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**Tackling climate change through
adaptation finance in the Least
Developed Countries: Is the LDC Fund
still fit for purpose?**

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Tackling climate change through adaptation finance in the Least Developed Countries

Is the Least
Developed Country
Fund still fit for
purpose?
November 2010

Junior Davis and Celine Tan

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1 Introduction

While the epicentre of the recent global recession was located in the financial sectors of developed countries and its immediate fallout was felt keenly in these countries and developing countries closely integrated into global financial markets. The least developed countries (LDC)¹ have been significantly affected by the downturn in the real economy following the financial crisis² (UNCTAD, 2009: 1 – 2; Karshenas, 2009: 1). In addition, in recent years LDCs have been disproportionately affected by interrelated and cumulative climate change and food security crises (for example, the impact of hurricanes, tornadoes, droughts and flooding in terms of both reduced GDP and food security) which have been exacerbated by the recent financial crisis.

These crises present an opportunity to reshape the LDC economies in favour of productive structures that have the potential to reconfigure their development trajectories onto a more sustainable path. This new development trajectory would help make LDCs more resilient to interrelated climate change and economic shocks, by enabling them to move towards a low-emission pathway to economic development. The scale of the necessary adjustments to enable this shift in development trajectory has not been fully reflected in the context of international support mechanisms to address climate change, poverty reduction and economic development in the LDCs.

This paper will consider the challenges confronting LDCs in meeting the adaptation and mitigation requirements brought on by the climate crisis and address the question as to whether the Least Developed Country Fund (LDCF), which is the main source of LDC climate adaptation finance, is fit for purpose? The LDCF was established in November 2002 under the auspices of the United Nations Framework Convention on Climate Change (UNFCCC), to identify; prioritise and begin to address the urgent climate adaptation needs within LDCs. The LDCF has the potential to contribute to the challenge of climate change in LDCs, including reorienting their economies towards more climate-resilient and ecologically sustainable pathways, through a significant injection of financial resources in adaptation projects, capacity development and the integration of adaptation strategies into national policies. However, we find that the LDCF has neither sufficient financial resources nor technical expertise to address the adaptation needs of the LDCs. The international community needs to provide further funding through the LDCF and other mechanisms to assist LDC adaptation needs. Moreover, LDCs need to make greater effort to mainstream their national adaptation programmes of action (NAPAs) into poverty reduction strategy papers (PRSP) and national development plans.

¹ Least developed countries refer to the 49 countries which the United Nations recognises as ‘the world’s poorest and weakest countries’, exhibiting the lowest indicators of social and economic development. They have a population not exceeding 75 million and a per capita gross national income (GNI) of less than US\$905. See UN-ORHLSS website: <http://www.unohrlls.org/en/lcd/related/59/> (4 January 2010).

² This includes the effects from a combination of a sharp reduction in world trade, rapid decline in commodity prices, decline in foreign direct investment (FDI) and slowdown in remittance flows from migrant workers due to rising unemployment in host countries (Karshenas, 2009: 1).

2 Climate Change Finance Challenges Facing the Least Developed Countries

2.1 Climate change finance challenges: adaptation

Enhanced adaptation action under the UNFCCC will be critical for LDCs and must be put in the perspective of sustainable development. Although adaptation measures should be integrated or mainstreamed into wider development planning generally, the costs of shoring up the adaptive capacity of developing countries, particularly LDCs, should be calculated in addition to the resources necessary to stay on existing economic and human development trajectories. Additional investment and financial flows for adaptation in LDCs is estimated at \$4 - \$17 billion annually (see Table 1). These figures are likely to be much higher if mitigation action is not taken to prevent further global warming. Non -UNFCCC sources have provided higher estimates for the cost of adaptation.

There is a significant gap between what is available now for all developing countries and projected figures. Figure 1 shows the annual estimated cost (requirements) as compared to funds currently available for developing countries through public financing initiatives, the Clean Development Mechanism (CDM) and the voluntary offset market (VER) totalling \$21.7 billion.

Although the Copenhagen Accord has included pledges to scale up financing under the UNFCCC, including up to \$30 billion between 2010 and 2012 for adaptation and mitigation (Copenhagen Accord, 2009: para 8), this figure still falls short of the conservative end of estimates for such financing. There is also a further commitment to mobilise \$100 billion for mitigation efforts with funding sources from a mixture of bilateral and multilateral public and private finance, but this does not represent a commitment to provide financing per se, merely to commit to mobilising resources (Third World Network, 2010b: 10). It also commits parties to the accord to the establishment of a Copenhagen Green Climate Fund as an operating entity of the UNFCCC's financial mechanism to support adaptation and mitigation activities and a Technology Mechanism to enhance action on development and technology transfer (ibid: para 10 – 11).

Table 1 Adaptation cost estimates in LDCs³

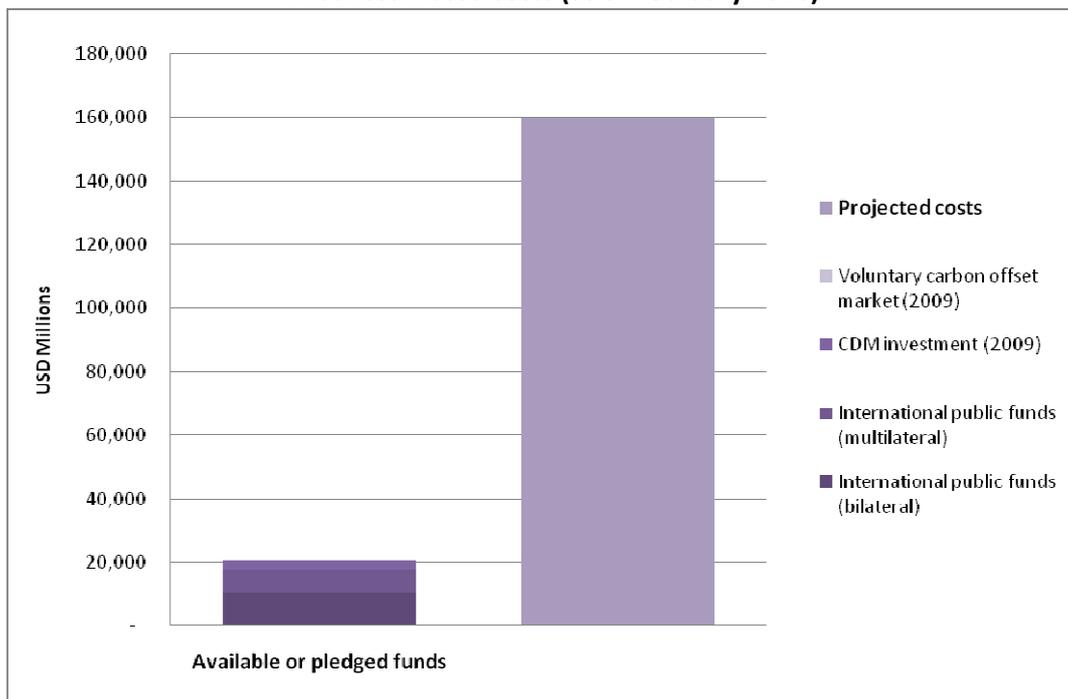
<i>Source</i>	<i>Estimated cost \$ billion p.a.</i>	<i>Time-frame</i>
World Bank (2010) WDR 2010	14	2030
UNFCCC (2007) Investment & financial flows to address climate change	4-12	Rising to 2030
Africa Group (2009): Submission to the UNFCCC	11	Rising to 2020
Stern (2009a) The global deal	8-17	In the next decade
UNDP (2007) Human Development Report	14	Rising to 2015
Oxfam (2007): Adapting to climate change	More than 8	Immediately

Source: UNFCCC (2009), Oxfam (2009), UN-DESA (2009) World Bank (2010).

Note: These figures represent LDC cost estimates revised on a pro rata basis.

³ These figures are estimates and are not generally comparable since they address different adaptation needs: (i) climate proofing ODA investment flows; (ii) climate proofing existing infrastructure; (iii) additional investment because of climate change (e.g. dams, dykes etc); (iv) costs of community based adaptation (e.g. capacity building); and (v) mainstreaming adaptation into Poverty Reduction Strategy Papers (PRSPs) and government policies.

**Figure 1 Developing country climate change adaptation and mitigation financing gap:
Annual estimated costs (as of February 2010)**



Source: Authors estimates based on data from Climate Funds Update website:

<http://www.climatefundsupdate.org/graphs-statistics/pledges-by-fund> (accessed 20 February 2010).

Note: CDM and VER investment data from World Bank (2010) State and trends of the carbon market. World Bank, Washington DC, May 2010. Figure excludes private philanthropy data.

