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Item 13 of the provisional agenda
Second review of the Kyoto Protocol pursuant to its Article 9

**Compilation and analysis of available information on ways and means
to enhance equitable regional and subregional distribution of projects
under the clean development mechanism**

Note by the secretariat

Summary

This note compiles and analyses available information on ways and means to enhance equitable regional and subregional distribution of projects under the clean development mechanism (CDM). It presents information on the current distribution of CDM projects and on the barriers to a more equitable distribution that have been identified. It also explores actions undertaken so far to improve project distribution and further actions that could be undertaken in the future.

The note draws on a number of information sources, including submissions by Parties, the work of the CDM Executive Board, work conducted under the Nairobi Framework, and studies prepared by international agencies and other research organizations.

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I. Introduction

A. Mandate

1. The Subsidiary Body for Implementation (SBI), at its twenty-eighth session, continued the preparations for the second review of the Kyoto Protocol pursuant to its Article 9, which is to take place at the fourth session of the Conference of the Parties serving as the meeting of the Parties to the Kyoto Protocol (CMP). In this context, the SBI requested the secretariat to prepare an information note to compile and analyse available information on ways and means to enhance equitable regional and subregional distribution of projects under the clean development mechanism (CDM) and the scope, effectiveness and functioning of the flexibility mechanisms under the Kyoto Protocol. It further requested the secretariat to make the note available to Parties prior to the pre-session workshop referred to in decision 4/CMP.3, paragraph 11.^{1,2}

2. At the same session, the SBI invited Parties to submit to the secretariat, by 19 September 2008, for compilation and synthesis, their views on: (1) ways and means to enhance equitable regional and subregional distribution of CDM projects; and (2) how the current institutional arrangements, governance, rules and procedures of the CDM and joint implementation may be improved in the first commitment period in order to enhance their functioning and effectiveness.³ These submissions are contained in document FCCC/KP/CMP/2008/MISC.2.

B. Scope of the note

3. This note compiles and analyses information on the first part of the mandate mentioned in paragraph 1 above, namely in relation to ways and means to enhance equitable regional and subregional distribution of CDM projects.⁴ Chapters II and III consider the current distribution of projects and barriers to a more equitable distribution, respectively. Chapters IV, V and VI discuss actions undertaken so far to improve project distribution and further actions that could be undertaken in the future.

4. This information note draws on the following information sources:

- (a) The submissions from Parties referred to in paragraph 2 above;
- (b) Information contained in the annual reports of the Executive Board to the CMP, in particular those of 2006 and 2007,⁵ as well as more detailed submissions and analysis considered by the Executive Board in the context of preparing its reports;
- (c) Work conducted by United Nations agencies and multilateral development banks under the Nairobi Framework;⁶
- (d) Numerous studies prepared by international agencies and other research organizations.⁷

¹ FCCC/SBI/2008/8, paragraph 109 (d) (ii).

² The pre-session workshop is planned for 22–23 October 2008 in Athens, Greece.

³ FCCC/SBI/2008/8, paragraph 109 (d) (iii).

⁴ The second part of the mandate is addressed in document FCCC/KP/CMP/2008/INF.3.

⁵ FCCC/KP/CMP/2006/4/Add.1 (Part I) and FCCC/KP/CMP/2007/3 (Part I).

⁶ For information on the Nairobi Framework, including a joint matrix of ongoing and planned activities of its partner agencies, see <http://cdm.unfccc.int/Nairobi_Framework/index.html>.

⁷ Comprehensive examples include: Ellis J and Kamel S. 2007. *Overcoming Barriers to Clean Development Mechanism Projects*. Paris: Organisation for Economic Co-operation and Development; and Silayan A. 2005. *Equitable Distribution of CDM Projects among Developing Countries*. Hamburg: Hamburg Institute of International Economics.

**C. Possible action by the Conference of the Parties
serving as the meeting of the Parties to the Kyoto Protocol**

5. The CMP may wish to consider the compilation and analysis contained in this information note in the context of the second review of the Kyoto Protocol.

II. Current distribution of projects under the clean development mechanism

6. Table 1 indicates that most of the 1,167 projects registered under the CDM (as at 22 September 2008) are concentrated in the Asia and the Pacific (ASP) region, followed by the Latin America and the Caribbean (LAC) region. Parties not included in Annex I to the Convention (non-Annex I Parties) in the Africa (AFR) region are host to 27 projects (2.31 per cent of the total), while least developed countries (LDCs) host 10 projects (0.86 per cent) and small island developing States (SIDS) host eight projects (0.69 per cent).

7. Expectations for the issuance of certified emissions reductions (CERs) from registered projects for the period until the end of 2012 indicate a stronger concentration still among the regions, as is also shown in table 1, with a higher proportion of CERs expected from the ASP region and a larger gap between this region and the LAC region. Approximately 3.14 per cent of total CERs for this period are expected to be generated by projects in the AFR region, with 0.05 per cent and 0.07 per cent of total CERs expected to be generated by LDCs and SIDS, respectively.

**Table 1. Distribution of registered projects under the clean development mechanism,
by region and group (as at 22 September 2008)**

	AFR	ASP	LAC	Other	Total	LDCs	SIDS
Projects (number)	27	758	374	8	1 167	10	8
Projects (% of total)	2.31%	64.95%	32.05%	0.69%	100.00%	0.86%	0.69%
CERs expected by 2012 (millions)	41.20	1 018.08	251.44	1.79	1 312.50	0.61	0.94
CERs expected by 2012 (% of total)	3.14%	77.57%	19.16%	0.14%	100.00%	0.05%	0.07%

Abbreviations: AFR = Africa, ASP = Asia and the Pacific, CERs = certified emission reductions, LAC = Latin America and the Caribbean, LDCs = least developed countries, SIDS = small island developing States.

8. Table 2 gives information on the 4,207 projects currently estimated to be in the CDM pipeline.⁸ This information reflects a pattern similar to that for registered projects, with a concentration in the ASP and LAC regions, and approximately 1.88 per cent of projects in the pipeline for the AFR region.

