Adaptation Finance Fellowship Programme
March 2020

Research Brief

International adaptation finance to address planned priorities in Least Developed Countries

1. Introduction and Rationale

International adaptation finance has been a key policy response in the United Nations Framework Convention on Climate Change (UNFCCC). The UNFCCC and the Paris Agreement acknowledge the need for climate finance to be consistent with the priorities and needs of developing countries, and in particular those that are most vulnerable to climate change impacts, such as the Least Developed Countries (LDCs)[i].

The funds under the UNFCCC play a key role in assisting developing countries in their adaptation efforts, and countries have progressively communicated their adaptation needs and priorities through various channels to the UNFCCC. However, there is limited information on how adaptation finance channelled through these funds is addressing national adaptation priorities.

Adaptation finance that is consistent with national priorities and needs can be more effective, increase national ownership of the results achieved and develop opportunities to strengthen national capacity. Ensuring that international finance responds to national priorities is also key to support a coordinated approach towards adaptation in the country. Adaptation finance that is not consistent with national priorities may result in overlapping or contradicting activities, and/or in an adaptation agenda that is more aligned to external organizations' focus rather than the government's priorities.[ii iii iv]

This study seeks to better understand the extent to which international adaptation finance has addressed planned adaptation priorities in LDCs. The findings of the study could be relevant to support future adaptation planning and project design to prevent contradictory actions across sectors and increase project ownership to promote that project investments sustainably strengthen in-country adaptation processes.

2. Planned adaptation priorities in LDCs

Planned adaptation refers to deliberate policy decisions aimed at maintaining or increasing resilience conditions, using information about expected climate risks to assess the suitability of current or future practices.[v vi] A critical part of adaptation planning is identifying and prioritizing options to address key climate risks[vii].

National adaptation planning in LDCs was first driven by the process to formulate and implement National Adaptation Programmes of Action (NAPAs) promoted under the UNFCCC. Collectively, the NAPAs signal the type of adaptation activities that were considered by LDCs as urgent and immediate needs.[viii ix]

Since the NAPA process, LDCs have progressed in identifying and communicating medium- and long-term adaptation priorities through National Adaptation Plans (NAPs), and more recently through their Nationally Determined Contributions (NDCs). While the NAPAs may not represent the most recent adaptation priorities in many LDCs, understanding how these priorities have been addressed by international adaptation finance could be useful for NDC implementation, as the sectors with the most adaptation measures in NAPAs are consistent with those highlighted in the NDCs. In both the NAPAs and NDCs the sectors with the highest number of priority adaptation measures are agriculture and food security, forests, and water resources and coastal zones[x xi] (Appendix I).

Implementation of adaptation plans and the provision of adaptation finance are closely linked. Under the UNFCCC, preparing and submitting NAPAs was a condition for accessing funding for their implementation. Insufficient or inadequate funding was identified as a barrier for adaptation in many NAPAs[xii] and has been a main constraint for their implementation.[xiii xiv] In addition, countries where the highest number of adaptation initiatives have been reported are likely to be those that have received the highest adaptation funding.[xv]

3. International adaptation finance: The UNFCCC's funds

International public adaptation finance plays a key role in enhancing adaptation action in developing countries by mobilizing other sources of finance, placing adaptation on the political agenda, and enhancing the enabling environment for investment.[xvi xvii xviii] The majority of public climate financing flowing to developing countries has been provided through channels outside the institutional arrangements under the UNFCCC.[xix] However, UNFCCC funds are expected to play a key role in mobilizing adaptation finance in the context of the Paris Agreement. UNFCCC funds provide more opportunities for developing countries to exercise control over funding decisions as they function under the guidance of and are accountable to the Conference of the Parties (COP).[xx xxi] The funds also aim to support national priorities, through country-driven projects, and bring together various institutions and donors that could potentially enhance the impact and coordination of adaptation investment.

The financial architecture under the UNFCCC includes five funds that channel adaptation finance to developing countries: The Least Developed Countries Fund (LDCF), the Special Climate Change Fund (SCCF), the Strategic Priority for Adaptation —a special allocation under the Global Environment Facility (GEF) Trust Fund; the Adaptation Fund (AF) and the Green Climate Fund (GCF) (figure 2).