A recent survey of UNFCCC and non-UNFCCC climate funds by the Climate Funds Update project has highlighted a substantial gap between funds pledged and funds deposited and dispersed. As of February 2010, the total amount pledged by donors for the 17 funds, including the Adaptation Fund, LDCF, Special Climate Change Fund (SCCF) and the Climate Investment Funds (CIFs), was about US\$17.72 billion while the resources actually deposited⁴ amounted to US\$1.9 billion and the amount dispersed was only US\$680 million⁵. Notably among developed country donors, Japan which has pledged the most (54.4 percent) and the US, the third largest commitment (9.8 percent) only accounted for 0.24 percent and 0.2 percent of the total deposits to the climate funds so far⁶ (see Table 2). Thus, there remains a significant financing gap between the amount of finance pledged by donors and the amount deposited and available for disbursement to developing countries, not to mention the amount actually required to address the climate challenge.

⁴ Deposits represent the funds that have been transferred from the donor into the account(s) of the respective funds (see Climate Funds Update website).

⁵ See Climate Funds Update website: 'Pledges v Deposited v Dispersed'

<http://www.climatefundsupdate.org/graphs-statistics/pledged-deposited-disbursed> (20 February 2010).

⁶ See Climate Funds Update website: 'Pledges By Donor Country', <http://www.climatefundsupdate.org/graphs-statistics/pledges-by-country>; and 'Deposits by Donor Country' <http://www.climatefundsupdate.org/graphs-statistics/deposits-by-country> (17 January 2010). The second largest donor, the UK, which has pledged 12.9 percent of the funds, has deposited 29.2 percent of the total.

Table 2 Selected multilateral adaptation funding channels (February 2010)

	<i>Acronym</i>	<i>Pledged (USD mn)</i>	<i>Deposited (USD mn)</i>	<i>Disbursed (USD mn)</i>	<i>Deposits as % of Pledged funds</i>
Adaptation Fund	AF	2.8	2.8		100
Least Developed Countries Fund	LDCF	176.5	135.5	111.9	77
Special Climate Change Fund	SCCF	121.1	100.5	91.2	83
<i>UNFCCC funding channels subtotal</i>		300.3	238.8	203.1	80
Clean Technology Fund	CTF	4967.8	483.5	9.3	10
Cool Earth Partnership	CEP	10000.0	0.0		0
Congo Basin Forest Fund	CBFF	100.0	100.0		100
Forest Carbon Partnership Facility	FCPF	110.0	53.9	3.5	49
Forest Investment Program	FIP	354.1	28.9		8
Global Climate Change Alliance	GCCA	144.3	172.8		120
Global Energy Efficiency and Renewable Energy Fund	GEEREF	169.5	33.0	33.0	19
International Climate Initiative	ICI	360.0	360.0	225.9	100
International Forest Carbon Initiative	IFCI	182.0	61.9	61.9	34
MDG Achievement Fund - Environment and Climate Change thematic window	MDG	90.0	90.0	85.5	100
Pilot Program for Climate Resilience	PPCR	627.7	142.3		23
Scaling-Up Renewable Energy Program for Low Income Countries	SREP	210.1	24.8		12
Strategic Priority on Adaptation	SPA	50.0	50.0	20.0	100
Reducing emissions from deforestation and forest degradation Programme	REDD	54.2	52.2	37.4	96
<i>Non-UNFCCC funding channels subtotal</i>		17419.6	1653.2	476.5	9
Grand Total		17719.9	1892.0	679.5	11

Source: Climate Funds Update website: <http://www.climatefundsupdate.org/graphs-statistics/pledges-by-fund> (accessed 20 February 2010).

This discrepancy along with the uncertainty over whether these financial commitments will be additional to existing ODA has led to frustration on the part of developing countries on the political will of developed countries to discharge their obligations under the climate change regime and to tackle the urgency of the climate crisis. For LDCs, there is also the added concern that insufficient funds are being directed towards adaptation efforts which they urgently require as compared to mitigation operations. Currently, mitigation activities make up 82.6 percent of projects supported by climate funds (excluding the 2.7 percent for Reducing emissions from deforestation and forest degradation (REDD) projects) while adaptation projects only amount to 14.7 percent of the total projects funded⁷.

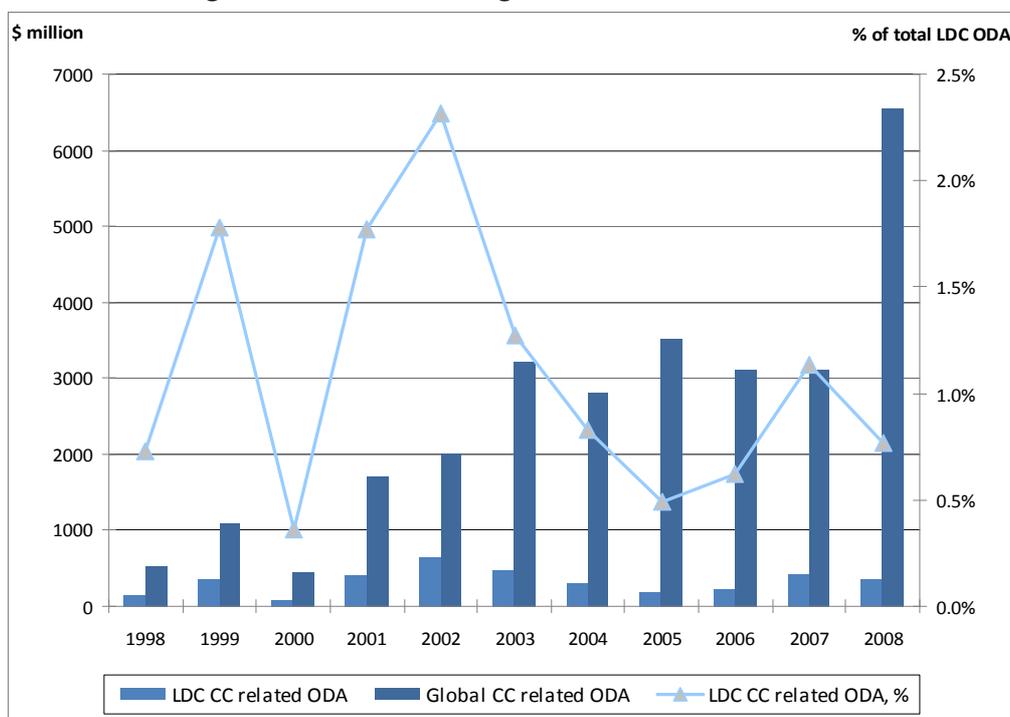
OECD data presented in Figure 2 shows that in 2008 the Development Assistance Committee (DAC) provided \$6.5 billion in bilateral ODA to assist developing countries to reduce their emissions. LDCs as a group received \$358 million (approximately 0.8 per cent of total LDC ODA) in climate change related ODA in 2008.⁸ However, the costs of adaptation and mitigation costs greatly exceed the total

⁷ See Climate Funds Update website: 'Areas of Focus Overall', <http://www.climatefundsupdate.org/graphs-statistics/areas-of-focus>

⁸ Climate-change-related aid is defined as comprising activities that contribute "to the objective of stabilisation of greenhouse gas (GHG) concentrations in the atmosphere at a level that would prevent dangerous

amount of ODA available to LDCs, which is already insufficient to meet MDGs (UN-DESA, 2009). However, channelling funds through ODA mechanisms tends to complicate the accounting of climate change financing and conflates developed countries' treaty-based financing obligations under the UNFCCC with their voluntary ODA commitments. Aside from enabling funds to be 'double counted', that is, using the same resources to meet both UNFCCC and ODA commitments⁹, the utilisation of funds outside the Convention to meet treaty obligations also makes it difficult for parties to the Convention to monitor developed countries' compliance with their obligations under Article 4 of the UNFCCC (Khor, 2008: 17; South Centre, 2009: para 1). The difficulty in estimating adaptation costs is complicated because there is as yet no clear consensus on what constitutes climate change 'adaptation' per se and a lack of commonly accepted and uniform typology of adaptation activities (SEI, 2009: 56). Although this approach has begun to shift, traditionally, the definition of adaptation measures have generally been used to refer to (at least for financing purposes) what is termed as 'impact-focused adaptation' rather than 'vulnerability-focused' adaptation (ibid: 34). The latter approach to adaptation is closely linked to development outcomes and encompasses not just enhancing the climate resilience of a development project, such as infrastructure construction, but also addressing the multiple drivers of vulnerability which lead to poor adaptive capacity (ibid: 16, Figure 2.1).

Figure 2 LDC climate change related ODA 1998-2008¹⁰



Source: Authors estimates based on OECD-DAC, data downloaded June 2010 from OECD.Stat.

Notes: These figures represent 1998-2008 commitments, \$ million, constant 2008 prices.

anthropogenic interference with the climate system by promoting efforts to reduce or limit GHG emissions or to enhance GHG sequestration.” (OECD, www.oecd.org/dac/stats/crs/directives).