**Table 2. Distribution of projects in the clean development mechanism pipeline,
by region (as at 22 September 2008)**

	AFR	ASP	LAC	Other	Total
Projects (number)	79	3 272	831	25	4 207
Projects (% of total)	1.88%	77.78%	19.75%	0.59%	100.00%

Abbreviations: AFR = Africa, ASP = Asia and the Pacific, LAC = Latin America and the Caribbean.

9. Further information on the distribution of projects is contained in the annex, including a breakdown of registered and pipeline projects by region and host Party. Approximately 66 per cent of

⁸ The CDM pipeline includes all registered projects and other projects submitted for validation by a designated operational entity.

the total registered projects are hosted by Brazil (12 per cent), China (23 per cent) and India (31 per cent). In terms of the expected issuance of CERs for the period until the end of 2012, from projects currently registered, 73 per cent are concentrated in the same three countries: Brazil (9 per cent), China (48 per cent) and India (16 per cent).

10. The annex also provides information on the sectoral scopes addressed by registered CDM projects. The majority of projects are in the energy industries (renewable and non-renewable sources) sector (55 per cent), followed by waste handling and disposal (20 per cent), agriculture (6 per cent) and manufacturing industries (5 per cent). Though there is more diversity at the regional level, a similar pattern is nevertheless evident. For the AFR region, of a total of 27 registered projects, 13 are in the energy industries sector, seven are in waste handling and disposal, five are in chemical industries and four are in manufacturing industries. Most CDM projects in LDCs are also in energy industries, closely followed by the waste handling and disposal sector. All projects hosted by SIDS are in energy industries.

11. Considering information on the projects currently in the CDM pipeline, it appears that projects in the energy industries sector will continue to dominate the CDM in the immediate future. These projects make up 61 per cent of the total pipeline, followed by waste handling and disposal projects with 16 per cent and projects in the manufacturing industries sector with 9 per cent.

12. A recent report by the World Bank sought to provide an inventory of the potential for clean energy projects in sub-Saharan Africa that could receive support through mechanisms such as the CDM.⁹ The report estimates that for the 44 countries and 22 technologies considered, there is a technical potential for more than 3,200 clean energy projects, including 361 programmes of activities under the CDM. If fully implemented, this estimated technical potential could provide more than 170 GW of additional power-generation capacity, more than twice the region's current installed capacity, and avoid approximately 740 million tonnes of carbon dioxide (CO₂) per year.

III. Barriers to improved project distribution

13. A number of barriers to a more equitable distribution of CDM projects have been identified. Some barriers relate specifically to the CDM – for example, barriers of insufficient local knowledge of the CDM or resulting from the modalities and procedures of the CDM – while others are more general and are related to the circumstances of host Parties. As a result, actions to address these barriers would need to be undertaken by a number of actors in their specific areas of capability and influence. In many cases, these barriers are interlinked and would require coordinated action on a number of fronts.

14. The following groups of barriers to a more equitable distribution of project have been identified:

- (a) **Financial barriers:** A key barrier is the difficulty experienced by project participants in gaining access to sufficient funds to develop and implement projects. As well as hindering projects requiring substantial levels of finance, this difficulty affects smaller projects for which the revenue stream from CERs may be considered too small to attract international funds or outweigh the set-up costs of the project. Examples include:
 - (i) Insufficient means to manage project risk. Risk may be specific to aspects of a project, for example whether it will receive necessary approvals (letter of approval, methodology approval and project validation/registration), whether errors have been made in the projected issuance of CERs and whether buyers will be found for the CERs. It may be further complicated by other barriers.

⁹ De Gouvello C, Dayo F and Thioye M. 2008. *Low-carbon Energy Projects for Development in Sub-Saharan Africa*. Washington DC: World Bank.

Where project participants are not able to spread such risk sufficiently over multiple projects, they must bear the risk for each project individually;

- (ii) Insufficient access to funds to finance capital investment. Upfront capital investments can be substantial for some projects and may be difficult to raise, in particular if the projects have long lead times or the investments are perceived as more risky than their conventional counterparts (e.g. renewable energy versus conventional energy sources);
 - (iii) Insufficient access to funds to finance upfront transaction costs. The costs incurred for project-related documentation at the start of a project's development may be substantial and need to be financed before the project's CER revenue stream commences. Such upfront costs include conducting feasibility studies (project idea notes), preparing project design documents, methodology development, project validation, project registration fees and the initial verification of emission reductions. These costs depend heavily on the level of external technical assistance required, especially in cases where sufficient capacity is not locally available;
- (b) **Structural and institutional barriers:** These may be specific to the CDM or relate to more general circumstances, and may be relevant to host Parties or Parties included in Annex I to the Convention (Annex I Parties). Examples include:
- (i) Insufficient institutional and administrative capacity in host Parties, chiefly within designated national authorities (DNAs). This may relate to the development of projects or authority to take actions necessary for their approval;
 - (ii) National legislative and policy frameworks in host Parties. The development of CDM projects may be hindered by legislation and policies, such as restrictions on feeding electricity into the national grid, high taxes or import duties, fossil fuel or electricity subsidies, restrictions on foreign ownership, or a lack of clarity over the legal ownership of CERs;
 - (iii) General issues concerning the institutional framework and governance in host Parties. These may include delays in obtaining permits, complex import procedures, needs for approval from different levels of government, complexity or lack of transparency in legislative frameworks, inconsistent tax enforcement, low levels of efficiency, corruption, and concerns for the protection of intellectual property rights;
 - (iv) Restrictions on investment and purchasing decisions. Some carbon funds restrict their investment to specific geographical regions or project categories. Limits on the project categories eligible for investments might result from setting minimum project sizes or purchase volumes, required rates of return, or maximum payback periods. Some CER purchasers are limited in their choice of project types by legislative constraints, such as purchases of CERs from afforestation or reforestation projects not being allowed under some domestic or regional emissions trading schemes.¹⁰

¹⁰ This is the case for the European Union emissions trading scheme, which has so far been a key driver of the demand for CERs.

