM towards less developed countries, in particular the African continent (CDM Watch 2012), also seems to suggest that the CDM requires additional initiatives to compensate for the embedded weaknesses of the CDM – in this case, the CDMs favouritism of specific geographic areas. Furthermore, the favouritism of certain geographic areas also brings forward the element of cost-efficiency right to the front, as many of the more developed countries chosen for CDM implementation represent locations in which costs are lower. As Cosbey et al. (2005: 46) have noted, “the beauty of any market mechanism is precisely that it will find the lowest-cost way to achieve its objectives.”

The unbalance between the two goals of the CDM is, according to Olsen, widely documented, as the CDM involves trade-offs between the two goals in favour of producing low-cost emission reductions at the expense of achieving sustainable development benefits (Olsen 2005: 13). As Pearson has rightly observed, “while the CDM is rhetorically mandated to assist in achieving sustainable development and this should benefit renewables, no part of the CDM’s architecture specifically monetises those benefits and as such they play a limited role, if at all, in directing investment (Pearson 2007: 249).

### The Political Deliberation and Discourse on the CDM

Some criticisms of the CDM are founded on a number of ambiguous terms and concepts associated with it. One of these is sustainable development, which has caused heated debates in terms of defining what it is, by whom, and how to assess the contribution to it. As introduced earlier, it is the host country of the CDM project in

question that is responsible for guaranteeing that a specific project with an applied CDM status is meeting the goals of sustainable development. The assessment of a CDM project is based on each country's own sustainable development criteria which, one can assume, differs from country to country. There are two ways to assess this aspect. One could argue that the CDM acknowledges that the different countries in the South have different needs and that it therefore is impossible to create a common checklist for sustainable development criteria. An approach that also seems to indicate an acknowledgement of national sovereignty and self-determination in terms of not imposing one specific model or one set of values to address very different needs. However, even this pro-CDM view of this aspect poses a number of potential problems. One could argue that should an increase in competition requires it, host countries may be tempted to lower their sustainable development criteria or standards in an effort to attract foreign investment, thereby increasing chances of gaining benefits. In this scenario, the CDM—or, more specifically, the CERs generated from the CDM—becomes yet another commercial commodity in the free market as opposed to being a tool for the promotion of sustainable development. Such behaviour affects the integrity of the CDM's overall objective, but it also affects the integrity of the institutional framework because there are no incentives to prevent such double-crossing or cheating. The fact that various NGOs have suggested more restrictions in relation to the CDM projects to prevent such behaviour only underlines the risk for such behaviour (Foot 2004: 127). Furthermore, the lack of international agreement for a definition of sustainable development also means that there are no international agreed methods for evaluating or assessing to what extent the CDM project in question contributes to sustainable development. This means that any evaluation of the CDM is almost impossible (Olsen 2005: 11), but it also brings forth, again, the risk of host countries compromising their sustainable development criteria in their efforts to attract investors, as host countries may have little to bargain with due to the global scope of the CDM and investors' wide choice of location (Olsen 2005: 11). This also illustrates that targets, purposes and goals, as described and expressed in the Kyoto Protocol, are very much dependent on domestic affairs rather than just foreign policies, and that the existence of the institutional setting for the CDM relies on how those involved in this collaboration assess the benefits.

It has been suggested that the CDM should be reformed in order to better achieve its sustainable development component, and that defining what sustainable development means is a crucial aspect if sustainable development within the framework of the CDM is to be achieved (Cosbey et al. 2005: 44; McDonald 2010: 15). However, defining sustainable development across more than a hundred radically different countries is an extremely difficult—if not impossible—task. As indicated, issues regarding national sovereignty may have a huge impact on what can be done, and it seems unlikely that countries want to be dictated on some “universal” definition of what sustainable development is or should be. All countries claim to be in a better position to judge what sustainable development is in their particular national framework, and attempting to apply an internationally agreed upon set of criteria may cause countries to withdraw if the criteria in question are not regarded to be the best solution for that specific country (McDonald 2010: 15). This could be the reason why it is argued that no meaningful international agreement on the definition of sustainable development will be forthcoming (McDonald 2010: 15).

Furthermore, due to the focus on cost-efficiency and the potential competition between the developing countries for investment and economic growth, it is no surprise that the focus is placed on the CERs generated as opposed to sustainable

development, as it is the CERs that are of value. This notion of CERs being nothing more than a new commodity for economic transaction and growth seems to be further underlined by questionable initiatives such as the HFC-23 CDM projects in China and the Plantar project in Brazil, which have gained much media attention due to the negative implications these CDM projects have (Blok 2010: 19). What these types of projects have in common is the generation of large volume CERs, and it seems rather clear that the focus of these projects is to generate CERs rather than taking into account what implications such a production of cheap CERs may have for sustainability or the environment. Keeping in mind the CDM's ability to generate a successful carbon market, one could argue that this in itself is an indicator of the CERs being just another commodity in the free market, with developing countries risking their sustainable development criteria in the attempt of attracting investment due to the embedded competition in the market. In a period of less than six months (June 2011 - December 2011), approximately 650 projects went through the CDM project cycle of approval, despite the fact that the global market is only secured until 2012. This rapid increase in establishing CDM projects could indicate that CERs as a commodity has gained much momentum in terms of being a trustworthy and valuable commodity. The fact that countries—such as India and China, which were initially extremely critical of letting a market mechanism dominate the CDM and the idea of commitment to reduce global climate change—have participated in such large numbers of CDM projects (Figure 1) and generated so many CERs (Figure 2) also implies that the CERs are viewed as a commodity that can provide economic benefits. The fact that there has been a tendency to focus primarily on the CDM's ability to generate a successful carbon market indicates an acceptance within public discourse that this is what the CDM actually does. This also seems to validate the suspicion that the CDM is merely used as a positive marketing brand in line with current trends of corporations and companies wanting to portray a “green” profile, and that an actual paradigm shift is yet to be seen.