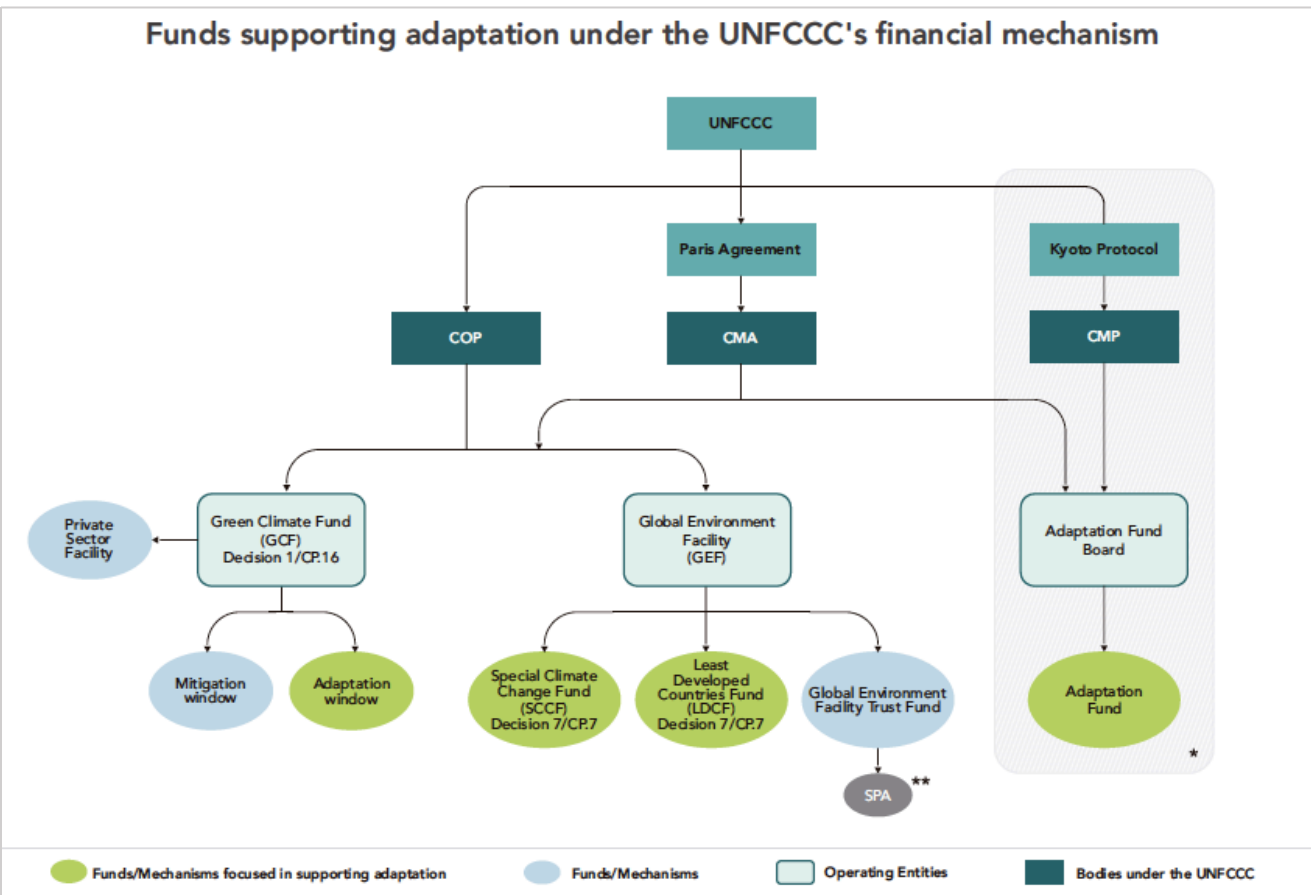


Figure 3. Funds supporting adaptation under the UNFCCC's financial mechanism. Adapted from Kato T. et al. 2014.
* The Adaptation Fund shall no longer serve the Kyoto Protocol once the share of proceeds becomes available under Article 6, paragraph 4 of the Paris Agreement. The Adaptation Fund shall continue to receive the share of proceeds, if available, from activities under Articles 6, 12 and 17 of the Kyoto Protocol (Decisions 13/CMA.1, para. 1; 1/CMP.14, para. 2 and 3).
** The SPA allocated all its resources between 2006 and 2010.

4. Methodology

To understand the extent to which international adaptation finance is addressing planned adaptation priorities in LDCs, I considered as international finance the resources provided by the UNFCCC's funds, and the adaptation priorities as those specified under NAPAs. The analysis included 221 national projects supported by the SPA, LDCF, SCCF, AF, and GCF in 44 LDCs in Asia and Africa. Projects in the concept stages were excluded. The projects that were analysed also included those that specified a link with the NAPA (in terms of alignment with objectives or addressing priority activities). Project information was extracted from the funds' public databases and integrated into a new database. Details of the projects were analysed using excel spreadsheets and quantitative data was summarized.

To measure the amount of finance allocated to the countries, I considered the amount provided by the funds, rather than the total project cost. To identify the adaptation priorities being addressed by the projects, I compared them to those identified under NAPAs for each country, and calculated the percentage of priorities addressed by country. It is important to note that I did not assess if and how the projects address adaptation priorities. Rather, I used the information about adaptation priorities being addressed or partially addressed by the projects as specified in the project documents. I plotted the amount of finance and percentage of adaptation priorities addressed by country and calculated the mean and standard deviation for each variable. With this information, I classified countries' progress according to three categories for each variable (low/medium/high). Appendix II includes additional information.