- (v) Insufficient access to funds for capacity-building. This barrier may be specific to individual projects or affect entire sectors and countries. Difficulty in raising funds for capacity-building hinders progress in addressing other barriers;
- (c) **CDM-specific capacity barriers:** Insufficient information, awareness, knowledge and experience of the CDM among stakeholders in host Parties, including in relation to the co-benefits that may be achieved through the CDM, can hinder the development and implementation of projects. Capacity may be insufficient among, for example:
- (i) Policymakers responsible for enacting laws and decisions affecting the promotion of CDM activities and the reduction of barriers;
 - (ii) DNA staff members responsible for approving projects and perhaps also responsible for promoting CDM projects;
 - (iii) Prospective CDM project developers in private- and public-sector entities;
 - (iv) Experts working in the local support sector for CDM projects, such as consultants, engineers and academics;
 - (v) Members of financial intermediaries involved, or able to be involved, in providing financing to local CDM projects;
- (d) **CDM process barriers:** In some cases, aspects of the CDM rules or their implementation may present a barrier to CDM projects. Examples include:
- (i) Issues relating to guidance provided by the CMP. Limitations on the scope of the CDM, or rules applying to eligible CDM activities, may be considered barriers to equitable project distribution. For example, some consider the thresholds for small-scale projects to be too low. In addition, afforestation and reforestation are the only land use, land-use change and forestry activities eligible within the CDM and there is a limit on the number of credits from such projects that an Annex I Party may use for compliance with its commitments under the Kyoto Protocol. Issuing temporary credits for afforestation and reforestation projects, in order to address issues of potential non-permanence in the forest stores of carbon, may also be seen as a barrier to these project types;
 - (ii) Issues relating to guidance provided by the CDM Executive Board. Some aspects of this guidance may be seen to hinder the uptake of projects in some countries, such as thresholds for small-scale projects, rules for bundling projects and the restriction of programmes of activities to using a single methodology;
 - (iii) Issues relating to methodologies. Where no existing methodologies are suitable for a project, developing or amending a methodology may be costly and time-consuming. Some methodologies for activities suitable for less developed countries (e.g. household energy efficiency and transport) have not yet been approved, typically because of challenges in preparing methodologies which ensure environmental integrity while being sufficiently simple to implement. A number of approved methodologies may now be too complex to implement, especially where they are approved for use in many variations of a project;
- (e) **Uncertainty about the modalities of the continuation of the CDM after 2012:** There remains little time to implement CDM projects to generate CERs in the first commitment period. While Parties have agreed that the use of the Kyoto mechanisms should continue

beyond the first period,¹¹ uncertainty remains as to future levels of CER demand and hence the future economic value of CERs. This uncertainty presents a greater difficulty for projects that have long lead times or generate low levels of CERs in their early years.

IV. Principles and roles for the improvement of project distribution

15. Assessments of the regional and subregional distribution of projects under the CDM often emphasize the context of the market in which the mechanism operates. In particular, as the CDM is a market-based instrument, it is often stressed that the private sector will naturally gravitate towards low-risk, high-opportunity locations and projects. The factors influencing foreign and domestic investment decisions also apply to investments made through the CDM.

16. The distribution of potential emission reductions among non-Annex I Parties plays a key underlying role in determining how CDM projects are distributed, with Parties that are less economically advanced typically having less potential for achieving large emission reductions at low cost. Furthermore, these Parties may tend to compete for available project finance with other non-Annex I Parties that have established strong national policies and institutions for the CDM.

17. In the light of these issues, the CDM Executive Board has identified the following principles for it to keep in mind when considering the issue of regional distribution of CDM projects:

- (a) Each non-Annex I Party should have an opportunity to realize its full potential to access the opportunities offered by the CDM, especially and with particular attention to African countries and SIDS;
- (b) The term “equitable distribution” should not be taken to mean equal distribution of CDM project activities (e.g. the same number of projects in each country; the same mix of small- or large-scale projects; an equal number of CERs generated; etc).¹²

18. To effectively address the barriers identified in chapter III would require action by a number of actors within the regulatory and market structure relevant to the CDM. Possible roles of different actors, based on their specific areas of capability and influence, are explored in table 3.

¹¹ FCCC/KP/AWG/2008/2, paragraph 18.

¹² FCCC/KP/CMP/2006/4/Add.1 (Part I), annex III, paragraph 4.

Table 3. Possible roles in addressing the equitable regional and subregional distribution of projects under the clean development mechanism

Actor	Possible role
Conference of the Parties serving as the meeting of the Parties to the Kyoto Protocol (CMP)	Establish or change the modalities and procedures governing the clean development mechanism (CDM); request actions by the CDM Executive Board, Parties and other actors
CDM Executive Board	Ensure clarity and comprehensiveness of procedures and guidance relating to the CDM within mandates provided by the CMP; ensure clear communication of modalities and procedures towards designated national authorities (DNAs), project participants, designated operational entities (DOEs) and other stakeholders; provide informed advice to other actors involved in the CDM; make recommendations to the CMP
UNFCCC secretariat	Support activities of the Executive Board; provide support to the DNA Forum; facilitate information exchange between project developers and investors
Host Parties	Enhance national legislation and policy frameworks; establish and strengthen DNAs; actively promote opportunities for CDM projects within their countries; undertake and participate in the capacity-building of local CDM stakeholders; cooperate at a regional level with other host Parties and DNAs
Parties included in Annex I to the Convention	Provide project financing for projects in countries currently underrepresented in the CDM; support the provision of such finance by others; provide support for capacity-building and host Party DNA activities
International agencies and financial institutions	Provide project financing for projects in countries currently underrepresented in the CDM; leverage the provision of such finance by the private sector; facilitate information exchange between project developers and investors, provide services to spread project risk and guarantee project investments; undertake capacity-building activities; support host Party DNA activities
Private sector	Provide project financing for projects in countries currently underrepresented in the CDM; provide services to spread project risk and guarantee project investments; undertake and participate in capacity-building activities for local CDM stakeholders

V. Actions taken to date to improve project distribution

19. The issue of the equitable regional distribution of CDM projects has been addressed in a number of decisions by the CMP, starting with the provisions of the Marrakesh Accords.¹³ In particular, at its first session, by decision 7/CMP.1, the CMP requested the CDM Executive Board to report to it, at its second session, information on systematic or systemic barriers to the equitable regional and subregional distribution of CDM projects, and options to address these issues.

