



Despite contributing the least to climate change, Southern Africa is among the worst-affected regions in the world. People with the least resources to adapt to the effects of climate change will bear the greatest brunt. Adaptation costs are rising faster than the finance available to respond. Planned relocation is a potential, hitherto overlooked, measure that must be budgeted for and carried out proactively.

#### **Key findings**

- Most climate financing has been directed at mitigation, but adaptation is equally important. Studies show that every US\$1 invested in adaptation generates a return of between US\$2 and US\$10.
- Least-developed countries are the furthest behind in adaptation, have the highest adaptation costs and the lowest resources to finance, plan and implement measures.
- Funding commitments have fallen short and adaptation costs are increasing faster than finance is being provided.
- Because such financing is still new, there is no consensus about what constitutes adaptation nor how to record and report expenditures.
- Mozambique, Zimbabwe and Malawi are among the five most vulnerable countries but climate financing received is not commensurate.

- Finance tends to flow to countries where donors already have a presence and to regions where countries have strong institutional capacities to implement projects.
- Planned relocation and voluntary movement in anticipation of climate impacts have better outcomes than unplanned displacements in emergencies.
- Interest in planned relocation has historically been low because past attempts were badly managed and produced poor socioeconomic outcomes.
- Interest in voluntary and planned relocation as an adaptive measure is growing, particularly in response to slow-onset climate impacts. Preemptive relocation to less-vulnerable places can protect lives, livelihoods and assets while maintaining community ties.

#### Recommendations

#### For governments:

- Adaptation funding must be mobilised and implemented. Early action is imperative as costs increase rapidly.
- Countries must mainstream climate adaptation into polices and projects across all sectors of society.
- Voluntary and planned relocation should be developed in areas prone to slow-onset climate change impacts. Planners must carefully consider the socio-political context given that many historical removals were done for nefarious reasons.
- Planned relocation should be a last resort, voluntary and developmental.
- Governments should strengthen links between local and national planning and mainstream adaptation projects into all sectors.

Local participation is imperative in designing and implementing relocations and in adaptation planning. Local governments and community leaders should be thoroughly consulted ahead of time.

#### For donors:

- Donors must meet their funding commitments to maintain trust with developing countries and encourage them to remain in climate change agreements.
- Donor financing instruments should seek consensus on definitions, tracking and evaluation to improve the quantity and quality of adaptation funding.
- Adaptation finance should develop flexible tools to reach vulnerable populations.
- Multilateral, bilateral and regional adaptation instruments should include voluntary and planned relocation.

#### Introduction

Despite contributing the least to climate change, Southern Africa is among the worst-affected regions, with the least resources to adapt to it.<sup>1</sup> The World Food Programme (WFP) has called Southern Africa the 'epitome' of the link between climate and the waterenergy-food nexus.<sup>2</sup> Climate change is increasing the frequency, intensity, duration and locations of both slowand sudden-onset impacts.<sup>3</sup>

Rainfall and temperature variability are contributing to water stress, pest infestations, and increased drought and flood cycles. Average rainfall has decreased and is predicted to continue to do so over parts of Southern Africa where small-scale farmers who depend on rain generate 90% of the food. They are extremely susceptible to increasing water stresses and droughts. Climate impacts are already severely disrupting social, economic and environmental realities and the impacts on food, health, security and economics across societies are growing.<sup>4</sup>

Climate change governance is divided broadly into two categories. The first is mitigation, which refers to reducing carbon emissions to slow or stop climate change. The second is adaptation, which refers to adjusting ecological, social and economic systems to reduce vulnerabilities and enhance resilience.

As the impacts of climate change worsen, the most vulnerable areas and people will be hardest hit. Southern Africa must focus urgently on adaptation to protect people and society. To do so, it needs funding.

