

Adaptation to Climate Change and Least Developed Countries (LDCs)

What are the LDCs?

Three criteria, developed by the Economic and Social Council of the United Nations, are used to determine which countries belong to the LDC group. The first one is the low-income criterion, which is based on a three-year average estimate of the GDP per capita. The GDP per capita must be under US\$900 to be included in the LDC group and above US\$1,035 to graduate from that group. The second criterion is the human resource weakness criterion, which involves the Augmented Physical Quality of Life Index (APQLI) based on nutrition, health, education and adult literacy indicators. The final criterion is the economic vulnerability criterion, which involves the Economic Vulnerability Index (EVI) based on indicators of: the instability of agricultural production, the instability of exports of goods and services, the economic importance of non-traditional activities (share of manufacturing and modern services in GDP), merchandise export concentration, and the handicap of economic smallness.

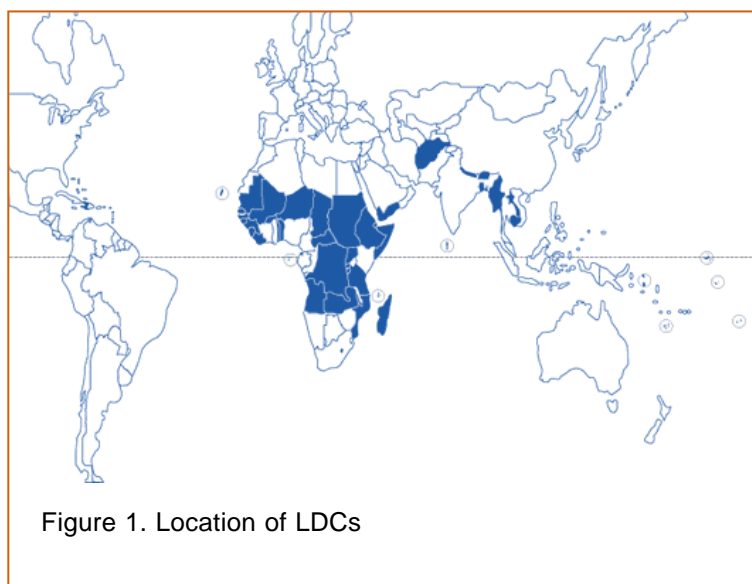


Figure 1. Location of LDCs

Source: UNCTAD. See <http://www.unctad.org/lpcs/>

Country	Population (millions)	GNP/capita (US\$)	Country	Population (millions)	GNP/capita (US\$)
Afghanistan	21.4	–	Madagascar	15.1	260
Angola	12.1	380	Malawi	10.4	210
Bangladesh	124.8	350	Maldives	0.3	1130
Benin	5.8	380	Mali	10.7	250
Bhutan	0.6	470	Mauritania	2.5	410
Burkina Faso	11.3	240	Mozambique	18.9	210
Burundi	6.5	140	Myanmar	44.5	–
Cambodia	10.7	260	Nepal	22.9	210
Cape Verde	0.4	1200	Niger	10.1	200
Central African Republic	3.5	300	Rwanda	6.6	230
Chad	7.3	230	Samoa	0.2	1070
Comoros	0.7	370	Sao Tome and Principe	0.1	270
Democratic Republic of the Congo	9.1	110	Senegal	9.0	520
Djibouti	0.6	–	Sierra Leone	4.6	140
Equatorial Guinea	0.4	1110	Solomon Islands	0.4	760
Eritrea	3.6	200	Somalia	9.2	–
Ethiopia	59.7	100	Sudan	28.3	290
Gambia	1.2	340	Togo	4.4	330
Guinea	7.3	530	Tuvalu	0.01	–
Guinea-Bissau	2.2	160	Uganda	20.6	310
Haiti	8.0	410	United Republic of Tanzania	32.1	220
Kiribati	0.9	1170	Vanuatu	0.2	1260
Lao People's Democratic Republic	5.2	320	Yemen	16.9	280
Lesotho	2.1	570	Zambia	8.8	330
Liberia	2.7	–			

Source: UNFCCC. See <http://r0.unctad.org/lpcs/>

LDCs and Climate Change

“The Least Developed Countries (LDCs) represent the poorest and the weakest segment of the international community. As a result, these are also amongst the most vulnerable to the adverse impacts of human induced climate change in future. It is, therefore, essential for these countries to prepare themselves for coping with or, one can say, ‘adapting’ to such adverse impacts and to ensure that such adaptation measures and policies are built-in to their existing national and sectoral development activities.”