20. The consideration by the Executive Board of actions to contribute to an enhanced distribution of projects is guided by the principles referred to in paragraph 17 above and takes place under a standing item on the agenda of each of its meetings. Though few of the barriers to project distribution can be

¹³ See, in particular, decisions 3/CMP.1, 4/CMP.1 and 7/CMP.1.

addressed directly by the Board, it has implemented a number of measures and made recommendations on this issue to the CMP in the context of its annual reports.

21. In its report to the CMP at its second session, the Executive Board highlighted decisions it had taken on the following measures in order to alleviate some of the concerns on this issue:¹⁴

- (a) Simplified modalities and procedures for small-scale projects;
- (b) Removal of the registration fee for projects that achieve fewer than 15,000 t CO₂ eq of emission reductions in a year;
- (c) Lower share of proceeds for the first 15,000 CERs issued per year;
- (d) Differentiation in the method of payment for the application fee for applicant entities from non-Annex I Parties;
- (e) Establishment of the Designated National Authorities Forum (DNA Forum);
- (f) Participation in subregional and global capacity-building events or awareness-raising activities;
- (g) Establishment of the CDM Bazaar.¹⁵

22. In its report to the CMP at its third session, the Executive Board noted that several activities had progressed in this area, in particular:¹⁶

- (a) The CDM Bazaar had been launched to provide a web-based information exchange platform which facilitates access to, and sharing of, information among all stakeholders involved in the CDM process, in particular those from developing countries;
- (b) Two meetings of the DNA Forum had been held, including one in Addis Ababa, Ethiopia, which had a particular focus on the Africa region;
- (c) The Nairobi Framework had been launched by the Secretary-General of the United Nations during the second session of the CMP to bring together the United Nations Development Programme, the United Nations Environment Programme, the World Bank Group, the African Development Bank and the UNFCCC secretariat, with the specific target of helping developing countries, especially those in sub-Saharan Africa, to improve their level of participation in the CDM;
- (d) Several Parties had undertaken activities to broaden the participation of different stakeholders in the CDM process and to address barriers. This cooperation had taken different forms, but most notably included capacity-building programmes. These efforts are being complemented by South–South cooperation;
- (e) The Executive Board had provided guidance on CDM programmes of activities, as well as on procedures for their registration and the issuance of CERs, as first steps towards this innovative approach, which facilitates access to the CDM and reduces transaction costs.

¹⁴ FCCC/KP/CMP/2006/4/Add.1 (Part I), annex III.

¹⁵ <<http://www.cdmbazaar.net>>.

¹⁶ FCCC/KP/CMP/2007/3 (Part I), annex.

23. The CMP, at each session, has considered the issue of equitable distribution and adopted decisions in this respect. In particular, at its third session, by its decision 2/CMP.3, the CMP abolished the payment of the registration fee and share of proceeds at issuance for CDM projects hosted in LDCs. The Executive Board continues to undertake work and provide advice on the issue of equitable project distribution and will make further recommendations to the CMP at its fourth session.

24. Activities implemented by the partner agencies of the Nairobi Framework have continued, since its launch in November 2006, in support of developing countries' participation in the CDM. Some of the key accomplishments of the partner agencies include:

- (a) Providing assistance to several host Parties in establishing DNAs that are able to approve projects that are consistent with the host's sustainable development priorities;
- (b) Increasing the capacity of a number of national experts and consultants to identify, design, implement and assess CDM projects;
- (c) Contributing to the general awareness-raising effort concerning the CDM in Africa;
- (d) Building capacity of local financial institutions to appraise and fund CDM projects;
- (e) Facilitating the participation of host Parties in global events, including through the organization of the Africa Carbon Forum (see para. 27 below);
- (f) Conducting an assessment of the potential for CDM projects in Africa.¹⁷

25. The Nairobi Framework is seen to represent a good example of successful inter-agency cooperation. Partner agencies have intensified their activities and strengthened their coordination and communication in order to avoid any duplication in their efforts.¹⁸ This year a new partner, the United Nations Economic Commission for Africa, joined the Nairobi Framework.

26. During the third session of the CMP, the partner agencies to the Nairobi Framework presented a new joint programme proposal to scale up activities to catalyse the CDM in Africa. However, sufficient additional funding has not been forthcoming to allow implementation of this proposal.

27. Some other activities are proceeding. For example, the partner agencies, together with the International Emissions Trading Association, held the first African Carbon Forum on 3–5 September 2008 in Dakar, Senegal. The Forum provided an opportunity to maintain the positive momentum on the CDM in Africa, build the capacity of participants and bring project developers and investors together.

28. A number of carbon funds have been established by governments, international financial institutions, multilateral development banks and the private sector. These funds act as intermediaries between donors and project developers. For example, the Community Development Carbon Fund (CDCF) was established by the World Bank to provide carbon finance to projects in less-advanced developing countries with a strong community development aspect. The CDCF has entered into CER purchase agreements for approximately 9 million CERs from 25 projects, five of which are in Africa. Potential actions to improve project distribution.

¹⁷ See footnote 9 above.

¹⁸ See footnote 6 above.

VI. Potential actions to improve project distribution

A. Actions to address financial barriers

1. Upfront funding for project development

29. The availability of new or strengthened sources of funding to partially or fully meet the upfront costs of developing projects in non-Annex I Parties currently underrepresented in the CDM could substantially improve the regional and subregional distribution of CDM projects. Funding that enables such projects to be developed fully, including by helping to meet the upfront transaction costs associated with the project-related documentation required for registration, would provide a minimum form of assistance. Further upfront funding could be envisaged which would contribute to the implementation of projects, including through assistance with capital investments and other costs.

30. A number of national and international carbon funds currently provide a degree of such funding. Some national CDM programmes established by Annex I Parties offer grant funding to cover project-related documentation. The CDCF established by the World Bank provides upfront funding for such document preparation via advance payment for CERs (the fund is reimbursed through a portion of the CERs that subsequently accrue to the projects).