Climate adaptation has progressed substantially in recent years. Historically, climate change policies and platforms prioritised mitigation, but adaptation measures are now embedded in most national and multilateral policy and planning platforms. As of 2021, 72% of countries have at least one national adaptation planning instrument.<sup>5</sup> In Southern Africa, all countries except Angola have national plans.<sup>6</sup> In June 2020, Botswana publicly recognised that climate change is damaging progress towards Sustainable Development Goals and launched a National Adaptation Plan (NAP) Framework.<sup>7</sup>

The economic case for investing in adaptation is very strong. Limiting climate damages is economically imperative. International studies have shown that every

US\$1 invested in adaptation generates a return of between US\$2 and US\$10.8 According to the Global Commission on Adaptation, investments of US\$1.8 trillion in early warning systems, climate-resilient infrastructure, dryland agriculture, mangrove protection and resilient water sources would avoid costs of US\$7.1 trillion.9

In 2018, Cyclone Ava caused US\$156 million in losses to Madagascar, 2.9% of the country's 2017 gross domestic product (GDP).<sup>10</sup> In 2019, Cyclone Idai cost Zimbabwe US\$274 million and Mozambique US\$3 billion,<sup>11</sup> 1.6% and 19.6% of their respective 2019 GDPs.<sup>12</sup>

As with most climate change factors, adaptation funding is very unequally distributed. Least-developed countries are the furthest behind, but have the lowest resources to finance, plan and implement adaptation measures and the highest adaptation costs relative to GDP.<sup>13</sup> Poor communities have the highest social and economic vulnerabilities and greatest exposures to climate hazards.

Climate adaptation investments of US\$1.8 trillion would avoid future costs of US\$7.1 trillion

The inherent inequality of climate change adaptation has long been recognised by international institutions. The United Nations (UN) Network Convention on Climate Change has recognised this double burden since its onset in 1994. It includes collective commitments for the wealthiest countries most responsible for climate change to those with the highest risks and lowest capabilities to address them.

A cornerstone of the 2015 Paris Agreement was that rich countries – that have exploited natural resources and fossil fuels to attain their wealth – direct major funds to less-developed countries to help them mitigate the impact of climate change and adapt. Annual financial assistance of US\$100 billion by 2020 was pledged from public and private sources to cut emissions and adapt to climate impacts.<sup>15</sup>

The funding has fallen short.<sup>16</sup> Furthermore, adaptation costs are increasing faster than finance is being provided.<sup>17</sup> Adaptation costs will increase exponentially over time. According to the UN Environment Programme

(UNEP) Adaptation Gap Report 2020, annual costs are currently about US\$70 billion and will rise to US\$140 to US\$300 billion in 2030 and US\$280 to US\$500 in 2050. 18 The costs – economic, social and environmental – of not adapting are enormous.

Covid-19 has pushed climate change down the priority list as countries and institutions focus on economic recovery and health. In some cases, resources allocated to adaptation have been redirected.<sup>19</sup>

Migration and displacement are key responses to both sudden- and slowonset climate impacts. Most movement occurs internally within countries. Migration is a critical adaptation strategy against climate change impacts,<sup>20</sup> yet it is almost always overlooked in adaptation strategies and financing.<sup>21</sup>

Planned relocation and voluntary movement in anticipation of climate impacts have better outcomes than unplanned, emergency displacements. Some communities and areas could become uninhabitable. In these cases, spending on adaptation when it will not change the outcome is a worse strategy than planned mobility and relocation.

Yet, financing for pre-emptive responses to slow-onset climate impacts is particularly insufficient and ad hoc. Relocation projects do not feature. Of the 400 adaptation projects funded by the Adaptation Fund, Green Climate Fund and Global Environment Facility, none include planned relocation.<sup>22</sup>

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This policy brief examines planned relocation as a relatively uncharted climate adaptation strategy. It summarises climate adaptation financing in Southern Africa because this is fundamental to understanding where and how planned relocation could occur. It explores complexities and socio-political histories of past relocations and provides recommendations based on best practices.

#### **Adaptation financing**

The UN defines adaptation financing as that which reduces vulnerability and exposure, and boosts resilience to actual or expected impacts of climate change. Historically, most financing has been directed at climate change mitigation, but this is changing. According to UNEP's Adaptation Gap Report 2020, adaptation has made major progress. It is now widely embedded in policy and planning across the world, but levels of engagement and the quality of instruments are vastly different from country to country'. 25

Adaptation spending is impossible to measure accurately. Mitigation measures are easier to agree on and track universally, while adaptation measures are highly place-specific, often multisectoral and overlap with mandates such as development. Public adaptation finance spent in 2019 was estimated at reaching US\$28 billion.<sup>26</sup>



ADAPTATION COSTS OF ± \$70 BILLION WILL RISE TO \$140-US\$300 BILLION IN 2030 Because adaptation financing is still relatively new and large amounts have been mobilised in a short time, there is not yet consensus on what constitutes it or how to record and report expenditures. To Different entities apply different definitions and processes. For example, the Organisation for Economic Cooperation and Development applies Rio markers that identify investments with 'principal' or 'significant' adaptation features and counts the entire project as an adaptation expenditure. Multilateral development banks credit only portions of funds that directly address adaptation. Research shows that these recording gaps have led to both under-reporting and over-reporting of adaptation financing. Page 18.