5. Results

International adaptation finance accessed

In total, USD 1,969 Million have been allocated to LDCs through projects addressing adaptation priorities financed by the UNFCCC funds. The LDCF and GCF have provided 90% of the funds through 192 projects (table 1). LDCs have on average five approved projects per country, and received on average USD 44.7 million per country. The highest amount of resources has been accessed by Tanzania, Bangladesh, Ethiopia, Bhutan, Rwanda, Madagascar, Comoros, Nepal, Senegal, and Cambodia (figure 4). Tanzania, the country with the highest amount of finance, has received through one GCF project more resources than all LDCs through all the funds. Through this project, Tanzania was approved to receive USD 116.2 million from the GCF. This project constitutes 14% of the total amount of finance approved by the GCF for all LDCs. Bangladesh-the second country with the highest amount of finance, has been approved a total USD 106.2 million through eight projects.

Table 1. Adaptation finance accessed to address adaptation priorities

Fund	Projects		Amount (USD million)	% of the total
LDCF	164	$	971.6	49%
GCF	28	$	802.3	41%
AF	24	$	177.4	9%
SPA	2	$	10.6	0.5%
SCCF	3	$	7.2	0.4%
Total	**221**	**$**	**1,969.1**	

Adaptation priorities addressed by projects

More than half of the countries analysed (64%) are implementing projects that address or partially address 60% or more of their adaptation priorities. The countries with higher percentages of priorities addressed or partially addressed are Rwanda, Mozambique, Malawi, Guinea Bissau, Uganda, Nepal Bhutan, Djibouti, Tuvalu and Senegal.

UNFCCC's funds are mainly supporting priorities in the food security, terrestrial ecosystems and water resources sectors (figure 5). This is consistent with the sectors with the highest amount of priorities in the NAPAs. Adaptation priorities in the health and energy sectors have been seldomly addressed. However, priorities might be underestimated as the results do not reflect priorities being addressed by projects not included in the analysis. For example, some priorities in the energy sector have been addressed through mitigation projects, while in the health sector some priorities have been addressed through multi-country projects. In addition, 12 projects analysed did not specify the priorities addressed or partially addressed.