⁹ This includes using climate change financing figures to meet ODA targets, such as their commitments to provide at least 0.7 percent of GNI as ODA as articulated in various international compacts, including the Monterrey Consensus on Financing for Development 2002 (see South Centre, 2009a: para 17 - 20).

¹⁰ Figures shown relate to DAC members' bilateral aid, and do not include multilateral contributions to GEF, UNEP and other organisations active in climate change adaptation or mitigation. These figures are based on the “Rio markers” on climate change mitigation established by the DAC in collaboration with the UNFCCC.

2.2 Climate change finance challenges: mitigation

In addition to meeting the costs of adaptation, LDCs will also have to factor into account the economic impact of climate change mitigation, in terms of their own transition to a low-carbon economy. A UNFCCC review in 2007 estimated that the additional investment and financial flows in 2030 to address climate change mitigation will amount to 0.3 to 0.5 per cent of global GDP in 2030 and 1.1 to 1.7 per cent of global investment in 2030 (UNFCCC, 2009a). Approximately 46 per cent of such new flows is required in developing countries in 2030 due to expected economic growth and population increase, leading to higher energy demand (UNFCCC, 2009a: 2; UNFCCC, 2008: para 60). These estimates do not include the operating or maintenance costs of mitigation investments (UNFCCC, 2008: para 63). On the basis of recent cost estimates, there is convergence on climate change mitigation financing at \$ 100 billion to \$ 200 billion, and for adaptation at around \$ 86 billion per annum in 2015 (UNDP, 2007).

3 Least Developed Countries Fund and Climate Change Governance

The international community has recognised the specific needs and vulnerabilities of LDCs under the global climate change regime underpinned by principles of equity and common but differentiated responsibilities. The consequences of climate change will be shouldered disproportionately by the countries least responsible for the problem. LDCs have contributed the least to the build-up of greenhouse gases (GHGs), and yet will be the most adversely affected by the impacts of climate change and least able to adapt to their changing environment.

Consequently, in addition to providing that the needs and circumstances of developing countries generally be taken into account in implementing measures to meet the objectives of the United Nations Framework Convention on Climate Change (UNFCCC), including mitigation, the Convention also stipulates that *'full consideration' be paid to the requirements of those states 'that are particularly vulnerable to the adverse effects of climate change and of those ... that would have to bear a disproportionate or abnormal burden under the Convention* (Article 3(2) of the UNFCCC, emphasis added). Article 4(9) of the UNFCCC refers specifically to the LDCs, committing all parties to the Convention to *'take full account of the specific needs and special situations of the least developed countries in their actions with regard to funding and transfer of technology'*.

Further, Article 4(8) commits UNFCCC parties to giving full consideration to actions necessary under the Convention *'to meet the specific needs and concerns' of developing countries 'arising from the adverse effects of climate change and/or the impact of the implementation of response measures'* with particular reference to countries with specific geographical vulnerabilities, including those with low-lying coastal areas, arid and semi-arid areas, areas prone to natural disasters, areas prone to drought and desertification and areas with fragile ecosystems. Also included in this list are countries *'whose economies are highly dependent on income generated from the production, processing and export, and/or on consumption of fossil fuels and associated energy-intensive products'*. Most, if not all, LDCs fall into one or more of the categories singled out by the UNFCCC for specific attention. The UNFCCC's Conference of Parties (COP)¹¹ at its seventh session reiterated the Convention's recognition of the special needs and circumstances of LDCs and established an LDC work programme to implement the provisions of Article 4(9) which includes the following activities:

¹¹ The UNFCCC is governed by the Conference of Parties (COP) whose responsibility is to 'keep under regular review the implementation of the Convention and any related legal instruments that the Parties may adopt' as

- Supporting preparation and implementation of national adaptation programmes of action (NAPAs)
- Strengthening existing and where needed, establishing national climate change secretariats and/or focal points to enable effective implementation of the Convention and of the Kyoto Protocol
- Providing training in negotiation skills and language
- Promotion of public awareness programmes
- Development and transfer of technologies, particularly adaptation technologies
- Strengthening meteorological and hydrological services to collect, analyse, interpret and disseminate weather and climate information to support implementation of the NAPAs (COP, 2002: Decision 5/CP 7: para 11).

It was also at this session that the COP established the Least Developed Countries Fund (LDCF) to support the LDC work programme, notably the preparation of NAPAs, through an entity entrusted with operating the financial mechanism under Article 11 of the UNFCCC (UNFCCC, 2009b: 4). The Global Environmental Facility (GEF), a trust fund established under the auspices of the World Bank Group in 1991 and an operating entity of the financial mechanism of the UNFCCC, was entrusted with the responsibility for administering the LDCF by the COP at their eight meeting in 2002 (UNFCCC, undated: para 5). Subsequent COP meetings mandated the LDCF to fund the implementation of NAPAs and the rest of the LDC work programme (ibid). A Least Developed Countries Expert Group (LEG) was also established at the seventh COP meeting to support LDCs in the preparation and implementation of their NAPAs (UNFCCC, 2009b: 7). Only two elements of the LDC work programme has been addressed so far – the training in negotiation skills and the preparation and implementation of NAPAs (UNFCCC, undated: para 4).

The establishment of the LDC work programme was an important step in operationalising UNFCCC parties' commitment to act in support of the needs of LDCs. In particular, it offered LDCs a process through which they are able to *'identify priority activities that respond to their urgent and immediate needs with regard to adaptation to climate change'* and to obtain financing to support the activities which they have identified (UNFCCC, 2009b: 5 – 7). Through the NAPAs, LDCs have been able to communicate urgent and immediate adaptation needs from a 'bottom-up' assessment and submit priority projects for financing through the UNFCCC. As of November 2009, 43 out of the 48 LDCs that have received funding for preparation of the NAPAs have submitted their documents and it is expected that the remaining five will do so within the next year (UNFCCC, undated). The LDC work programme also places emphasis on climate change adaptation which is an overriding concern of LDCs given their low emissions levels and acute vulnerability to the adverse consequences of climate change but which had been under-prioritised in the UNFCCC and within the wider aid architecture.

Enhanced action on adaptation was also prioritised by the COP in the Bali Action Plan (BAP) agreed at the COP's 13th session. The BAP stressed the urgency for 'enhanced action on adaptation', including considering *'[i]nternational cooperation to support the urgent implementation of adaptation actions'*, taking into account *'the urgent and immediate needs of developing countries that are particularly vulnerable to the adverse effects of climate change, especially the least developed countries and small island developing States'* as well as *'the needs of countries in Africa affected by drought, desertification and floods'* (COP, 2008: Decision 1/CP 13, para 1(c)(i)). It also placed importance on consideration of *'[d]isaster reduction strategies and means to address loss and*

well as to 'make, within its mandate, the decisions necessary to promote the effective implementation of the Convention' (Article 7 of the UNFCCC).

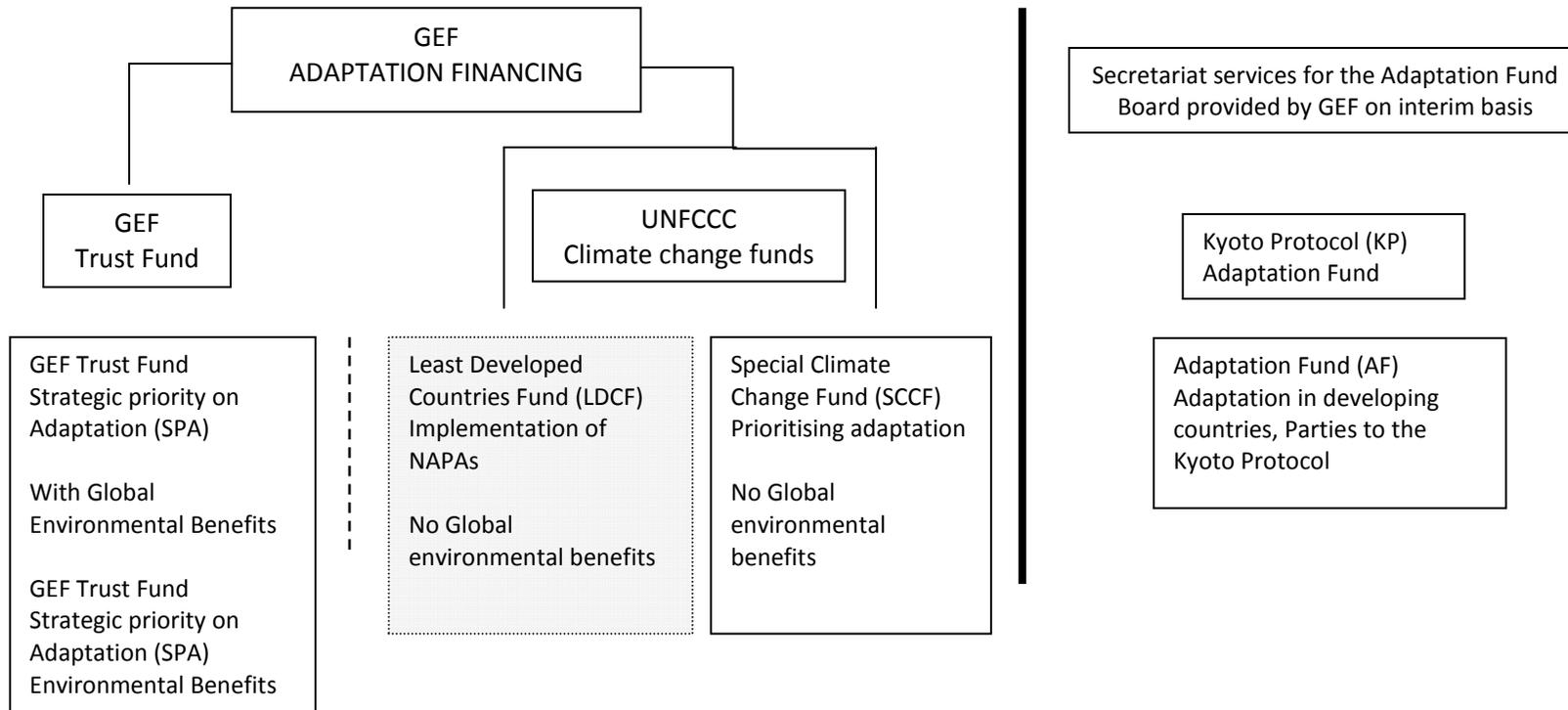
damage associated with climate change impacts in developing countries that are particularly vulnerable to the adverse effects of climate change' (ibid: para 1(c)(iii)).