Because adaptation financing is still new, there is not yet consensus on what constitutes this financing or how to record and report expenditures

Chart 1 shows the cumulative value at March 2021 of multilaterally governed funding pledges, deposits and project approvals for each Southern African Development Community (SADC) country since 2003. 30 Other private, bilateral, national and regional funding channels are not included, nor is multicountry nor regional funding.

Chart 1: Multilateral climate funding in SADC countries

Country	Adaptation funds (US \$ million)	Total climate funding (US \$ million)	% of climate funding that goes to adaptation
Angola	25.7	34.8	74%
Botswana	0	4.4	0%
Comoros	69.6	79.7	87%
DRC	26.8	331.3	8%
Eswatini	1.7	5.1	33%
Lesotho	43.9	68.3	64%
Madagascar	28.8	119.4	24%
Malawi	50.2	79.6	63%
Mauritius	9.1	62.8	14%
Mozambique	139.2	227.1	61%
Namibia	47.8	71.9	66%
Seychelles	6.5	15.9	41%
South Africa	13.6	612.6	2%
Tanzania	151	235.7	64%
Zambia	144.9	238.2	61%
Zimbabwe	5	45.3	11%

Source: Climate Funds Update, Data Dashboard31

South Africa received the most multilateral climate financing on the continent and was sixth highest internationally, but only 2% is directed to adaptation. Botswana received no adaptation funding.

2%

AMOUNT OF CLIMATE
ADAPTATION FINANCING THAT
SOUTH AFRICA RECEIVED

There are no universally accepted standards to evaluate whether projects are helping communities become more resilient to climate change.<sup>32</sup> Most are still too new to claim a reduction in climate risks. According to UNEP, only 3% of 1 700 adaptation actions are at the risk-reduction stage and most approved projects to date are not clear on their lasting outcomes.<sup>33</sup>

While the climate finance community regularly voices the need to prioritise the most vulnerable countries, there is no consensus on which these are.<sup>34</sup> Spending analyses show that many countries and communities with the highest risks and needs are left behind and that vulnerability is not a key factor in determining where funds go.<sup>35</sup> According to Germanwatch's Global Climate Risk Index 2021, Mozambique, Zimbabwe and Malawi were the first, second and fifth most affected countries by extreme weather events in 2019.<sup>36</sup> They rank 32<sup>nd</sup>, 108<sup>th</sup> and 75<sup>th</sup> in climate financing received.<sup>37</sup>

Finance flows to countries where donors have a presence and that have strong institutional capacity and perceived ability to implement projects

Finance tends to flow to countries in which donors already have a presence and that have strong institutional capacities and perceived ability to successfully implement projects.<sup>38</sup> Investors seek sufficiently predictable environments to measure and generate return on investment and are reluctant to invest in countries with poor policy, institutional and market environments.<sup>39</sup>

Even where very vulnerable countries receive adequate adaptation funding, it does not necessarily reach vulnerable communities. Some highly at-risk communities and countries lack financial, technology or human resource capacities. Corrupt governments or individuals sometimes siphon from funds en route to communities. Mitigation financing offers flexible tools for complicated situations. Similarly, adaptation finance innovations must be available to exposed communities despite the barriers.