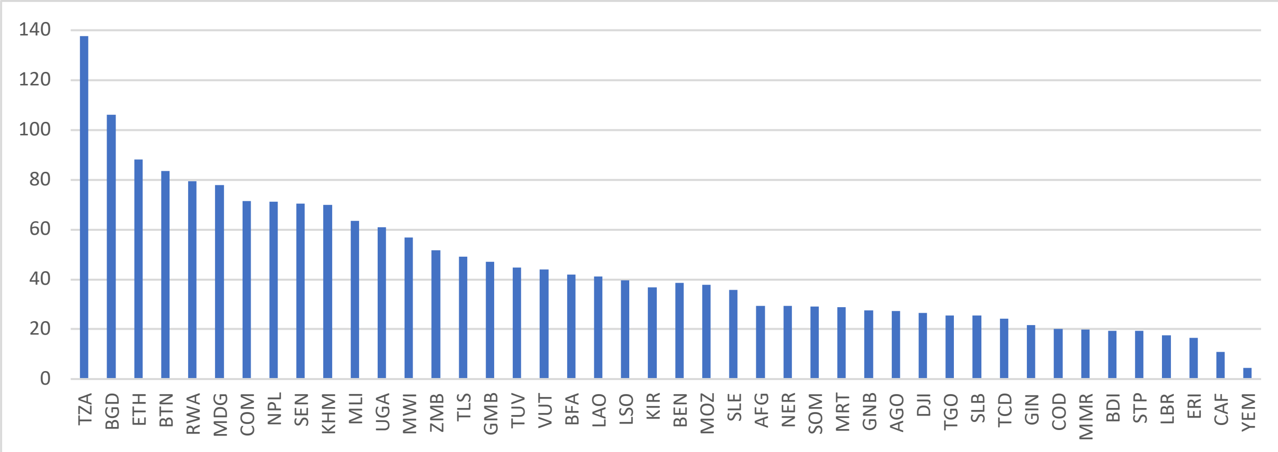


Figure 4. Amount of international adaptation finance accessed by LDCs

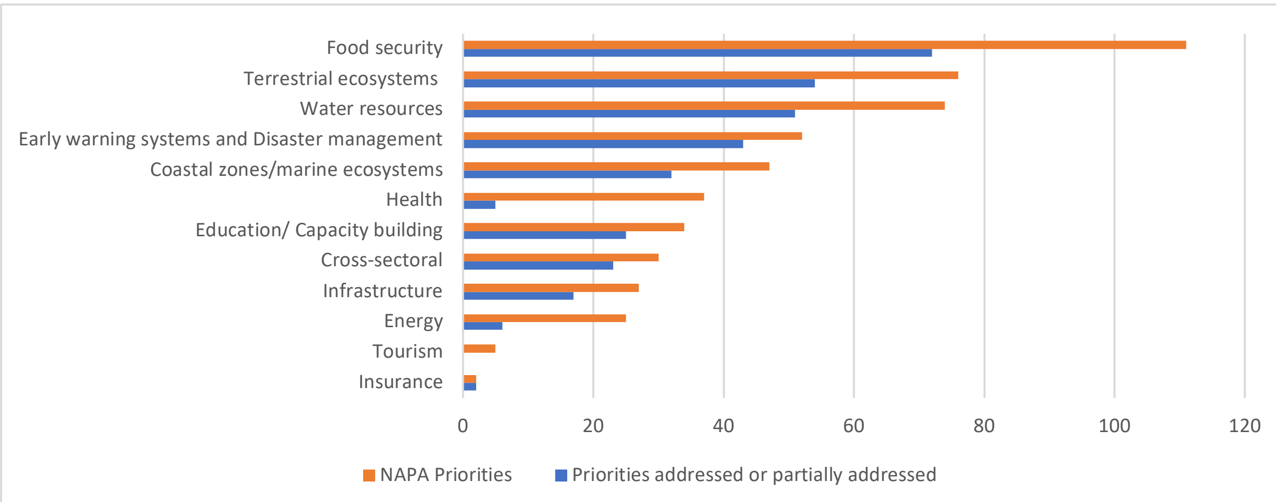


Figure 5. NAPA priorities by sector that have been addressed or partially addressed

LDCs' progress in accessing finance to address adaptation priorities

Overall there is a positive tendency between the amount of finance received and the percentage of priorities addressed. Notable exceptions include Comoros and Tanzania (high finance but low priorities addressed) and Djibouti, Guinea Bissau, and Chad (low finance and high priorities addressed) (Table 2).

The countries with the best progress in accessing finance to address adaptation priorities are Bangladesh, Bhutan and Senegal, who are lower middle income countries, and Nepal and Rwanda (low income countries).[xxii] Bangladesh, Bhutan, Nepal and Rwanda are also countries where the highest amount of adaptation initiatives have been reported in the literature[xxiii].

Studies on bilateral adaptation finance suggest that lower middle income countries benefit the most from adaptation finance as they are perceived to be more able to absorb finance flows.[xxiv] However, this differs from multilateral finance in LDCs as shown in this study (figure 6).

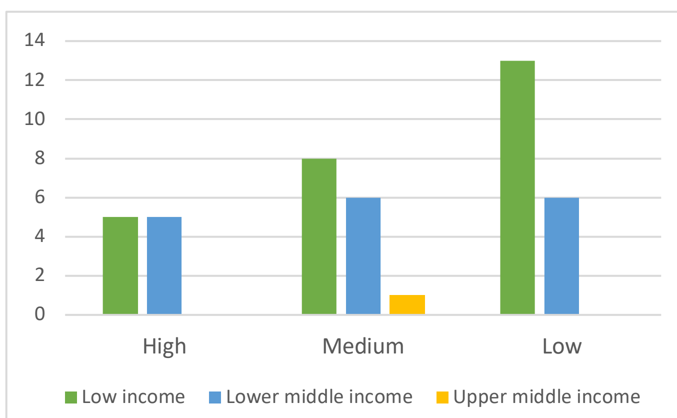


Figure 6. Number of LDCs according to the amount of international finance accessed and income group.

Table 2. LDCs' progress in accessing finance to address planned adaptation priorities

Priorities	Finance: Low (<35 USD million)	Finance: Medium (35-65 USD million)	Finance: High (>75 USD million)
Low (0-50%)	**Countries:** AGO, CAF, COD, LBR, MMR, MRT, TGO, YEM **Total:** USD 154.80 million **% of total finance:** 8% **Projects:** 41	**Countries:** LSO **Total:** USD 39.68 million **% of total finance:** 2% **Projects:** 7	**Countries:** COM, TZA **Total:** USD 208.90 million **% of total finance:** 11% **Projects:** 7
Medium (>50-75%)	**Countries:** AFG, BDI, ERI, GIN, NER, SLB, SOM, STP **Total:** USD 190.30 million **% of total finance:** 10% **Projects:** 36	**Countries:** BEN, BFA, KIR, LAO, MLI, SLE, TLS, VUT **Total:** USD 350.94 million **% of total finance:** 18% **Projects:** 42	**Countries:** ETH, KHM, MDG **Total:** USD 235.86 million **% of total finance:** 12% **Projects:** 13
High (>75%)	**Countries:** DJI, GNB, TCD, **Total:** USD 78.20 million **% of total finance:** 4% **Projects:** 13	**Countries:** GMB, MOZ, MWI, TUV, UGA, ZMB **Total:** USD 299.15 million **% of total finance:** 15% **Projects:** 36	**Countries:** BGD, BTN, NPL, RWA, SEN **Total:** USD 410.88 million **% of total finance:** 21% **Projects:** 26

Countries with the least progress (low finance and low priorities addressed) have received 8% of the total amount of finance. From this group, Afghanistan, Central African Republic, Democratic Republic of Congo, and Yemen are countries with high and medium intensity of conflict,[xxv] which might explain a low capacity to access adaptation finance and implement adaptation actions.