3.1 LDCF Governance Structure

The Global Environmental Facility (GEF) is the managing body of the LDCF (see Figure 3). The World Bank serves as the trustee of the GEF Trust Fund in a fiduciary and administrative capacity and is accountable to the GEF Council. The trustee administers the GEF Trust Fund (which includes the LDCF) in accordance with the provision of the GEF Instrument and the decisions of the GEF Council. The LDCF follows the GEF's policies and rules in all aspects of their operations (such as fiduciary standards, streamlined project cycle, result-based frameworks etc) unless the LDCF Council in response to COP guidance decides to take a different approach. The LDCF's operational and governance structure which parallels that of the GEF, is presented in Figure 4 below. The GEF's governing structure is composed of:

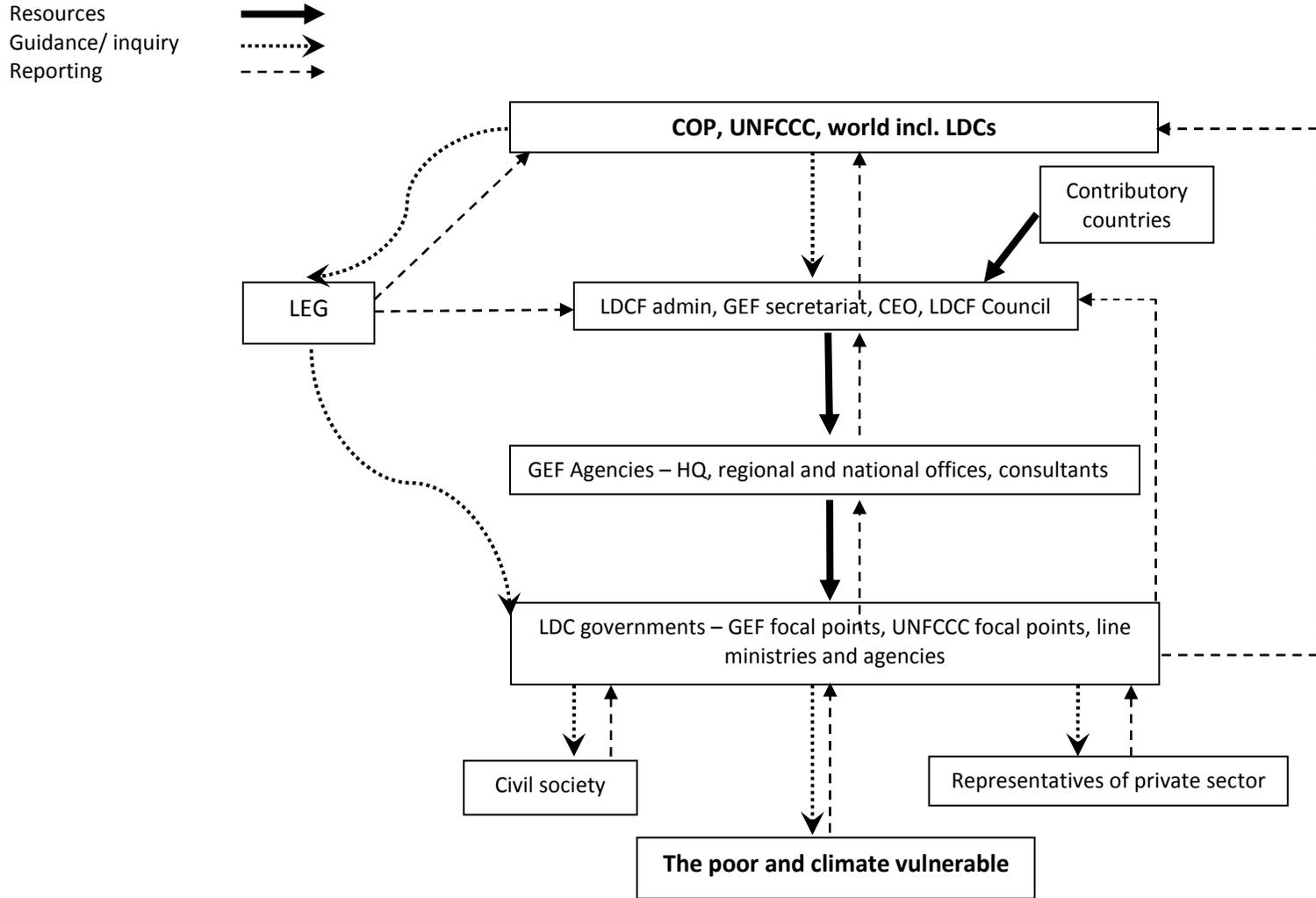
- An assembly including 176 member countries, or Participants. It meets every four years at the ministerial level to review the general policies, operations, membership and potential amendments of the GEF.
- A Council which is the main governing body of the GEF comprising 32 Members appointed by constituencies of GEF member countries: 14 from donors and 18 from recipient constituencies.
- The GEF Secretariat coordinates the overall implementation of GEF activities. The GEF secretariat is lead by a Chief Executive Officer (CEO).
- The GEF develops its projects through ten Implementing Agencies: the United Nations Development Programme (UNDP), the United Nations Environment Programme (UNEP) the World Bank, the African Development Bank (AfDB), the Asian Development Bank (ADB), the European Bank for Reconstruction and Development (EBRD), the Inter-American Development Bank (IAD), the International Fund for Agricultural Development (IFAD), the United Nations Food and Agricultural Organization (FAO), and the United Nations Industrial Development Organization (UNIDO).
- The Scientific and Technical Advisory Panel (STAP) provides independent advice on scientific and technical aspects of GEF programs and policies.
- The GEF also has an Independent Office of Monitoring and Evaluation (M&E). The GEF utilises Focal Points (Country Representatives) which are government officials, designated by member countries, responsible for GEF activities and to ensure that GEF projects are country-driven and based on national priorities. Typical GEF project partners are organizations and entities implementing projects on the ground (e.g. governments, national institutions, non-governmental organizations etc).

Figure 3 The Global Environmental Facility Administered Funds addressing Adaptation



Source: Global Environmental Facility (2010) <http://www.thegef.org/gef/sites/thegef.org/files/documents/Step-by-Step%20Guide%20to%20the%20LDCF%20Project%20Cycle.pdf>

Figure 4 The LDCF operational structure



Source: DANIDA (2009) Joint External Evaluation: Operation of the Least Developed Countries Fund for Adaptation To Climate Change. September, 2009. Published By The Evaluation Department, Ministry Of Foreign Affairs/Danida, Denmark. www.evaluation.dk

3.2 LDCF arrangements and eligibility criteria

A schematic outline of the LDCF operational structure is shown in Figure 4. The day-to-day management of the LDCF is performed by a secretariat within the GEF Secretariat's climate change team and reports to the GEF CEO. A Least Developed Countries Experts Group (LEG)¹² was established to assist in the preparation and implementation of NAPAs in an advisory capacity to the LDCs. The LEG is not directly involved in the implementation of LDCF projects, but works in support of the LDC work programme and reports to the UNFCCC. LDCF activities comprise two stages: (i) preparation and (ii) implementation of NAPAs. Stage (i) enables LDCs to identify priority activities that respond to their urgent climate adaptation needs. The preparation of the NAPAs include participatory assessment of vulnerability to current climate variability and extreme events due to climate change; and the elaboration of key adaptation measures and criteria for prioritizing activities, often in the form of potential projects or programmes of action. According to an informal ceiling agreed by the LDCF in conjunction with the LDCs, each LDC Party can access up to \$7 million from the Fund for implementing priority projects, and thus projects require co-financing, for example in the form of bilateral grants or loans from the International Development Association (IDA) of the World Bank.