A 2021 study<sup>40</sup> into climate adaptation financing in Zimbabwe found that awareness of climate change and its impacts has grown, and that it is becoming a government priority. Yet climate change policy and adaptation planning are still in their infancy. There are not yet policy frameworks to implement adaptation strategies and Zimbabwe has not been able to attract desperately needed public or private funding. Disharmony between the public and private sector is not conducive to public-private partnership funding models. The national government and multilaterals view adaptation differently.<sup>41</sup>

Adaptation is highly localised. Faced with the same climate hazards, community abilities to adapt vary drastically. Each community has unique vulnerabilities and resilience opportunities. <sup>42</sup> Despite this, adaptation finance is often driven internationally and nationally, excluding local governments and community leaders. Most climate financing is nationally focused and

### Botswana & eSwatini

RECEIVED THE LEAST
ADAPTATION FUNDING OF
ALL SADC COUNTRIES

very little is directed to or determined by local governments or community-based organisations.<sup>43</sup>

Adaptation planning and finance must be inclusive to be successful. A World Resources Institutes report analysing projects in Ethiopia, Kenya and Uganda found that local communities are often excluded from planning and designing interventions, rendering them ineffective. Priorities determined internationally or nationally often don't match local needs. Failing to engage local policymakers can create suspicion and frustration, and lower community ownership. This report further established that projects enabling civil society to create transparency and generate meaningful engagement improve climate adaptation outcomes, including spending efficiency.<sup>44</sup>

Pre-emptively relocating people to less-vulnerable places may protect lives and assets from future harm, while maintaining community ties

#### **Planned relocation**

Some communities and areas in Southern Africa could become uninhabitable as climate impacts increase. Sea-level rise, salinisation, acidification and desertification are already irreversible in some places. In certain cases, early warning systems, or improved infrastructure and technologies, support adapt-in-place strategies. In others, spending on these measures could be futile and have worse outcomes than planned mobility. A pre-emptive relocation to less-vulnerable places may protect lives, livelihoods and assets from future harm, while maintaining community ties.<sup>45</sup>

Planned relocation is defined as state-led resettlement of populations severely exposed to climate change impacts. <sup>46</sup> It differs from migration because it is a deliberate community intervention. Whereas migration is an individual decision with varied potential destinations, planned relocation is moving people systematically to a safer place with services and infrastructure. <sup>47</sup>

Planned relocations remain relatively uncharted and there is still uncertainty of how to conduct them effectively and efficiently. Most have been in response to sudden-onset disasters. Some have resulted in loss of land, property, livelihoods and food access that have further marginalised people and produced poor socio-economic outcomes.<sup>48</sup>

Interest in planned relocation as a potential strategy is growing, particularly in response to slow-onset climate impacts, <sup>49</sup> which have received far fewer policy and finance responses than rapid-onset impacts. Most laws and funding mechanisms are focused on disasters such as flooding and severe weather events. <sup>50</sup>

Planned relocation is difficult, particularly if it is to improve people's prospects. Most people have strong place attachment and do not want to leave their livelihoods, communities and homes, which are often their

Comoros & Angola

RECEIVED THE MOST CLIMATE FUNDS FOR ADAPTATION OF ALL SADC COUNTRIES biggest assets. Destination communities also often resist new groups and population shifts can have political and social ramifications.<sup>51</sup>

Examples of planned relocations in response to climate hazards are limited, particularly for slow-onset impacts. Small communities in India, Kiribati, Fiji and Panama, however, have pre-emptively relocated due to rising sea levels. <sup>52</sup> In Africa, state-led relocations are not new. Under colonial rule, large groups were denied land tenure and freedom of movement, and were forcefully relocated. Many post-colonial planned resettlements have occurred for other reasons that hold important lessons.

Most people have strong place attachment and don't want to leave their livelihoods, communities and homes, which are often their biggest assets

State-led relocations have taken place in Egypt, Ethiopia, Rwanda, Tanzania and Zambia. They have varied in purpose, but all include socio-economic redistribution and 'villagisation' goals and grouping rural people collectively, ostensibly to attain development goals.<sup>53</sup> In 2010, Ethiopia launched a 'villagisation' project to relocate 1.5 million people, citing poor agricultural yields. The reasons were political, including to clear land for commercial agriculture. According to Human Rights Watch, the moves were involuntary and many people were abused and threatened by armed forces and taken to areas without adequate food, health and education facilities.<sup>54</sup>

A University of Reading study examined planned climate-prompted relocations in eight countries in Africa and Asia. It highlighted three principles for success:<sup>55</sup>

- They should be a last resort when alternatives have been exhausted or are not available.
- They should be voluntary. Free and informed consent strongly influences long-term success.
- They should be developmental. People should be better off after moving.