31. Options for increasing the availability of upfront funding include:

- (a) Increasing upfront grants or advance CER payments offered by existing national CDM programmes and carbon funds to projects in underrepresented host Parties;
- (b) Making resources available via the management action plan of the CDM Executive Board to cover the upfront transaction costs required for projects in LDCs and SIDS;
- (c) Establishing a revolving fund for CDM project development, which would provide funding for upfront transaction and investment costs associated with projects in underrepresented host Parties. This funding would be reimbursed once the revenue stream from the project CERs commences so that it could be used for other projects;
- (d) Establishing a venture capital fund to finance the capital investment and other costs of CDM projects in underrepresented host Parties. The return on these investments, in the form of CERs subsequently issued for the projects, would again be recycled in order to benefit other projects.

32. In the case of revolving funds and venture capital funds, their commitment of resources might apply only to the early stages of projects, up to the point when the initial investment has been reimbursed. This would enable such funds to be involved in a wide range of CDM projects and leverage the remaining project investment from other sources, including private-sector sources. Such funding mechanisms would substantially mitigate the risks associated with developing individual projects by spreading this project risk across a portfolio of projects.

2. Guaranteeing investments in projects

33. Other mechanisms could be established to guarantee investments made in CDM projects in Parties with few or no projects. As with the revolving or venture capital funds described in paragraph 31 above, such investment guarantees would work by spreading project risk across a portfolio of projects. Options for these mechanisms include:

- (a) Insurance to cover cases in which projects deliver fewer CERs than expected or agreed. Such insurance could be provided to project investors against a range of risks, such as

risks associated with project registration, the level of CER issuance, the receipt of CERs after issuance or the withdrawal of a letter of approval;

- (b) Investment guarantees provided by international finance institutions to domestic banks in host Parties. Domestic banks have the potential to supply capital to a wide range of small- and medium-scale projects but in many cases lack sufficient knowledge of the CDM or are reluctant to bear the project risk.

34. Insurance is currently provided by several providers, from both the public and the private sector,¹⁹ although in some cases there are limitations on the project types and host Parties for which insurance can be obtained.

3. Matching finance to projects

35. Project investors and developers are typically brought together through relationships established between project originators, brokers and financial institutions. Some measures seek to create a more open forum that allows all potential project participants to exchange information and contacts. For example, the CDM Bazaar provides a web-based facility for buyers and sellers of CERs to exchange information on CDM project opportunities.

36. Measures to facilitate the matching of project investors with developers would need to improve the information exchange between these parties and deepen their working relationships. In particular, working relationships could be strengthened between DNAs in non-Annex I Parties with few or no projects and financial institutions at local, regional and international levels.

37. Specifically, further measures for matching project investors with developers include:

- (a) Enhancing the CDM Bazaar to give special attention to project ideas and projects to be hosted by Parties currently underrepresented in the CDM and to facilitate the identification of project investors for these projects;
- (b) Supporting DNAs in non-Annex I Parties in their promotion of projects among potential investors. This could involve assisting with the development of national CDM catalogues and investor guides, promoting dialogue between DNAs and international finance institutions, establishing investor forums, and funding participation of DNAs at market events.

38. Actions such as these would need to be closely tied to capacity-building activities targeting DNAs, project developers and financial institutions in underrepresented host Parties. They could also be linked to technology needs assessments undertaken by host Parties, with the CDM being a mechanism for providing these Parties with the technologies identified.

B. Actions to address structural and institutional barriers

1. Enhancing capacity-building activities under the Designated National Authorities Forum

39. The CDM Executive Board established the DNA Forum to provide opportunities for DNA representatives to exchange views, share their experiences relating to the CDM and bring common views and issues to the attention of the Executive Board. As a global mechanism for bringing together all DNAs on a regular basis, the Forum provides a unique platform for capacity-building activities that address many of the structural and institutional barriers that specifically relate to the CDM.

¹⁹ For example, Rabobank, Swiss Re and the Multilateral Investment Guarantee Agency of the World Bank.

40. Activities undertaken in the context of the Forum can draw upon the Executive Board's authoritative knowledge of the CDM and its procedures and the experience of non-Annex I Parties that have been successful in establishing institutions and structures to support the development of many CDM projects. In addition, the DNA Forum can provide opportunities to extend the benefits of capacity-building undertaken in specific host countries, for example by international agencies and multilateral development banks participating under the Nairobi Framework, to a wider group of DNAs.

41. Future capacity-building activities carried out through the DNA Forum, in particular for the benefit of Parties currently underrepresented in the CDM, could focus on, inter alia:

- (a) Increasing knowledge of the CDM modalities and procedures adopted by the CMP, procedures and decisions adopted by the Executive Board, and practices and priorities applied by project developers and market participants. These activities could contribute to, and make use of, CDM guides and other materials (see para. 48 (c) below);
- (b) Building the institutional and administrative capacity required by Parties to promote, assess and approve CDM projects. This could involve supplying knowledge and know-how, assisting in the preparation and implementation of national procedures (including for the assessment and approval of CDM projects), providing support for securing the necessary decision-making mandates to allow DNAs to effectively fulfil their role within the CDM, and providing support for ensuring adequate administrative facilities;
- (c) Enhancing national CDM strategies to develop Parties' participation in the CDM;
- (d) Enhancing promotional activities of DNAs, which may include national activities among local stakeholders, publishing information on the CDM and project opportunities, and extending the CDM Bazaar and other activities (see para. 37 (a) above);

42. Given the specific nature of some of these activities, the need for localized support and the differences in national conditions, support could be provided under the umbrella of the DNA Forum to regional DNA networks. Such networks could help to catalyse capacity-building and facilitate the exchange of information and experience between DNAs, for example through studies, newsletters and meetings. Regional DNA networks could also work in combination with regional centres of excellence or other initiatives at the regional level (see para. 48 (a) below).

2. Enhancing capacity-building for national legislative and policy frameworks

43. In addition to capacity-building provided in support of DNAs, further activities could be directed towards enhancing national legislative and policy frameworks in non-Annex I Parties that are underrepresented in the CDM. Enhancing these frameworks would be aimed at facilitating the Parties' participation in the CDM and providing a supportive environment for their DNAs to work in. While many aspects of national legislation and policy affect a Party's hosting of projects, there are many complex contributing factors to the frameworks that may be difficult to address in the specific context of the CDM. As a result, it may be useful to focus CDM-related efforts on areas where greater impacts can be achieved for Parties' participation the CDM.