At stage (ii) after the NAPA official report is published, the LDCF may support the implementation of activities identified, (including the LDCs work programme), to promote the integration of adaptation measures in national development and poverty reduction strategies. The process of developing a project for implementation under the LDCF begins with the LDC Party requesting a GEF agency to assist in submitting a project profile/ proposal to the GEF. GEF agencies receive the financial resources from the Trustee and deliver the applications for funding to the LDCF administration. LDCs can decide which GEF agency to collaborate with, but have limited negotiating power in their relationship with the agencies. In partnership with the LDC the GEF agency develops a project identification form (PIF), and submits it to the GEF, followed by subsequent steps to elaborate a full project document (see Figure 5). This whole process from inception to funding should take up to 22 months. The project cycle process for full-size projects can be broken down into six steps:

1. LDC applicants must contact the Country Operational Focal Point and verify that the proposal is aligned with national priorities. Then a Project Identification Form (PIF) in collaboration with a GEF Agency is developed and submitted to the LDCF/GEF Secretariat for approval.
2. After the GEF Secretariat has completed its review of the PIF, the CEO considers the PIF for inclusion in a work program. PIFs cleared for work program inclusion are sent to the Scientific & Technical Advisory Panel (STAP) for screening and are then eligible for a LDCF/GEF project preparation grant.
3. The GEF Council reviews the work programs during two Council meetings held each year with decisions by mail on a no-objection basis, between Council meetings. The Council reviews and endorses the overall objectives of the Program Framework Document (PFD).
4. Next the LDCF CEO must endorse the project before it is approved by the GEF Agencies. At this point the final GEF funding amount is confirmed by the CEO. The project proposals are reviewed by the CEO Secretariat within 10 working days for compliance with the following conditions for endorsement:
 - i. A high likelihood that the project, will deliver its outcomes;
 - ii. LDCF/GEF funds are used cost-effectively;
 - iii. Compliance with the GEF's M&E policy; and

¹² The LEG has is comprised of 12 experts: 5 from African LDCs, 2 from Asian LDCs, 2 from LDC SIDS and 3 from ODCs.

- iv. Project preparation grant has been used in a cost effective way.
- 5. Once the CEO has determined that the project proposal meets the conditions for endorsement, the Secretariat circulates to Council Members the draft final project document. Within four weeks of receiving this, Council Members may transmit to the CEO any concerns related to the LDCF that they may have regarding the proposal prior to CEO endorsement and final approval by the Agency concerned. Endorsed final project documents are posted on the GEF website and commitments of funding are then made to GEF Agencies for projects following CEO endorsement. For Medium-Sized projects the project cycle is shorter. Similarly for Enabling Activities (EA) under expedited procedures (up to \$500,000 in LDCF/GEF financing,) does not require the submission of a PIF.
- 6. This step consists of implementation supervision, monitoring and final evaluation.

Proposals submitted for funding under the LDCF are reviewed against project criteria, developed under the auspices of the COP guidance. These criteria include: (i) country ownership; (ii) program and policy conformity; (iii) financing; (iv) institutional coordination and support; and (v) monitoring and evaluation.

Country ownership concerns country eligibility and the degree to which a project is country driven. For a country to be eligible to receive funding for NAPA implementation under the LDCF, it should be an LDC Party to the UNFCCC that has completed its NAPA.

Program and policy conformity includes project design; sustainability and stakeholder involvement. In terms of sustainability, increased capacity to cope with adverse impacts of climate change should continue after project completion. Regarding stakeholder involvement, the project should provide for multi-stakeholder consultations and participation to continue during project implementation.

Regarding *financing*, LDCs must present the additional costs of adapting to climate change impacts i.e. the difference between the full project costs with climate change and the baseline costs without it. The LDCF also requires a summary of financing contributions to the project. Co-financing may include the utilization of existing resources, in the form of bilateral grants, IDA loans, or other in-cash and in-kind contributions. The total project cost is the sum of the LDCF contribution and all co-financing. LDCs may also use an optional sliding scale (rather than additional costs approach) that identifies how much of the total project cost the LDCF will provide. Table 3 below shows the LDCF sliding scale contribution to total project costs. The sliding scale recognizes that in practice it may be difficult to assess ex-ante the additional costs of adaptation. This approach removes the need to submit the detailed baseline and scenarios required for determination of additional costs. Unclear terminologies such as co-financing and sliding scale tend to confuse the LDCs, as in some cases they are interpreted as conditionalities for accessing the funds.

Table 3 The LDCF Project Finance Sliding Scale:

Project total costs (\$ millions)	LDCF may provide funding
<0.3	up to 100 %
0.3-0.5	up to 75 %
0.5-6	up to 50 %
6-18	up to 33 %
>18	up to 25 %

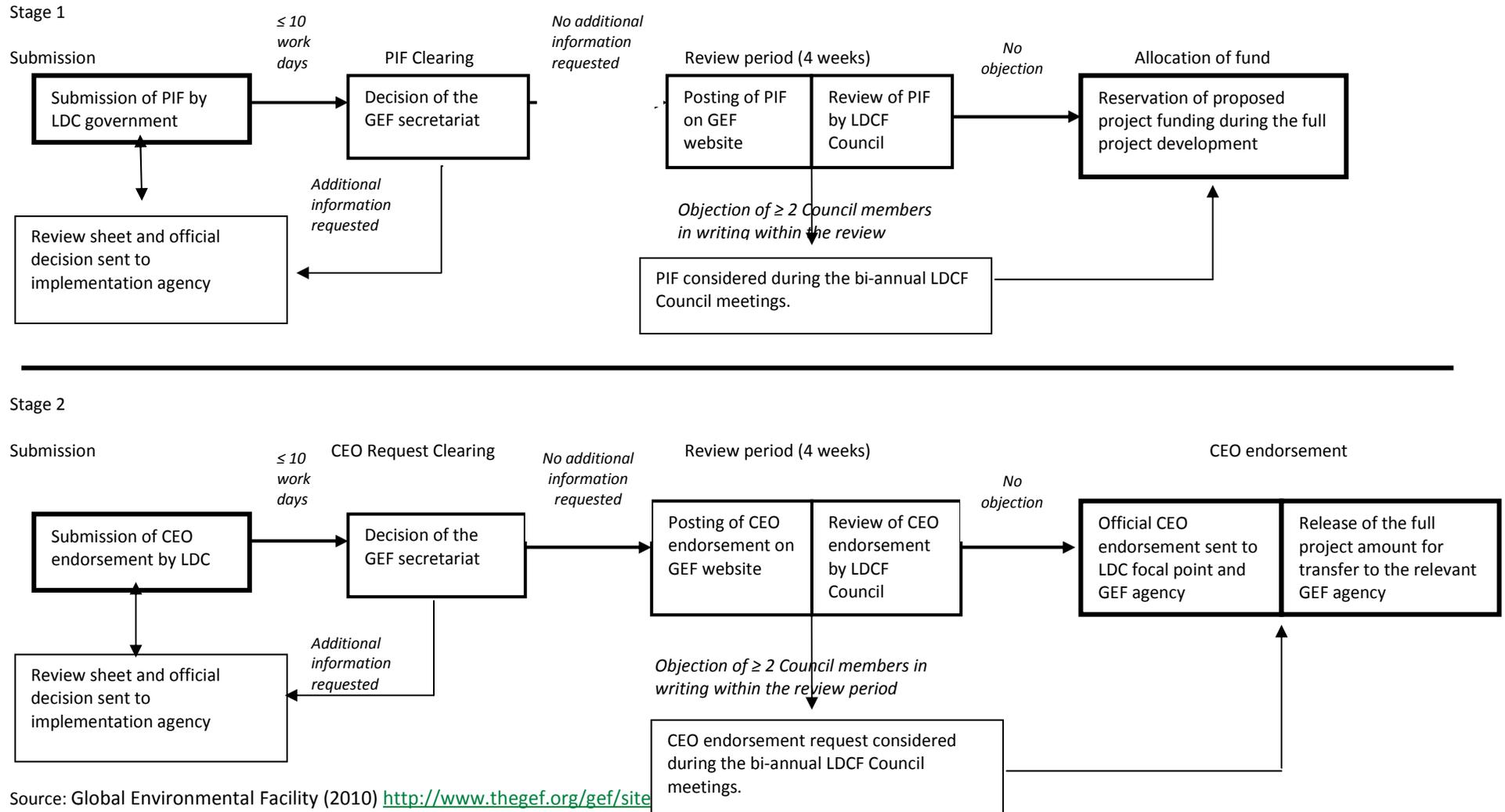
Source: DANIDA (2009) Joint External Evaluation: Operation of the Least Developed Countries Fund for Adaptation to Climate Change. September, 2009. Published By The Evaluation Department, Ministry Of Foreign Affairs/Danida, Denmark. www.evaluation.dk

Institutional coordination and support is required of all projects to ensure that coordination and consistency of approaches to other activities in the country is maximized.