Planned relocations that have not followed these principles have had poor results. Several have been staged for political objectives. People were worse off after relocation but political leaders refused to acknowledge failures.

Research has examined relocations following cyclones and floods in the Zambezi River Valley in 2007 and Mozambique in 2008. Mozambique received international funding to relocate small-scale farming communities from floodplains to high regions. National government promoted the move

30%

OF HOUSEHOLDS
RELOCATED AFTER
MOZAMBIQUE'S 2008
FLOODS RETURNED TO
THE FLOODPLAINS

to local communities. The new locations were close geographically, but in a less-fertile agricultural zone. Donor funds were used to create new livelihoods to compensate for lost livelihoods from subsistence farming. The study found that farmers relocated nearby who received greater technical and financial support enjoyed improved livelihoods.

Others relocated further away or who received less assistance were significantly worse off than before. About 30% of households returned to the floodplains. Those who were visibly worse off than before stayed only because of strong messaging that the new sites were more 'modern' or 'progressive' and provided better protection against the armed militant and political movement, Renamo. Here, failures were not related to financial support but to poor planning and implementation.<sup>56</sup>

#### Conclusion

Southern Africa has urgent climate adaptation needs, which will grow considerably into even greater threats to all aspects of society. While adaptation planning and implementation are still young, progress is rapid. Sound strategies are emerging to improve adaptive capacity and better track and monitor community resilience to climate change. It is promising that all stakeholders are making concerted efforts to increase not only the quantity of adaptation financing and projects, but quality.

Planned relocations should be part of adaptation planning and finance should be allocated. Given the history of forced removals under colonial- and minority rule and their poor record on the continent, such initiatives must be proactive and strategic. Waiting until there are no other options and relocating in haste will have far worse outcomes than strategic relocations that allow time for community buy-in and leadership, and significant coordination across government levels.

#### **Notes**

- C Watson and L Schalatek, Climate Finance Regional Briefing: Sub-Saharan Africa, Overseas Development Institute and Heinrich Böll Stiftung, February 2021, www.climatefundsupdate.org
- 2 https://reliefweb.int/sites/reliefweb.int/files/resources/WFP-0000129074. pdf.
- 3 S Stapleton et al, Climate change, migration and displacement: the need for a risk-informed and coherent approach, ODI and UNDP, November 2017, www.odi.org/publications/10977-climate-change-migration-anddisplacement-need-risk-informed-and-coherent-approach.