44. Capacity-building activities to support the development of legislative and policy frameworks in non-Annex I Parties currently underrepresented in the CDM could focus on, inter alia:

- (a) Establishing national CDM committees, across various arms of government, which can raise awareness of the CDM among government departments, develop national CDM strategies, promote mainstreaming of the CDM into government activities and identify

possible changes in national legislation and policy (e.g. in relation to import duties and procedures, energy pricing and investment incentives);

- (b) Establishing support for the introduction of technologies into the country and the promotion of their use (e.g. through replication or adaptation to national circumstances).

45. Activities of this nature are under way in some countries, including under the Nairobi Framework. Capacity-building activities to enhance national legislative and policy frameworks could be linked to capacity-building activities undertaken through the DNA Forum (see para. 41 above).

3. Broadening investment criteria

46. National CDM programmes and carbon funds could be encouraged, where appropriate, to broaden the criteria they use to allocate investment funds so as to prioritize non-Annex I Parties that are currently underrepresented in the CDM. This may entail removing restrictions on specific geographical regions or project categories. Alternatively, CDM programmes and carbon funds could be encouraged to dedicate a portion of their CDM investment to specific host Parties, or limits could be set on the quantities of CERs from specific regions or types of emission reduction that Annex I Parties may acquire and use for compliance purposes.

C. Actions to address specific capacity barriers

1. Enhancing targeted capacity-building for local project developers and support services

47. Capacity-building targeted at project developers has been the focus of many activities. These may include broader events or be more targeted towards specific projects and individuals. As an example of the latter, activities under the Nairobi Framework identify specific persons, companies and institutions, as well as supporting professionals, as “CDM champions”. The capacity-building focuses on training and coaching these champions through practical “learning by doing”, as they identify and develop suitable CDM project opportunities (this work includes support for preparing and submitting necessary project documentation to designated operational entities (DOEs) and the CDM Executive Board, obtaining project funding, conducting contract negotiations and implementing the projects themselves). CDM champions serve to showcase successful projects and become a core resource for undertaking further CDM projects.

48. Further strengthening of such capacity-building activities could involve extending them to other developers and stakeholders or building upon synergy between them. Examples may include:

- (a) Establishing regional centres of excellence that could provide targeted capacity-building at regional and local levels, including by serving as a channel for other capacity-building organizations. Regional centres could also play a role in collecting and providing access to information for each region, for example by providing regional databases of projects or hosting Internet sites for DNAs. Such information activities could be coordinated with the CDM Bazaar;
- (b) Establishing an online CDM resource centre, as part of the CDM Bazaar, as a central Internet portal for information on the CDM.²⁰ This information could include CDM procedures under the Executive Board, programmes and procedures established at a national level, CDM tools, and technical, promotional and educational material to assist both experienced CDM practitioners and newcomers to the CDM. The centre could complement support by the CDM Bazaar for matching project investors with developers;

²⁰ The portal could allow third party information to be posted directly on the CDM Bazaar and provide links to other websites where further information is located.

- (c) Preparing and disseminating publications, guides and methodology handbooks on the CDM. These could be provided by the secretariat to synthesize information for project developers and stakeholders in easily understood language. For example, guides could be provided to help determine which technologies and measures to use under specific circumstances, identify best practices and guidance on data issues to help ensure that the project can be registered, raise awareness of the sustainable development benefits of CDM projects, and present the range of available CDM methodologies, in summary form, with information on their suitability and the way in which they may be used.

49. Measures could also be taken to assist with the establishment and operation of DOEs based in non-Annex I Parties. DOEs operating at the local level in host Parties may have an advantage in being familiar with local regulations and conditions and may offer services at a lower cost than do other DOEs.

2. Enhancing targeted capacity-building for local financial institutions

50. Improving access to project finance at the local level is seen as an important step in overcoming financial barriers to CDM projects, as it is local banks and other financial institutions that have the contacts and the reach to work alongside local project developers.

51. Capacity-building activities and promotional seminars for local banks and other financial institutions could increase their awareness of the CDM and of common practices and procedures relating to the evaluation and financing of CDM projects. Such capacity-building may be delivered by holding specific training or seminars for representatives from local financial institutions and facilitating larger investment forums at a regional level. There is scope for the involvement of international and multilateral financial institutions in such activities, as well as for the participation of project developers and other CDM stakeholders.

52. A number of the options for addressing other barriers to improving the distribution of CDM projects, as discussed above, could be linked to specific actions for capacity-building in the local finance sectors. For example, this may include activities involving investment leveraged through a revolving fund, CDM investment guarantees, the matching of project investors with developers, capacity-building targeted towards CDM champions, and the establishment of regional centres of excellence.

D. Actions to address remaining process barriers

1. Provision of additional guidance on the clean development mechanism

53. Although much guidance has been provided by both the CMP and the CDM Executive Board, there may be some gaps remaining to be filled. For example, further guidance on the implementation of programmes of activities may be useful, although it may be beneficial in some cases to collect initial experiences with registered programmes of activities before providing further guidance.

54. It may be possible to make further changes to the rules governing the CDM, which could reduce or overcome barriers to enhancing the distribution of projects. Examples include increasing the threshold for small-scale projects in LDCs and SIDS or determining their additionality through benchmarks. As many of the current small-scale projects tend to exhibit complexities similar to those for large-scale projects, an alternative may be to establish a smaller-scale category ('micro-scale') and exempt altogether the projects in this category from the requirement to demonstrate additionality.

2. Provision of additional methodologies

55. Baseline and monitoring methodologies form a central component of CDM projects and can constitute a considerable technical hurdle to the implementation of projects. Where appropriate methodologies have not yet been approved, work could be undertaken to develop methodologies and/or

to define acceptable parameters which project participants may apply within their methodologies. There is also scope for improving methodologies that have been found by the Executive Board to not meet required standards. The development of additional methodologies and parameters could be undertaken by the Executive Board or commissioned by it. There would be scope for drawing upon experts to define proposals for methodologies and their component parameters.

56. It would be beneficial to concentrate this work on methodologies and parameters that are particularly relevant to circumstances in non-Annex I Parties which are currently underrepresented in the CDM, and that are most likely to be replicated in many projects.