Monitoring and evaluation requirements for the project are the same as for all GEF projects. All projects must have a detailed monitoring and evaluation plan.

The LDCF structure outlined in Figure 4 does not enable direct accountability and reporting between the GEF and the LDCs. The GEF agencies developing these projects are only accountable to the GEF; they are not directly accountable to LDCs who have no direct access or control over the funds. The LDCs do not even have effective control over the LDCF decision making processes regarding resource allocation or in routinely appraising the UNFCCC about adaptation project outcomes.

Figure 5 LDCF Project cycle: project identification file (PIF) procedures, processing and CEO endorsement of project



Source: Global Environmental Facility (2010) <http://www.thegef.org/gef/site/Step%20Guide%20to%20the%20LDCF%20Project%20Cycle.pdf>

4 LDCF funding sources

The LDCF relies on voluntary contributions from developed countries. Donor contributions to the LDCF are held in trust by the World Bank, as part of an investment portfolio for all trust funds held by the World Bank (World Bank, 2010a). According to the recent Status Report on the LDCF and the Special Climate Funds from the Trustee; as of May 2010, twenty-two contributing participants have pledged contributions to the LDCF equivalent to \$221.5 million (see Table 4) and the total amount deposited was \$169.1 million. \$22.2 million of pledged funds remain unpaid. The GEF secretariat has allocated \$120.3 million to the LDCF, committed \$76 million of which \$66 million relates to projects (including preparation activities), \$7million to fees, and \$3 million to cover corporate and administrative expenses. As of May 2010 only \$24 million has been transferred to GEF agencies, the remaining \$52 million remains outstanding for payment. Of the GEF agencies UNDP/UNEP and the World Bank account for the greatest share of LDCF commitments 76.3 per cent, and 12 per cent respectively (see Table 5).

Table 4 LDCF funding by source as of May 2010 (\$)

<i>Participant</i>	<i>Pledged</i>	<i>Deposited</i>	<i>Unpaid</i>
Australia	6,600,750	6,600,750	
Austria	580,400	580,400	
Belgium	638,000	638,000	
Canada	6,518,366	6,518,366	
Czech Republic	25,454	25,454	
Denmark	15,967,606	15,967,606	
Finland	10,447,515	9,474,030	973,485
France	14,675,270	11,633,130	3,042,140
Germany	52,921,488	34,668,650	18,252,838
Ireland	9,749,794	9,749,794	
Italy	1,000,000	1,000,000	
Japan	250,000	250,000	
Luxembourg	5,702,900	5,702,900	
Netherlands	16,342,578	16,342,578	
New Zealand	3,868,560	3,868,560	
Norway	8,421,064	8,421,064	
Portugal	64,065	64,065	
Spain	1,520,781	1,520,781	
Sweden	9,912,143	9,912,143	
Switzerland	4,231,686	4,231,686	
UK	22,020,974	22,020,974	
USA	30,000,000	0	
Total	221,459,394	169,190,931	22,268,463

Source: World Bank (2010) Status Report on the least developed countries fund and the special climate fund. GEF/LDCF.SCCF.8/Inf.2/Rev.1. May 31, 2010.

Table 5 LDCF allocations for approved NAPA priority projects per end of May, 2010

<i>GEF agency</i>	<i>Number of LDCs</i>	<i>LDCF (US \$ million)</i>	<i>Agency share of funds (%)</i>	<i>Total project cost (US \$ million)</i>
AfDB	1	3.3	2.6	24.4
FAO	2	4.6	3.6	13.8
IFAD	2	6.9	5.5	14.4
UNDP	20	81.2	64.2	237.3
UNDP & UNEP	2	7.8	6.2	25.9
UNEP	3	7.6	6.0	19.4
World Bank	4	15.1	12.0	35.1
Total		126.5		370.3

Source: World Bank (2010) Status Report on the least developed countries fund and the special climate fund. GEF/LDCF.SCCF.8/Inf.2/Rev.1. May 31, 2010.

As of November 2009, 48 LDCs had received funding for the preparation of NAPAs and 43 had submitted their documents, with the remaining 5 expected to do so by 2011 (UNFCCC, undated). There were over 750 climate adaptation priority project profiles identified in the submitted NAPAs. Of the priority project profiles submitted by October 2009, 20 per cent focused on food security, 16 per cent on territorial ecosystems, 14 per cent on water resources and 9 per cent on coastal zone and marine ecosystems (see Figure 6 and Figure 7). An important area was building the ability of the agricultural sector to adapt to climate change. By June 2010, the LDCF had funded 36 projects in 32 LDCs, allocating \$126 million in total with an average priority project profiles size of \$3.5 million. The total cost of these priority projects (LDCF funding plus co-financing) is estimated to be \$370 million. As previously noted, under the LDCF each LDC Party can access \$7 million for the development of a NAPA. The LDCF disbursed \$4 million per LDC (in 32 countries) to support climate change adaptation projects between 2001 and June 2010.

5 National Adaptation Plans of Action: A progress report

For most LDCs the NAPAs represent a first attempt to implement climate change adaptation planning. The NAPA priority project profiles which have been identified are mainly project based single sectoral interventions. Very few of the NAPAs have been evaluated against conventional cost-benefit analysis criteria. Distinguishing ‘additional’ costs of climate change impacts from baseline development needs is extremely complex. This probably reflects a lack of technical expertise available to most LDCs to effectively estimate the costs and benefits of climate change and adaptation. There are over 750 priority project profiles included in the submitted NAPAs.

Figure 6: Percentage of all NAPA priority project profiles by sector (UNFCCC, October 2009)

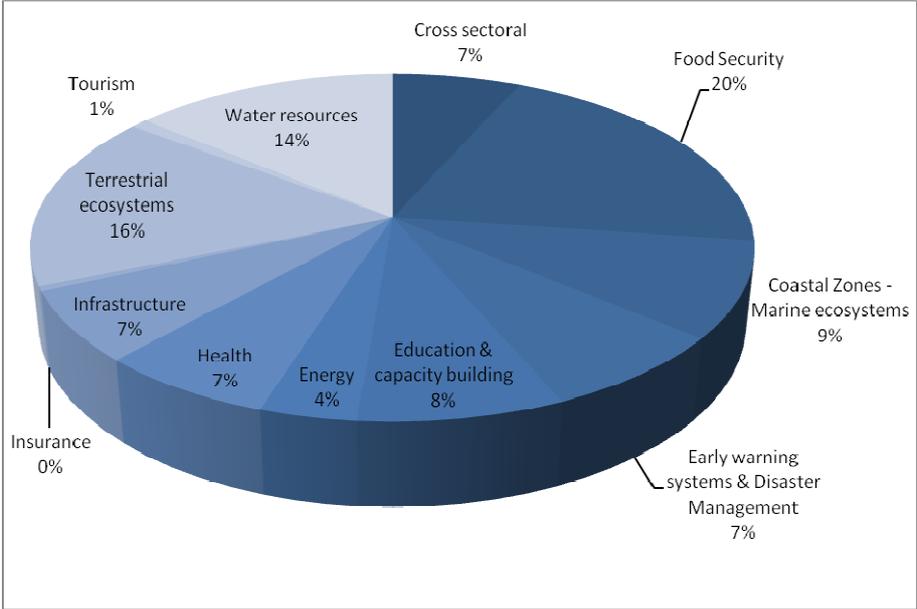
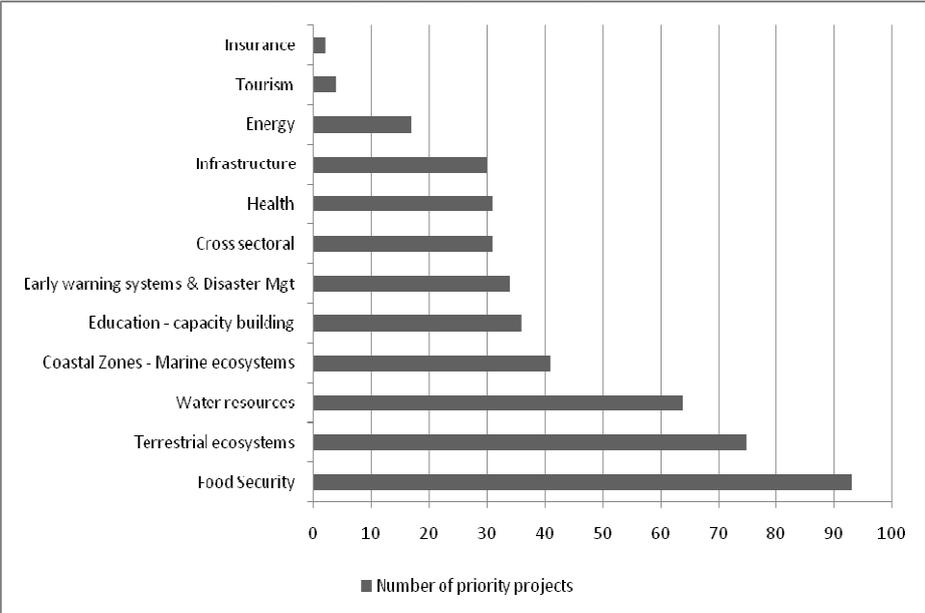


Figure 7: Number of NAPA priority project profiles by sector (UNFCCC, October 2009)



Source: Authors estimates based on UNFCCC Lists of NAPA Priority Projects by Sector database - http://unfccc.int/files/cooperation_support/least_developed_countries_portal/napa_project_database/application/pdf/napa_index_by_sector.pdf (accessed November 2009).