Countries that have a high amount of finance but low percentage of priorities addressed could be explained by the type of approved projects and cross-sectoral focus, as well as the number of adaptation priorities in the NAPA. For example, both Comoros and Tanzania established a similar amount of adaptation priorities (13 Comoros, 14 Tanzania) and have five approved projects. In Comoros four projects are addressing the same top four NAPA priorities, targeting the agricultural, terrestrial ecosystems and water resources sectors. In Tanzania, 84% of the approved funds for the country were accessed through one cross-sectoral project funded by the GCF.

6. Conclusion

International adaptation finance channelled through the UNFCCC's funds is addressing planned adaptation priorities in LDCs. However, there are opportunities to strengthen the investment to address adaptation priorities in other key sectors, such as the health sector.

LDCs' progress in accessing international finance to address their adaptation priorities varies, with Bangladesh, Bhutan Nepal, Rwanda and Senegal, being the leaders in accessing international finance to address national priorities. Djibouti, Guinea Bissau and Chad are among the countries with a higher percentage of adaptation priorities addressed but with limited finance. Angola, Central African Republic, Democratic Republic of Congo, Liberia, Mauritania, Togo and Yemen constitute the group with the least access to adaptation finance and limited adaptation action.

The different progress shows that there are opportunities to improve the distribution of adaptation finance to LDCs, and target capacity building and finance readiness support to the 19 LDCs with the lowest access to finance. Future research could explore the factors that explain why some LDCs have been more successful in accessing finance to address their adaptation priorities.

Written by AFFP Research Fellow Ana Karla Perea Blazquez.

This research brief is part of a research project carried out with the aid of a grant from the International Development Research Centre, Ottawa, Canada.

[i] UNFCCC Decisions 1/CP.16 para 97 and 6/CP.23 para. 10; Paris Agreement Article 7 para. 5 and 6.

[ii] Bizikova, L., Parry, JE., Karami, J., Echeverria D. 2015. Review of key initiatives and approaches to adaptation planning at the national level in semi-arid areas. Reg Environ Change (2015) 15:83. https://doi.org/10.1007/s10113-014-0710-0

[iii] UNFCCC 2018. In-session workshop on long-term climate finance in 2018. Summary report by the Secretariat. September 2018

[iv] Conway, D., Mustelin, J. 2014. Strategies for improving adaptation practice in developing countries. Nature Clim Change 4, 339–342 (2014) doi:10.1038/nclimate2199

[v] United Nations Environment Programme (UNEP). 2016. The Adaptation Finance Gap Report 2016. Nairobi. http://www.unep.org/climatechange/adaptation/gapreport2016/

[vi] Füssel, H. 2007. Adaptation planning for climate change: concepts, assessment approaches, and key lessons. Sustain Sci 2, 265-275. https://doi.org/10.1007/s11625-007-0032-y

[vii] Mullan, M. et al. (2013), "National Adaptation Planning: Lessons from OECD Countries", OECD Environment Working Papers, No. 54, OECD Publishing. http://dx.doi.org/10.1787/5k483jpfpsq1-en

[viii] DANIDA, and GEF. 2009. Joint external evaluation, COWI Group and International Institute for Environment and Development *Evaluation of the Operation of the Least Developed Countries Fund for Adaptation to Climate Change*. http://www.evaluation.dk

[ix] Klein Richard J.T. and Åsa Persson. 2008. Financing Adaptation to Climate Change: Issues and Priorities European Climate Platform (ECP), ECP Report No. 8. https://www.ceps.eu/ceps-publications/financing-adaptation-climate-change-issues-and-priorities/

[x] UNFCCC. 2013 Index of NAPA Projects by Sector. https://unfccc.int/files/cooperation_support/least_developed_countries_portal/napa_priorities_database/application/pdf/napa_index_by_sector.pdf

[xi] Patel et al. 2019). Patel, S., Rai, N., and McIvor, S. 2019. LDC NDCs: adaptation priorities and gaps to address. International Institute for Environment and Development (IIED). https://pubs.iied.org/pdfs/17709IIED.pdf

[xii] Pauw, P. and Pegels, A. 2013. Private sector engagement in climate change adaptation in least developed countries: an exploration, Climate and Development, 5:4, 257-267. DOI: 10.1080/17565529.2013.826130