57. It would also be possible to prepare templates for project design documents that integrate approved methodologies and acceptable methodology parameters. These templates would guide project developers as to the specific data and other information that need to be entered, thus acting as guidance on how to complete project design documents. Any project parameters that are standardized for specific host Parties, technologies or gases could be included in the templates. Being able to select among such parameters would ease the process of preparing project design documents and methodologies.

Annex

Further information on the distribution of projects under the clean development mechanism

I. Registered projects under the clean development mechanism

1. Figure 1 shows the distribution of registered clean development mechanism (CDM) projects among Parties not included in Annex I to the Convention (non-Annex I Parties). Brazil, China and India host approximately 66 per cent of projects between them. Figure 2 shows the rapid growth in projects registered under the CDM, again showing the growth to be most prominent in the Asia and the Pacific (ASP) and Latin America and the Caribbean (LAC) regions.

Figure 1. Registered projects, by host Party (as at 22 September 2008)

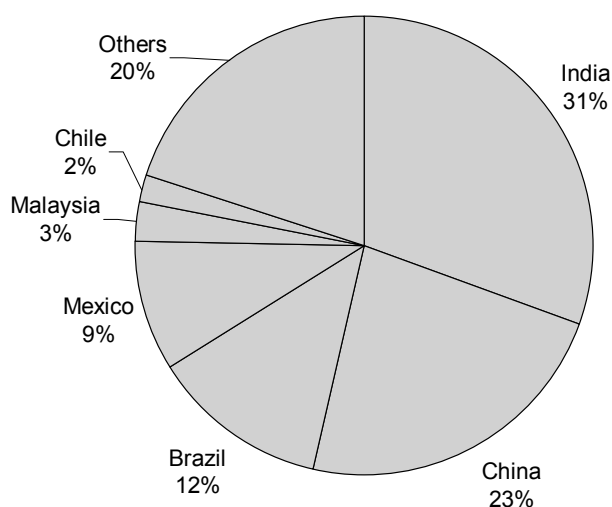
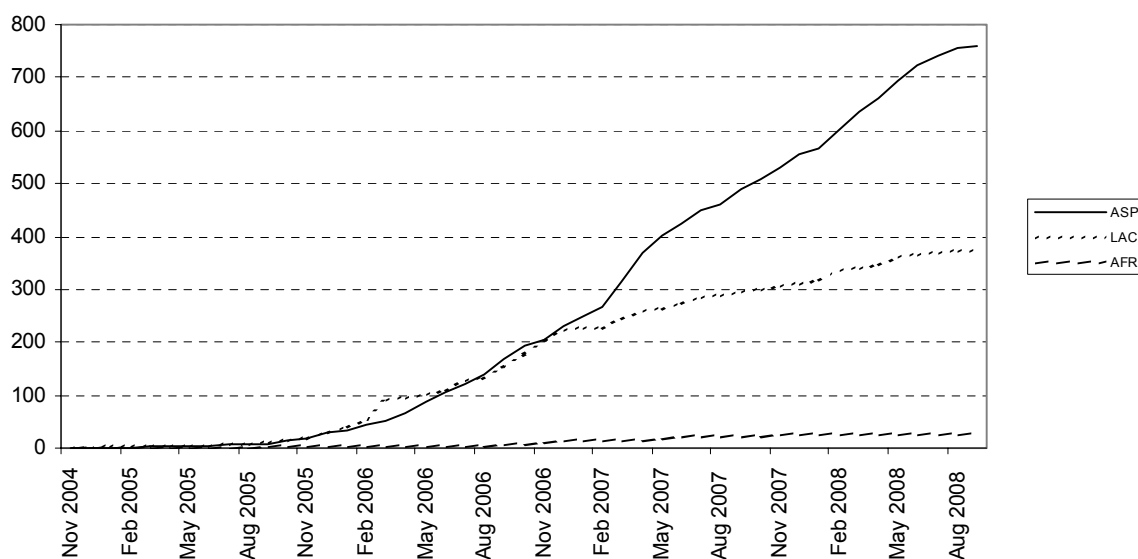


Figure 2. Growth in the number of registered projects, by region (as at 22 September 2008)



Abbreviations: AFR = Africa, ASP = Asia and the Pacific, LAC = Latin America and the Caribbean.

2. Table 4 provides information on the sectoral scopes addressed by registered CDM projects. Overall, just over half of the CDM projects are in the energy industries sector, followed by the waste handling and disposal, agriculture and manufacturing industries sectors. The pattern for each region is broadly similar, although the energy industries are particularly dominant in the ASP region. The proportion for the energy industries sector in Africa is lower than the average overall, while the chemical industries and manufacturing industries sectors hold greater shares. For the LAC region, the waste handling and disposal sector holds a share equal to energy industries, with relatively high proportions of CDM projects also in the fugitive emissions from fuels sector and the agriculture sector.

Table 4. Distribution of projects under the clean development mechanism in each sectoral scope, by region and group (as at 22 September 2008)

Sectoral scope	AFR	ASP	LAC	Other	Total	LDCs	SIDS
1. Energy industries (renewable/non-renewable sources)	39.4%	69.1%	35.8%	50.0%	55.3%	50.0%	100.0%
2. Energy distribution	-	-	-	-	-	-	-
3. Energy demand	3.0%	1.5%	0.2%	50.0%	1.2%	-	-
4. Manufacturing industries	12.1%	7.2%	1.9%	-	5.2%	7.1%	-
5. Chemical industries	15.2%	3.1%	1.0%	-	2.6%	-	-
6. Construction	-	-	-	-	-	-	-
7. Transport	-	0.1%	0.2%	-	0.1%	-	-
8. Mining/mineral production	-	1.0%	-	-	0.6%	-	-
9. Metal production	3.0%	-	0.2%	-	0.1%	-	-
10. Fugitive emissions from fuels (solid, oil and gas)	3.0%	3.6%	14.1%	-	7.7%	-	-
11. Fugitive emissions from production and consumption of halocarbons and sulphur hexafluoride	-	1.7%	0.3%	-	1.1%	-	-
12. Solvent use	-	-	-	-	-	-	-
13. Waste handling and disposal	21.2%	10.0%	35.1%	-	20.0%	35.7%	-
14. Afforestation and reforestation	-	0.1%	-	-	0.1%	-	-
15. Agriculture	3.0%	2.5%	11.2%	-	5.9%	7.1%	-

Note: Each project may be categorized under more than one sectoral scope.