Reflecting on the discourse on the CDM, it seems that there are two ways of assessing the CDM's failure to deliver sustainable development. On the one hand, there seems to be a wide acceptance of the fact that the CDM does not deliver enough sustainable development because it was expected that it would deliver more. On the other hand, there is also a wide acceptance of the existence of the CDM and some consensus on the fact that even if the CDM has failed in some aspects, it is still a good incentive for the promotion of combating climate change and addressing sustainable development issues in the South as long as there is continued pressure for the improvement of the CDM. However, accepting that the CDM at the outset is a good idea—because it rhetorically addresses and acknowledges the importance of fusing collaboration on development and combating global climate change, as well as creating a framework for bridging the gap between the North and the South—does not necessarily mean we have to accept that the tool is good enough as it is. This means that if the tool is the reason for the lack of expected results, due to the embedded dysfunctionality, it can seem strange that the tool is not abolished altogether. Furthermore, considering the expiry date of these agreements and the problems related to committing to a new international agreement, one could question to what extent the CDM has managed to minimise the gap between the North and the South. In many ways, the lack of consensus among developed and developing countries in reaching new agreements seems to underline that the gap is as wide as it has ever been. What is interesting in this relation and to the evaluation of the CDM is whether one is to believe that economic profits can generate sustainable development or not,

and whether neoliberal institutionalism can provide the best framework for securing international cooperation of this magnitude.

## Reflection and Conclusion

The CDM is a phenomenon loaded with complexities ranging from rhetorical weaknesses to a dysfunctionality embedded in the model, and to some extent, an unbalance within the institutional framework—i.e., balancing the prioritisations of national and international issues. These complexities are, in many ways, the result of trying to combine different perspectives from the North and the South, but also different perspectives on what sustainable development entails; what combating climate change entails; and what systems, structures, tools, ideas, and values are better for addressing issues of global nature and importance. It is, at times, difficult enough to reach agreement domestically within a country, which means that reaching consensus between governments, corporations, organisations, and institutions on a global level is a far more difficult task, especially keeping in mind national sovereignty and self-determination.

One could argue that the CDM fails in delivering sustainable development because it is a market mechanism. The element of cost-efficiency was an important factor during the Kyoto negotiations, and it can therefore come as no surprise that cost-efficiency has become the guiding principle of the CDM despite its two mandated purposes of GHG emission reduction and achieving sustainable development. Furthermore, under the current structure of the CDM, the only element of monetary value is that of the credits. This means that they are the only incentive for investors to participate. Sustainable development in comparison is, at best, valuable in terms of having branding value. In many ways, it is utopian to assume that the CDM will deliver anything else than cost-efficient credits, which brings the very existence of the CDM into question. Perhaps it is better to acknowledge that the CDM in its current structure cannot do two things at once because there are no features of the CDM structure that support the notion of promoting sustainable development — that is, sustainable development in terms of being more than economic growth.

## Notes

1. This is also known as the carbon market. For details on what constitutes the carbon market, see Lecocq and Ambrosi (2007: 139).
2. The CDM Executive Board (CDM EB) supervises the Kyoto Protocol's clean development mechanism under the authority and guidance of the Conference of the Parties serving as the Meeting of the Parties to the Kyoto Protocol (COP/MOP). The CDM EB is fully accountable to the COP/MOP. The CDM EB will be the ultimate point of contact for CDM Project Participants for the registration of projects and the issuance of CERs.
3. Cheapest abatement options or cheapest emission reduction options that are favoured by the market and therefore easily sold, which may result in developing countries having to invest in more expensive measures in order to meet future reduction targets (Castro 2010: 2).
4. For further reading on the historical background of the concept of development, see Larrain 1989: 1.
5. For exact wording and definition of "sustainable development," see *Our Common Future*, Chapter 2, 1987.
6. Neither the UNFCCC nor the Kyoto Protocol provides any exact definition of what is meant when using the term sustainable development. The protocol does instead provide what is best described as guiding principles for Annex 1 countries when promoting sustainable development

- (see UNFCCC 1992, Article 1 for list of definitions and Kyoto Protocol 1997: Article 2 for list of guiding principles).
7. For details on processes of approval, see Curnow and Hodes 2009: 33-34.
  8. For realist inspired accounts on how states interact within institutional settings, see Stean et al. (2005: 65) and Brown (1997: 49).
  9. For an elaboration on neoliberal institutionalism and functions of institutions, see Steven L. Lamy (2006: 207-221).
  10. This is supported by those who argue that the idea that the CDM can promote sustainable development is founded on the assumption that payments for environmental services, including carbon- and greenhouse gas emission reduction, can generate poverty reduction and enhance sustainable development (Minang et al. 2007: 615).
  11. For details and criticism on these projects, see Blok 2010.
  12. This is a rough estimate. See Pearson (2007: 248).
  13. This is as far as we have been able to assess from our research.
  14. See UNDP 2006 for their assessment of the CDM.
  15. The CDM in numbers: for figures and statistics on CDM, see <http://cdm.unfccc.int>; and for Least Developed Country information under the UNFCCC, see [http://unfccc.int/cooperation\\_and\\_support/items/3097.php](http://unfccc.int/cooperation_and_support/items/3097.php).

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