Anwarul Karim Chowdhury, Under-Secretary-General and High Representative for LDCs,
United Nations, New York, 2003

The LDCs have contributed least to the emission of greenhouse gases (see Figure 2), but are the most vulnerable to the effects of climate change, because of both their locations in some of the most vulnerable regions of the world (areas prone to floods, droughts, etc.), and their low capacity to adapt to such events.

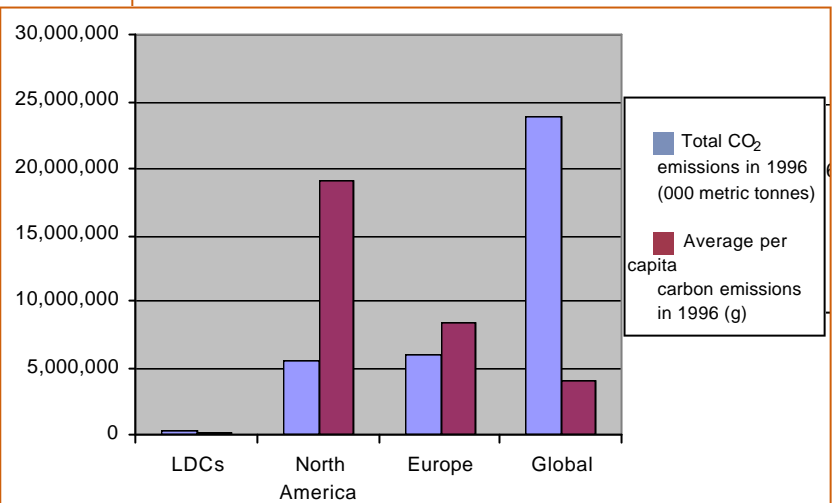


Figure 2: Global Greenhouse Gas Emissions

LDCs and the United Nations Framework Convention on Climate Change (UNFCCC)

"The Parties shall 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."

UNFCCC, Article 4.9

Tiempo

Tiempo is a quarterly bulletin on global warming and the developing world published by the International Institute for Environment and Development (IIED) and the University of East Anglia (UEA).

The interactive website associated with the bulletin is at:

www.cru.uea.ac.uk/tiempo



LDCs and Climate Change Impacts

Africa is the most vulnerable region to climate change, due to the extreme poverty of many Africans, frequent natural disasters such as droughts and floods, and agricultural systems heavily dependent on rainfall. The main climate change impacts will be on water resources, food security and agriculture, natural resource management, biodiversity and human health. Although most LDCs are

located in Africa (see Figure 1), those in Asia are also vulnerable. Issues of concern in Asia include water availability, food security and agriculture, ecosystems and biodiversity, and human health. Several LDCs are also small island states. These will face similar challenges, and countries such as the Maldives and Kiribati may even disappear if significant sea-level rise occurs.

Source: IPCC, 'Climate Change 2001. Impacts, adaptation and vulnerability'. Contribution of Working Group II to the 3rd Assessment Report of the IPCC, 2001.

Funding Adaptation and LDCs

The LDC Fund

The United Nations Framework Convention on Climate Change (UNFCCC) created several funds at the second half of the sixth conference of parties (COP 6 bis) in Bonn, Germany in July 2001. One of these was the LDC Fund. At COP 7 in Marrakech, Morocco, in 2001, guidelines for the operation of the fund were established, and it was determined that the fund would be operated by the Global Environment Facility (GEF). The LDC Fund will support the preparation of National Adaptation Programmes of Action (NAPAs). According to the GEF report to COP 8, the fund should be operational by 2003. The LDC fund is therefore probably one of the most rapid instruments to have been operationalised in the short history of the UNFCCC. However, it remains to be seen what the best way to actually use available funds will be.

Source: Saleem Huq, 'The Bonn-Marrakech agreements on funding' in *Climate Policy* 2(2-3): 243-46, 2002.