Through the NAPAs, LDCs have been able to communicate urgent and immediate adaptation needs from a 'bottom-up' assessment and submit priority project profiles for financing through the UNFCCC. As of May 2010, 44 out of the 48 LDCs that have received funding for preparation of the NAPAs has submitted their documents and it is anticipated that the remaining four will do so by 2011 (UNFCCC, undated). Figure 6 and Figure 7 show that 20 per cent of the submitted NAPAs have priority project profiles on food security, 16 per cent on territorial ecosystems, 14 per cent on water resources and 9 per cent on coastal zone and marine ecosystems. Less than 10 per cent of projects focus on education and capacity building. Very few reports mention mainstreaming or policy reform co-objectives, which probably reflect LDCF funding constraints. NAPAs only cover a subset of LDCs broader adaptation needs, reflect an immediate time scale, thus neglecting medium to long-term adaptation needs. Thus, wider development coherence through LDCF adaptation funding is difficult to achieve given the relatively small scale of the funding for priority projects. Although the LDCF at \$221.5 million only covers a fraction of actual LDC adaptation finance needs, they are pursuing a wide range of projects with the resources provided through it. A selection of adaptation projects that have recently been funded through the LDCF include:

- Bhutan: Reducing Climate Change-induced Risks and Vulnerabilities from Glacial Lake Outbursts in the Punakha Wangdi and Chamkhar Valleys. This project has two components: (a) physical measures to artificially lower the water level of critical glacial lakes; and, (b) capacities for responding to and predicting disasters will be increased through targeted disaster risk management development and installation of early-warning systems (OHRLLS, 2009; GEF, 2010). This is being executed by the Department of Geology and Mines (DGM); Ministry of Trade and Industry with an LDCF Grant of \$3,625,050 (co-financing element \$3,486,224).
- Ethiopia: *Promoting Autonomous Adaptation at the Community Level* is being executed through the Federal Environment Protection Agency, Addis Ababa Environment Protection Agency with a LDCF Grant of \$5,307,885 (co-financing element \$22,650,000). Ethiopia is extremely sensitive to climate-related shocks, including drought and flooding. The project aims to: (a) strengthen institutional capacities, (b) improve access to appropriate technologies, (c) enhance climate risk reduction, and (d) improve learning and scaling-up of adaptation efforts (GEF, 2010).
- Haiti: *Strengthening Climate Resilience and Reducing Disaster Risk in Agriculture to Improve Food Security in Haiti post-Earthquake*. The project focuses on 1) the identification, validation, and appropriate introduction of seeds, cropping patterns, cultivars and improvement to traditional adaptation practice to promote climate-resilience of livelihood systems, 2) agro-forestry (tree planting), 3) sustainable land and water management practices, including soil conservation and land tilling, and lastly 4) strengthening of local institutions and associations to encourage awareness and dissemination of risk management linked to regional and national level disaster and climate risk management (GEF, 2010). This is being executed by the Ministry of Agriculture (Département de Développement Agricole) with an LDCF Grant of \$2,000,000 (co-financing element \$5,000,000).
- Rwanda: Reducing Vulnerability to Climate Change by Establishing Early Warning and Disaster Preparedness Systems and Support for Integrated Watershed Management in Flood Prone Areas. The Gishwati ecosystem in Western Rwanda has been experiencing worsening irregularity and unpredictability of rainfall resulting in long droughts followed by flooding since 1990 due to climate change (GEF, 2010). This is being executed by the Rwanda Environmental Management Authority (REMA) with a LDCF Grant of \$3,486,000 (co-financing element \$12,427,000).

- Samoa: *Integration of Climate Change Risk and Resilience into Forestry Management (ICCRIFS)*. Samoa's natural resources are extremely vulnerable, due to climate change through increased air temperatures, erratic extreme daily rainfall, and rising sea levels. The project aims to enhance the resilience of forest ecosystems, where resilience means the capacity of a forest to withstand and absorb external pressures (GEF, 2010). This is being executed by the Ministry of Natural Resources and Environment, Ministry of Agriculture and Fisheries with a LDCF Grant of \$2,400,000 (co-financing element \$2,400,000).

Some LDCs such as, Bangladesh and Rwanda have successfully integrated the NAPAs into their PRSPs and national development strategies. Similarly, since 2007 Mozambique and Madagascar have sought to mainstream climate adaptation strategies into their PRSPs to highlight the prevention and mitigation of natural disasters; and to improve forecasting and the mapping of risk zones as priorities for future investment. Although 43 NAPAs have been developed in LDCs, very few actions have been identified in the context of national development strategies and has attracted little donor funding (SEI, 2009).

Prior to the inception of NAPAs, there were no mechanisms by which LDCs could identify adaptation requirements and cost them for the purposes of seeking finance. However, although these 'bottom-up' assessments have yielded crucial, nationally-based information on adaptation priorities of LDCs and highlighted key domestic sectors for adaptation financing, NAPAs are not ideal instruments for projecting long-term adaptation needs (BOND and Bretton Woods Project, 2009: 4; SEI, 2009: 38). As they are limited to responding to urgent and immediate adaptation needs, NAPAs are poorly placed to incorporate future climate projections and scenarios due to a lack of technical capacity at the local level to interpret and contextualise data (SEI, 2009: 38).

6 Is the LDCF fit for purpose?

The climate crisis may yet provide LDCs with the opportunity to restructure their economies onto a more sustainable track, including expanding access to clean energy, facilitating greater sustainability in agriculture through improved land use, and protecting biodiversity through better forest management. However, presently, LDCs lack the financial and technological capacity to shift towards a low carbon growth path and develop more sustainable patterns of production and consumption. Many continue to be locked into unsustainable development trajectories as a consequence of their structural weaknesses and external constraints. The LDCF is a response by the UNFCCC to LDCs climate change vulnerabilities and adaptation needs, by helping to identify priority climate change adaptation activities that respond to the urgent and immediate needs of the LDCs. It also provides LDCs with the opportunity to create national, country-owned plans.

6.1 Financing national adaptation programs of action

Although the LDCF provides some specific assistance to assist LDC adaptation, notably the preparation of NAPAs, through the GEF, which is entrusted with operating the financial mechanism under the UNFCCC; most climate change related international support measures are universal, and at their most targeted focus on developing countries in general. The size of the LDCF is still comparatively small relative to the scale of the problem faced by LDCs. The financial scope and scale of the LDCF needs to be expanded to meet the adaptation needs of LDCs.

In terms of the LDCF funding NAPAs it has successfully granted financial support to their preparation in 44 out of 48 LDCs. There has been an emphasis on supporting projects rather than programmatic approaches framed within a broader developmental perspective. Currently, much of the LDCF financing is delivered through project-based modalities although there are proposals for moving towards sectoral and programmatic approaches, including disbursing financing via budget support¹³ mechanisms (SEI, 2009: 62 – 70; UNFCCC, 2008: para 199 – 204). The main weakness of the LDCFs project-based delivery of climate financing is that it limits comprehensive solutions to adaptation and mitigation needs and circumvents national public expenditure systems and strategic planning (UNFCCC, 2008: para 200 – 202). It also increases transactions costs, relies heavily on imported technical assistance and does not generally build local capacity (IDD and Associates, 2006 in UNFCCC, 2008: para 200). Less reliance on independent consultants and a greater use of public sector expertise and effort on establishing intra-governmental arrangements in NAPA processes could have improved the technical sustainability of the NAPA outputs (Danida, 2009).