Abbreviations: AFR = Africa, ASP = Asia and the Pacific, LAC = Latin America and the Caribbean, LDCs = least developed countries, SIDS = small island developing States.

II. Projects in the clean development mechanism pipeline

3. Figures 3–5 show the distribution of projects in the CDM pipeline among host Parties in three regions. The host Parties with the majority of pipeline projects in the Africa region are South Africa (35 per cent) and Egypt (14 per cent). Within the ASP region, China (47 per cent) and India (35 per cent) hold the largest shares. The LAC region is dominated by Brazil (41 per cent) and Mexico (23 per cent).

Figure 3. Projects in the clean development mechanism pipeline in the Africa region, by host Party (as at 22 September 2008)

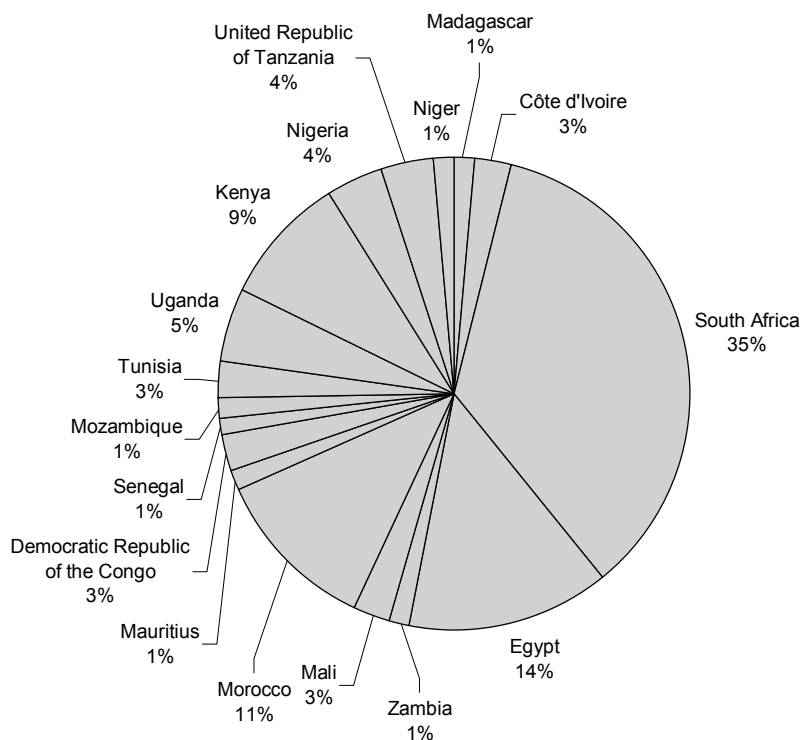


Figure 4. Projects in the clean development mechanism pipeline in the Asia and the Pacific region, by host Party (as at 22 September 2008)

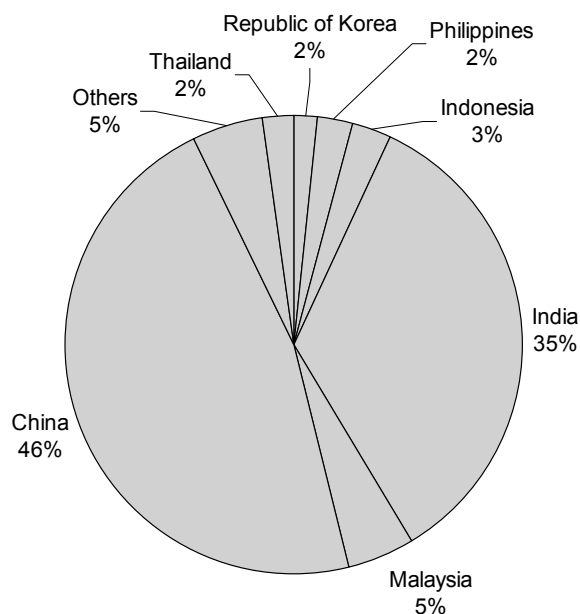
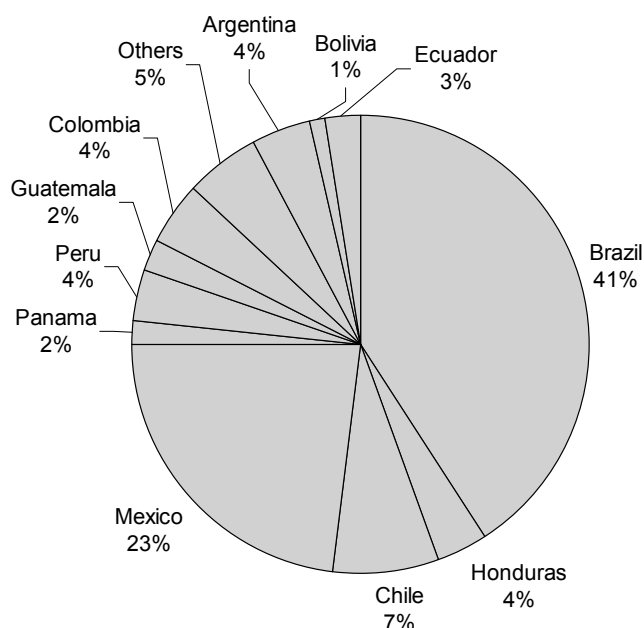


Figure 5. Projects in the clean development mechanism pipeline in the Latin America and the Caribbean region, by host Party (as at 22 September 2008)



4. Figure 6 shows the breakdown of projects in the CDM pipeline by sectoral scope. Projects in the energy industries (renewable and non-renewable sources) sector make up 61 per cent of the total, followed by waste handling and disposal projects with 20 per cent and projects in the manufacturing industries sector with 8 per cent.

Figure 6. Breakdown of projects in the clean development mechanism pipeline, by sectoral scope (as at 22 September 2008)