The Community Development Carbon Fund

The World Bank, in collaboration with the International Emissions Trading Association (IETA), intends to create a new fund to provide carbon finance through the Clean Development Mechanism (CDM). The Community Development Carbon Fund (CDCF) will link small-scale projects seeking carbon finance with companies, governments, foundations, and NGOs seeking to improve the livelihoods of local communities and obtain verified emission reductions (ERs). Contributors to the fund will support projects that measurably benefit the poor and will receive ERs from abated or sequestered emissions. These 'Development + Carbon' ERs (ERs with the added value of development benefits) will have the potential to be recognized under emerging global, national, and regional programs. The target size for the CDCF is US\$100 million.

Source: <http://communitycarbonfund.org/>

The Special Climate Change Fund

The Special Climate Change Fund was established along with the LDC Fund at COP 6 bis. At COP 7 it was determined that the GEF should operate the Special Climate Change Fund. The fund will finance activities relating to climate change in the areas of adaptation; technology transfer; energy, transport, industry, agriculture, forestry and waste management; as well as activities to assist developing countries whose economies are highly dependent on income generated from fossil fuels in diversifying their economies. As with the LDC Fund, it remains to be seen what the best way to actually use available funds will be. Thus developing countries (particularly the LDCs) have a window of opportunity to determine how funds should be spent maximise adaptation benefits, before funding levels have been raised and stabilised in about 2005.

Source: S. Dessai, *The Special Climate Change Fund: Origins and Prioritisation Assessment*. Tyndall Centre for Climate Change Research. Briefing Note No. 5, 2002.

Adaptation Actions in LDCs

National Adaptation Programmes of Action (NAPAs)

The Marrakech Accords (COP 7) established a separate work programme for LDCs. This work programme includes the preparation of NAPAs, which opens up a simplified channel for LDCs to inform the international community of their prioritised urgent and immediate adaptation needs. The newly created LDC Fund will fund the preparation of NAPAs. In order to support LDCs in their preparation and implementation of NAPAs, the Marrakech Accords launched a LDC Expert Group (LEG) with a mandate to provide technical guidance and advice to LDCs and to facilitate information exchange and promote synergies with other multilateral environmental treaties as well as regional synergies.

Capacity strengthening in the LDCs for Adaptation to Climate Change (CLACC)

Improving the ability of LDCs to adapt to the impacts of climate change will require long-term efforts to strengthen the adaptive capacity of each society. This will require investment in capacity strengthening in all sectors of society, including civil society as well as government. The NAPA process is one step in the long process of helping different national stakeholder groups understand the problem and the roles they can play in building resilience to potential adverse impacts. This proposal aims to strengthen the elements of civil society related to adaptive capacity in order to support the official NAPA process in the LDCs over the coming years.

CLACC will be undertaken by the Regional and International Networking Group (RING) (www.ring-alliance.org), and will be managed by the International Institute for Environment and Development (IIED) on behalf of the group.

Project objectives include:

- Strengthening the capacity of civil society in LDCs to adapt to climate change and fostering adaptive capacity among the most vulnerable groups.
- Establishing an information and knowledge system to support countries to deal with the adverse impacts of climate change.
- Mainstreaming the NAPA process with key non-governmental stakeholders.

The three-year programme will focus research in five regions, each led by a RING institution:

- Asia: BCAS, Bangladesh
- East Africa: ACTS, Kenya
- Southeast Asia: SEI, Thailand
- West Africa: ENDA, Senegal
- Southern Africa: ZERO, Zimbabwe

IIED/RING publications

Mainstreaming Adaptation to Climate Change in Least Developed Countries

Saleemul Huq, Atiq Rahman, Mama Konate, Youba Sokona and Hannah Reid
ISBN 1 84369 417 4, 40pp, IIED, London, 2003

This report comes with three working papers:

Working Paper 1: Country by Country Vulnerability to Climate Change

Saleemul Huq, Hannah Reid and Laurel Murray.

Working Paper 2: Bangladesh Country Case Study

Atiq Rahman and Mozaharul Alam
BCAS, Dhaka

Working Paper 3: Mali Country Case Study

Mama Konate and Youba Sokona

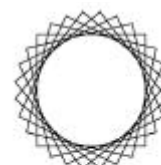
PDFs available at: www.iied.org/climate_change/pubs.html

Printed version of main report available from IIED



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