NAPA outputs and findings should be incorporated into LDC sector wide programmes (SWAPs) and national development plans. As per the Paris declaration, LDC governments should insist that donor's climate change activities are harmonised through NAPA priorities. This process has contributed to greater awareness of the adaptation challenges and the scale of the required policy and financial response in LDCs. However, the LDCF/GEF has not prioritized the adaptation needs of the most

¹³ Budget support approaches have become a common means of delivering conventional ODA and are increasingly used by bilateral and multilateral donors to deliver financing to recipient countries. There are many different modalities for budget support but they generally involve channelling resources directly into a government's budget using 'their own allocation, procurement and accounting systems' (UNFCCC, 2008: para 202) and expenditure is not ring-fenced around specific projects or activities although donors often insist on recipient governments meeting pre-qualification criteria, including fiduciary standards and a blueprint for achieving international development targets such as the World Bank and IMF-initiated Poverty Reduction Strategy Papers (PRSPs) for low-income countries.

vulnerable and has disproportionately funded projects in LDCs with relatively low rates of poverty (Mitchell, Anderson and Huq, 2008). There was no established timeline for both the preparation and implementation phases of NAPA and for this reason NAPAs failed to address the urgent adaptation needs of LDCs.

6.2 Improving LDCF transparency and governance

Governance is a crucial component in designing an equitable framework to support international climate change financing. Many of the deficiencies with the current LDCF stem from the fragmented and unrepresentative nature in which the funds are administered. The LDCF governance structures are complex and the rules make accessing funding for LDCs difficult and time-consuming (see Figure 4). The complexity of the LDCF procedures and structures including LDC governments, the GEF secretariat as the LDCF administration and the LDCF Council have hindered understanding of the operation of the LDCF in many LDCs (LEG, 2009).

Although funding through the GEF is not formally conditional, requirements attached to funding include burdensome reporting and co-financing criteria. GEF agencies such as the UNDP and the World Bank, often add further bureaucracy to the process (Ayres and Huq, 2008). There is also dissatisfaction on the part of LDCs about access to climate funds. Developing countries have called for direct access to funding, notably under the UNFCCC, not funds mediated through external agencies and for greater coherence and predictability in which funds are disbursed (SEI, 2009: 67 – 69). Currently, even within the LDCF, countries vying for adaptation financing have to submit proposals through one of the implementing agencies, such as the World Bank, other Multilateral Development Banks or UN agencies such as the UNDP (ibid). Additionally, aside from resources from the Adaptation Fund, finance provided through the LDCF mechanism often has co-financing requirements as funds only cover ‘full incremental or additional costs’ as opposed to ‘full costs’ which have to be borne either by the recipient government themselves or through financing leveraged through other sources (ibid). Similar arrangements apply with respect to the World Bank’s climate investment funds where access to the funds is mediated by MDBs, that is, eligible countries would need to have an ‘active MDB country programme’ in place (World Bank, 2008b: Annex A, para 16-17). Given current LDC institutional capacities, distinguishing ‘incremental or additional’ costs of climate change impacts from baseline development needs is an extremely complex task. As most LDCs cannot afford to meet the baseline development costs; LDCF commitments of finance for the additional cost is often an inadequate response to the scale and urgency of their needs (Ayres and Huq, 2008).

An LDC Expert Group (LEG) survey¹⁴ conducted in 2009 highlighted the need for improved LDC capacity building for project management and for mainstreaming adaptation into national policy, implementation and planning systems. There should also be support in helping LDCs establish intra-governmental organisational structures capable of fostering inter-ministerial concerted action on climate adaptation. Despite substantive public and civil sector experience in most LDCs of developing PRSPs, and National Action Plans (e.g. the UN Convention to Combat Desertification and the Convention of Biodiversity), the use of this expertise has been largely ignored in the development of NAPAs, with GEF agencies preferring the use of independent consultants (LEG, 2009). In the future, the LDCF should seek to institutionalise the NAPA process within government agencies so as to build

¹⁴ LDC Expert Group (2009) The Least developed Countries National Adaptation Plans of Action: Overview of preparation, design of implementation strategies and submission of revised project lists and profiles. UNFCCC Secretariat, Bonn, Germany. See Chapter 3, summary of experiences, lessons learned and best practice from LDC NAPAs.

(rather than displace) public sector human resource capacity, improve efficiency, and enhance the impact and sustainability of NAPA outputs.

Changing priorities related to adaptation needs also seem to have added complications. For example, on completion of its NAPA, Zambia experienced a major flood and would have preferred to switch its NAPA project funding to address this natural disaster. However, LDCF processes proved inflexible even though this would have been justified on the grounds of meeting urgent needs (DANIDA, 2009).

The LDCF operational structures need to reverse existing accountability and reporting relationships between the GEF agencies and the LDCs. The LDCs have little control over LDCF resources and thus limited effective negotiating power vis-à-vis the GEF agencies. As shown in Figure 4 LDCF structures do not include direct LDC access to LDCF funds, or reporting responsibilities to the UNFCCC regarding NAPA performance.

6.3 Sustainable and predictable LDC climate adaptation finance

The most crucial element in crafting a new agenda for international financial support to tackle climate change in LDCs is the sustainability and predictability of financial resources. Given the scale of the financing challenge, it is critical that international climate financing is sufficiently adequate and that these financial flows are sustainable and predictable. LDCF finance for priority adaptation project implementation is inadequate given the scale of the adaptation challenge LDCs face – rising from an estimated \$4 billion to \$17 billion per annum by 2030 (UNFCCC, 2009a: 2; UNFCCC, 2007: para 746 – 753).

The LDCF is also inadequate in the sense that it is dependent on the voluntary contributions of developed countries and is therefore not reliable enough to enable the LDCF administration to deliver a comprehensive programming of implementation of adaptation needs for all LDCs. The LDCF is not part of the GEF's Trust Fund and formal budgetary replenishment processes via the Trustee, therefore it is dependent on voluntary contributions. Opportunities to effectively address the climate adaptation needs of LDCs through NAPAs sequenced as strategic programmes of cross-sectoral adaptation activities have been missed due to a lack of LDCF ambition, financial and technical resources. The lack of these resources lead to a narrowing down of the NAPA processes from a wide set of priority actions to a few top priority projects, usually on the basis of multi-criteria assessments and expert opinions rather than cost-benefit analyses.

Clearly, the funding of the NAPAs has been neither predictable nor sufficient to address the climate adaptation challenges LDCs face. The LDCF was established in 2001, long before the creation of the Adaptation Fund under the Kyoto Protocol, the Cool Earth Partnership (Japan), or the Global Climate Change Alliance (European Union). Nonetheless, despite its relatively slow progress in implementing priority adaptation projects through complex LDCF procedures, it should continue in a reformed and financially replenished mode to support LDC adaptation through delivering effective finance and technical assistance. The scale of the required financial resources need to fit the tasks expected of the LDCF (to support whole NAPA programmes rather than individual projects), and if funds are limited it may require a mandate to gradually reduce the scope of its activities to specific groups of actions or countries rather than cover all LDCs inadequately. For example, the LDCF could play a role in enabling LDCs to access other adaptation funds by providing a project preparation facility which could address the co-financing constraints many LDCs face in accessing climate finance. Similarly, the LDCF could develop an NGO / civil society facility to fund local level NAPA priorities identified by them, through innovative climate adaptation funding schemes (e.g. output-based models).

The LDCF LEG and Council need to counsel more widely (e.g. include civil society organisations) and seek to build-on potential improvements outlined in the LEG (2005)¹⁵ draft on NAPA implementation strategies and the OECD/DAC guidelines on mainstreaming adaptation by more closely aligning NAPA priority projects with government policies and budgetary processes (Danida, 2009).

LDC governments should introduce a climate change adaptation planning cycle into government investment and budgetary plans to provide a means of coordinating adaptation financial flows from other sources, and maintain momentum from NAPA preparation to implementation of identified adaptation priorities. Danida (2009) note that systematic and inclusive learning platforms be initiated as a NAPA priority so that stakeholders can share lessons on implementation and improve the impact of adaptation projects. Nonetheless the LDCF continues to play a vital role in the preparation of NAPAs and in the provision of adaptation finance to LDCs.

Whilst LDCs lack the necessary technical capacities, LDCs could also take steps to enhance their adaptation capacity through regional and cross-border arrangements to pool financial and other resources; especially in the development of regional early warning systems for extreme weather events.

In an era of intense post Copenhagen climate finance debates and the possible replacement of the Kyoto Protocol after 2012 the UNFCCC and its partners will need to consider whether the LDCF is still fit for purpose. It could be argued that reforming elements of the LDCFs operational structure, incorporating a direct access component to the funding mechanisms for LDCs (as in the Adaptation Fund) and reliable funding (on a non-voluntary basis) would enable the LDCF to continue as a viable and necessary entity to assist LDCs in adapting to climate change.

¹⁵ See LDC Expert Group (2005) Elements for implementation strategies for national adaptation programmes of action UNFCCC/TP/2005/5, 2 August 2005.

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