[xiii] Kalame, Fobissie Blese, Denboy Kudejira, and Johnson Nkem. 2011. "Assessing the Process and Options for Implementing National Adaptation Programmes of Action (NAPA): A Case Study from Burkina Faso." *Mitigation and Adaptation Strategies for Global Change* 16: 535–53

[xiv] Osman-Elasha, Balgis, and Thomas E Downing. 2007. Lessons Learned in Preparing National Adaptation Programmes of Action in Eastern and Southern Africa

[xv] De Souza, K., Kituyi, E., Harvey, B. *et al.* 2015. Vulnerability to climate change in three hot spots in Africa and Asia: key issues for policy-relevant adaptation and resilience-building research. Reg Environ Change 15, 747-753. https://doi.org/10.1007/s10113-015-0755-8

[xvi] See reference xv

[xvii] Bouwer L. and Aerts J. 2006. Financing climate change adaptation. *Disasters,* 2006, 30(1): 49−63

[xviii] See reference v

[xix] Nakhooda, S., Watson, C., Schalatek, L. 2016. 10 things to know about climate finance in 2016. ODI briefing paper. https://www.odi.org/sites/odi.org.uk/files/resource-documents/11058.pdf

[xx] See reference xvii

[xxi] Scoville-Simmonds, M. 2016. "The Governance of Climate Change Adaptation Finance - An Overview and Critique." *International Development Policy.* https://doi.org/10.4000/poldev.2243

[xxii] World Bank. 2019. Classification of countries by income. https://datahelpdesk.worldbank.org/knowledgebase/articles/906519-world-bank-country-and-lending-groups

[xxiii] See reference xv

[xxiv] Betzold, C., and Weiler, F. 2017. Allocation of aid for adaptation to climate change: Do vulnerable countries receive more support? International Environmental Agreements: Politics, Law and Economics, Springer, vol. 17(1) 17-36. DOI: 10.1007/s10784-016-9343-8

[xxv] World Bank. 2020. List of Fragile and Conflict-affected Situations http://pubdocs.worldbank.org/en/179011582771134576/FCS-FY20.pdf

Appendix I. Adaptation measures by sector established in NAPAs and NDCs

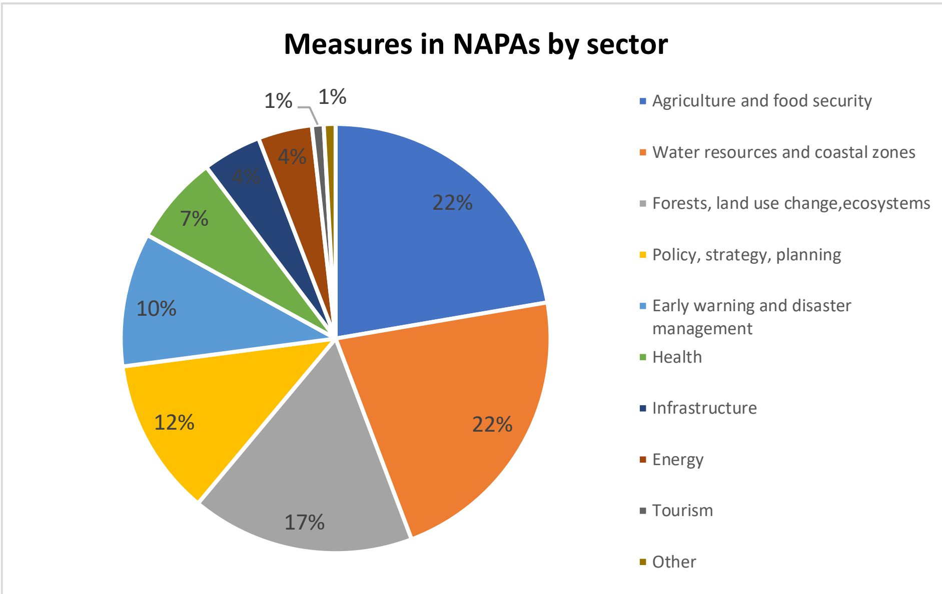


Figure 1. Measures in NAPAs by sector. Source: Adapted from UNFCCC 2013.