- World Food Programme, Climate change in Southern Africa, a position paper for the World Food Programme in the region, June 2021, https:// reliefweb.int/sites/reliefweb.int/files/resources/WFP-0000129074.pdf.
- 5 United Nations Environmental Programme, Emissions Gap Report 2020, 2021, www.unep.org/emissions-gap-report-2020.
- 6 Ibid
- 7 S Masike, Botswana's pragmatic approach to a climate-proof economy, NAP Global Network, 16 June 2020, https://napglobalnetwork. org/2020/06/botswanas-pragmatic-approach-to-a-climate-proof-economy/.
- 8 C Brandon and N Krishnan, Adaptation finance and investment, World Resources Institute, accessed 25 Aug 2021, www.wri.org/initiatives/ adaptation-finance-accountability-initiative.
- 9 United Nations Environmental Programme, Emissions Gap Report 2020, 2021, www.unep.org/emissions-gap-report-2020.
- T Randrianalijaona, Measuring the economic impact of cyclones in Madagascar, *The Conversation*, 8 April 2018, https://theconversation.com/measuring-the-economic-impact-of-cyclones-in-madagascar-90946.
- 11 K Nhundu et al, Economic losses from cyclones Idai and Kenneth and floods in Southern Africa: implications on Sustainable Development Goals, in G Nhamo, D Chikodzi (eds) Cyclones in Southern Africa. Sustainable Development Goals Series, 29 September 2021, https://doi. org/10.1007/978-3-030-74303-1 19.
- 12 The World Bank, Data Bank, https://data.worldbank.org/indicator/ NY.GDP.MKTP.CD?locations=MZ.
- 13 United Nations Environmental Programme, Emissions Gap Report 2020, 2021, www.unep.org/emissions-gap-report-2020.
- 14 S Eriksen et al, Adaptation interventions and their effect on vulnerability in developing countries: help, hindrance or irrelevance?, World Development Volume 141, May 2021, swww.sciencedirect.com/science/article/pii/ S0305750X20305118?via%3Dihub.
- 15 F Harvey, The Paris agreement five years on: is it strong enough to avert climate catastrophe?, The Guardian, 8 December 2020, www. theguardian.com/environment/2020/dec/08/the-paris-agreement-fiveyears-on-is-it-strong-enough-to-avert-climate-catastrophe.
- 16 F Harvey, Rich failing to help fund poor countries' climate fight, warns UN secretary general, *The Guardian*, 9 December 2020, www.theguardian. com/environment/2020/dec/09/rich-failing-help-fund-poor-countries-climate-fight-warns-un-chief-antonio-guterres.
- 17 United Nations Environmental Programme, Emissions Gap Report 2020, 2021, www.unep.org/emissions-gap-report-2020.
- 18 Ibid.
- 19 Ibid
- 20 A Mbiyozo, Migration: a critical climate change resilience strategy, Institute for Security Studies Policy Brief, 8 Dec 2020, https://issafrica. org/research/policy-brief/migration-a-critical-climate-change-resilience-strategy.
- 21 A Farley-Kiwanuka and S Yiga Farley-Kiwanuka, Migration as adaptation: addressing rural-urban migration in Uganda, Africa Portal, 27 May 2020, www.africaportal.org/ publications/migration-adaptation-addressing-rural-urban- migration-uganda/.
- J Boston et al, Designing a funding framework for the slow-onset impacts of climate change: insights from recent experiences with coastal retreat, Centre for Climate Change Economics and Policy and Grantham Research Institute on Climate Change and the Environment, London School of Economics and Political Science, August 2020, www.lse.ac.uk/ granthaminstitute/wp-content/uploads/2020/08/working\_paper\_343\_ Boston\_et\_al-1-1.pdf.
- 23 The International Federation of Red Cross and Red Crescent Societies, Smart Financing, World Disasters Report 2020, November 2020, https://www.ifrc.org/sites/default/files/2021-09/20201113\_WorldDisasters\_7.pdf.

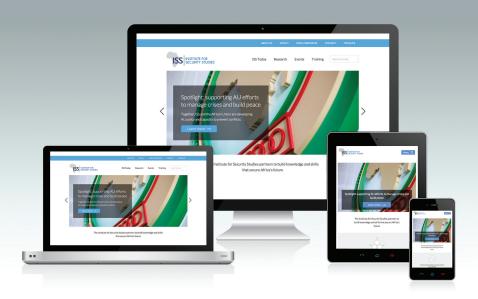
- 24 H Burmeister et al, Financing adaptation to climate change an introduction, Adelphi, 2019. www.adaptationcommunity.net/wp-content/uploads/2019/10/2019-10\_adelphi\_Adaptation-Briefings\_Financing-Adaptation\_an-Introduction.pdf.
- 25 United Nations Environmental Programme, Emissions Gap Report 2020, 2021, www.unep.org/emissions-gap-report-2020.
- 26 The International Federation of Red Cross and Red Crescent Societies, Smart Financing, World Disasters Report 2020, November 2020, https://www.ifrc.org/sites/default/files/2021-09/20201113\_WorldDisasters\_7.pdf.
- 27 N Krishnan, Following the money isn't enough: how civil society organizations provide accountability for climate adaptation finance, World Resources Institute, September 2020, www.wri.org/publication/followingthe-money.
- 28 Ibid.
- 29 The International Federation of Red Cross and Red Crescent Societies, Smart Financing, World Disasters Report 2020, November 2020, https://www.ifrc.org/sites/default/files/2021-09/20201113\_WorldDisasters\_7.pdf.
- 30 Climate Funds Update, Data Dashboard, https://climatefundsupdate.org/ data-dashboard.
- 31 Climate Funds Update, Data Dashboard, https://climatefundsupdate.org/ data-dashboard.
- 32 Ibid.
- 33 Ibid.
- 34 The International Federation of Red Cross and Red Crescent Societies, Smart Financing, World Disasters Report 2020, November 2020, https://www.ifrc.org/sites/default/files/2021-09/20201113\_WorldDisasters\_7.pdf.
- 35 D Doschi and M Garschagen, Understanding adaptation finance allocation: which factors enable or constrain vulnerable countries to access funding? 25 May 2020.
- 36 D Eckstein et al, Global Climate Risk Index 2021, Germanwatch, https://germanwatch.org/en/19777
- 37 Climate Funds Update, Data Dashboard, https://climatefundsupdate.org/data-dashboard/#1541245745457-d3cda887-f010.
- 38 The International Federation of Red Cross and Red Crescent Societies, Smart Financing, World Disasters Report 2020, November 2020, https://www.ifrc.org/sites/default/files/2021-09/20201113\_WorldDisasters\_7.pdf.
- 39 I Chirisa et al, Interrogating climate adaptation financing in Zimbabwe: proposed direction, Sustainability 2021, 13, 6517. https://doi. org/10.3390/su13126517.
- 40 Ibid.
- 41 Ibid.
- 42 Ibid
- 43 N Krishnan, Following the money isn't enough: how civil society organizations provide accountability for climate adaptation finance, World Resources Institute, September 2020, www.wri.org/publication/followingthe-money.
- 44 Ibid.
- 45 E Ferris and S Weerasinghe, Promoting human security: planned relocation as a protection tool in a time of climate change, *Journal on Migration and Human Security*, 2020;8(2):134-149. doi:10.1177/2331502420909305.
- 46 J Boston et al, Designing a funding framework for the slow-onset impacts of climate change: insights from recent experiences with coastal retreat, Centre for Climate Change Economics and Policy and Grantham Research Institute on Climate Change and the Environment, London School of Economics and Political Science, August 2020, www.lse.ac.uk/granthaminstitute/wp-content/uploads/2020/08/working\_paper\_343\_Boston\_et\_al-1-1.pdf.