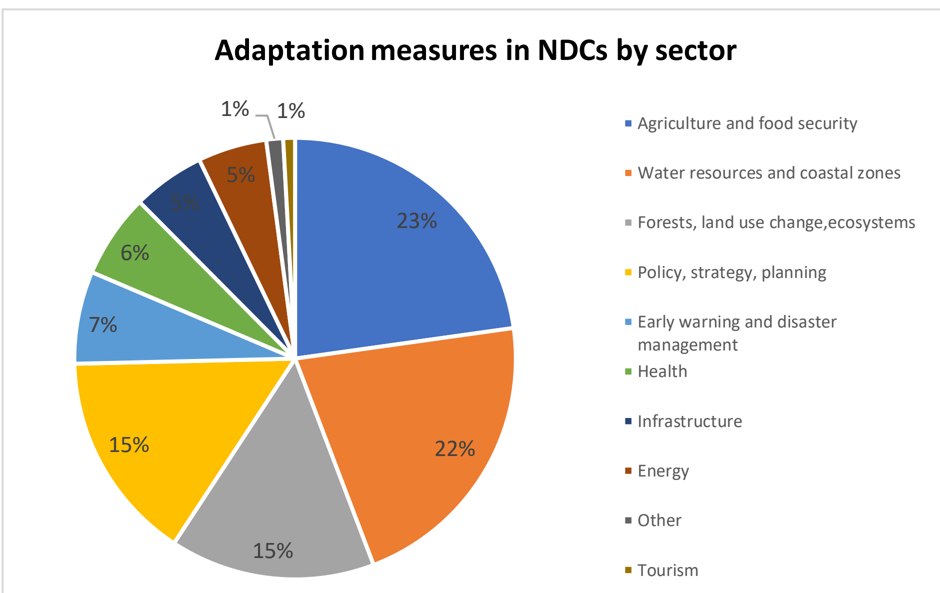
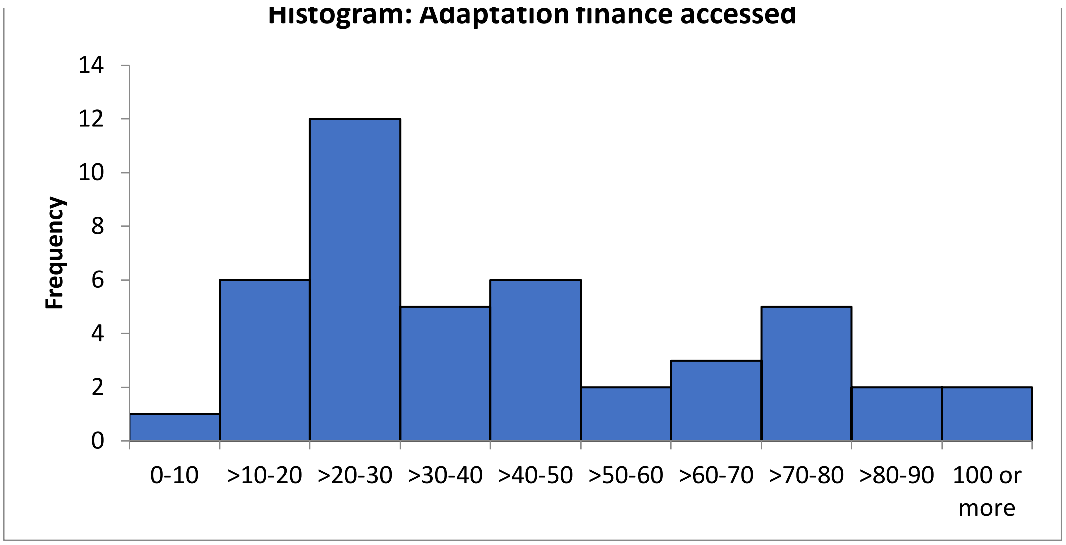


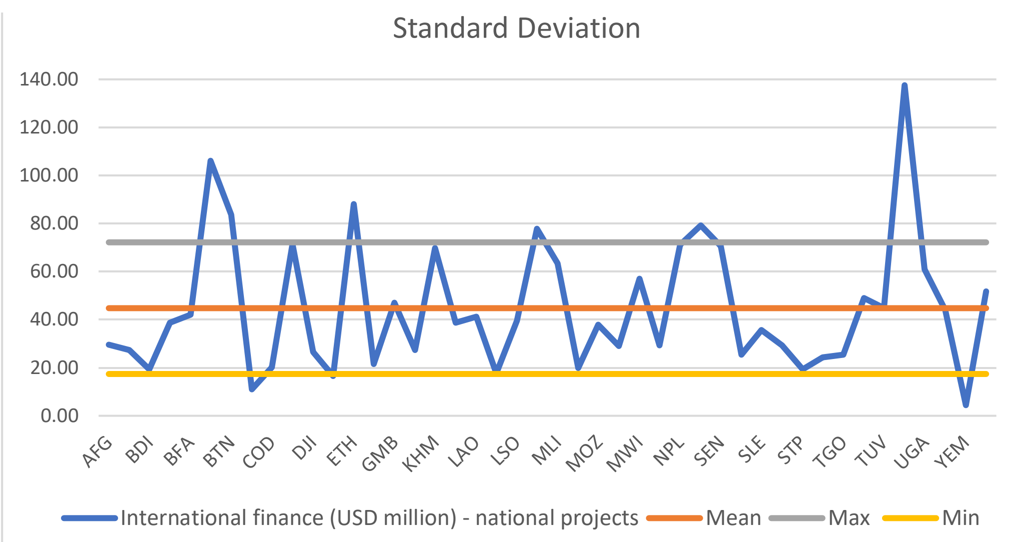
Figure 2. Measures in NDCs by sector. Source: Patel et al. 2019.

Appendix II.

1. International finance accessed by LDCs.

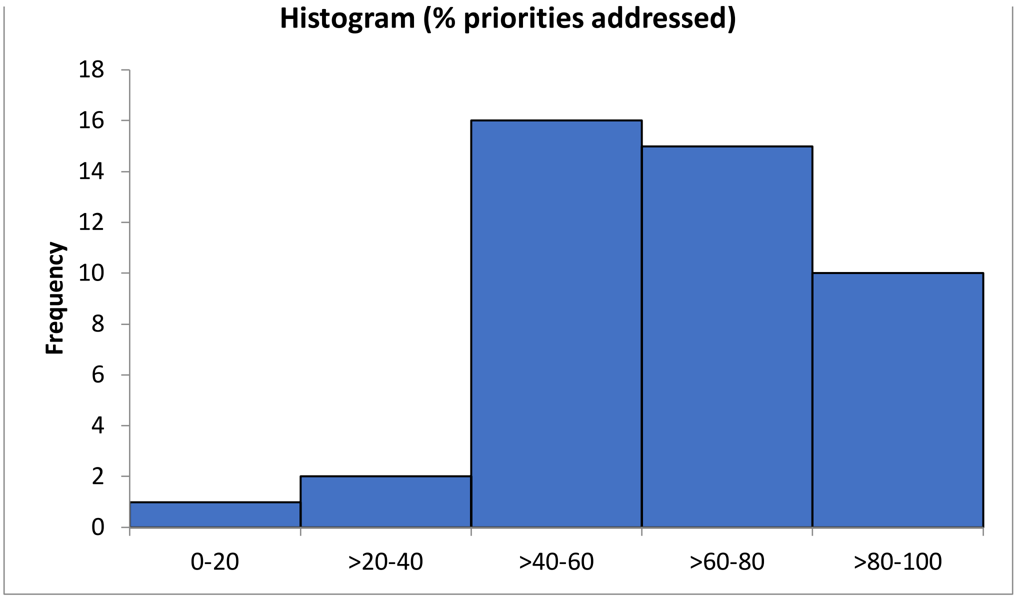
International finance (USD million)	
Mean	44.788
Standard Deviation	27.392
Max limit	72.180
Min limit	17.395

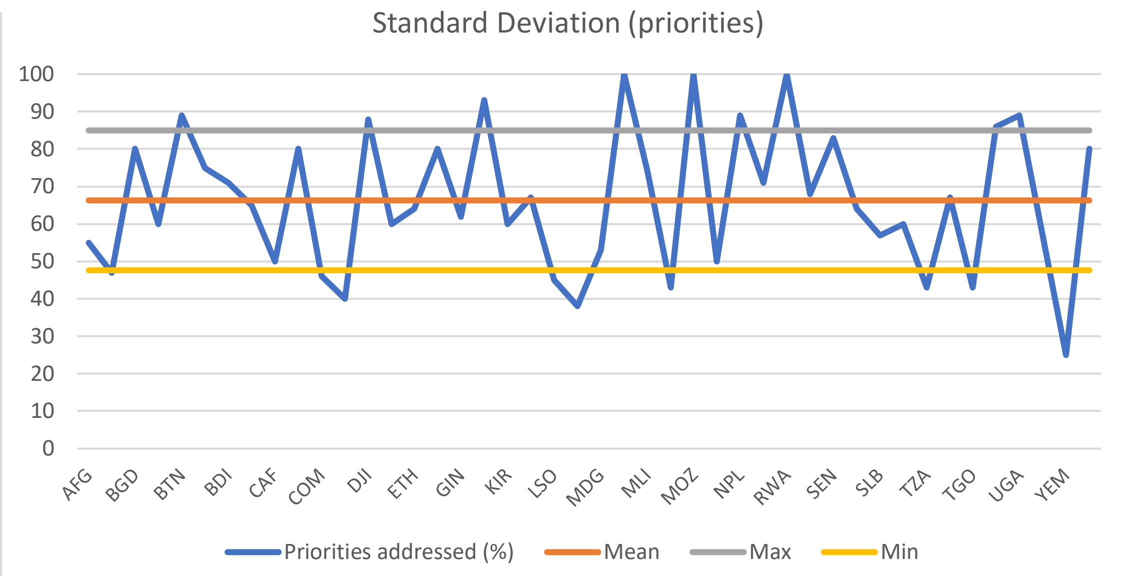




2. Adaptation priorities addressed or partially addressed

Priorities addressed (%)	
Mean	66.30
Standard Deviation	18.68
Max limit	84.97
Min limit	47.62





3. Progress in accessing finance to address adaptation priorities