- 47 Ibid.
- 48 E Ferris and S Weerasinghe, Promoting human security: planned relocation as a protection tool in a time of climate change, *Journal on Migration and Human Security*, 2020;8(2):134-149. doi:10.1177/2331502420909305.
- 49 Ibid
- 50 J Boston et al, Designing a funding framework for the slow-onset impacts of climate change: insights from recent experiences with coastal retreat, Centre for Climate Change Economics and Policy and Grantham Research Institute on Climate Change and the Environment, London School of Economics and Political Science, August 2020, www.lse.ac.uk/ granthaminstitute/wp-content/uploads/2020/08/working\_paper\_343\_ Boston\_et\_al-1-1.pdf.
- 51 Ibid.
- 52 Ibid.
- 53 A Arnall, Resettlement as climate change adaptation: what can be learned from state-led relocation in rural Africa and Asia? Climate and Development, 11:3, 253-263, DOI: 10.1080/17565529.2018.1442799, 2019
- 54 Human Rights Watch, Ethiopia: Ethiopia: forced relocations bring hunger, hardship, 16 January 2012, www.hrw.org/news/2012/01/16/ethiopiaforced-relocations-bring-hunger-hardship.
- A Arnall, Resettlement as climate change adaptation: what can be learned from state-led relocation in rural Africa and Asia? Climate and Development, 11:3, 253-263, DOI: 10.1080/17565529.2018.1442799, 2019
- 56 A Arnall et al, Flooding, resettlement, and change in livelihoods: evidence from rural Mozambique in Disasters, 2013, 37(3): 468–488, Overseas Development Institute, 2013, https://liverman.faculty.arizona.edu/sites/liverman.faculty.arizona.edu/files/2018-06/Arnall%20et%20al.%20-%20 2013%20%20Flooding,%20resettlement%20-and%20livelihoods%20 change%20evidence%20from%20rural%20Mozambique\_1.pdf.
- 57 N Krishnan, Following the money isn't enough: how civil society organizations provide accountability for climate adaptation finance, World Resources Institute, September 2020, www.wri.org/publication/followingthe-money.



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This policy brief is funded by the Hanns Seidel Foundation. The ISS is also grateful for support from the members of the ISS Partnership Forum: the Hanns Seidel Foundation, the European Union, the Open Society Foundations and the governments of Canada, Denmark, Ireland, the Netherlands, Norway, Sweden and the USA.

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