



Villagers tend their vegetables as part of Oxfam's Farmer's Field School, designed to mitigate the effects of climate change in West Timor.  
Photo: Tom Greenwood

# ADAPTATION AND THE \$100 BILLION COMMITMENT

Why private investment cannot replace public finance  
in meeting critical climate adaptation needs

Private finance has a vital role to play in the global response to climate change, but it is not a substitute for public finance. Developed countries have committed to mobilizing \$100 billion in climate finance per year by 2020 to support climate adaptation and mitigation in developing countries. Reliance on private finance over public to meet these financing goals presents a triple whammy for pro-poor adaptation. Private finance will struggle to meet the essential adaptation needs of poor and marginalized people; it overwhelmingly favours mitigation over adaptation; and it favours richer developing countries over less developed countries. COP19 in Warsaw must make commitments to scaling up public finance for adaptation, so that the world's poorest countries and communities are not left without promised adaptation support.

# 1 INTRODUCTION

Climate change is an immediate, grave, and growing threat to development, making the battle to overcome poverty ever harder and more expensive. International climate finance is vital in the global effort to combat climate change. The lives and livelihoods of poor women and men at increased risk of floods, hunger, droughts, and disease depend on it. But most rich countries are failing in their obligations and commitments to support developing countries to cope with a more hostile climate they did least to cause. They are also increasing the risk of climate change by failing to slash their emissions far or fast enough.

## Efforts to scale-up public finance have stalled

In 2009, developed countries committed to mobilizing \$100bn per year by 2020 to support adaptation and mitigation in developing countries. Yet four years on, with vulnerable developing countries facing climate-related shocks of increasing frequency and severity, there is no certainty on how they will be supported to adapt.

Efforts to scale up climate finance hit a wall at the 2012 international climate summit in Doha. The Fast Start Finance period came to an end,<sup>1</sup> and developed countries walked away without agreeing any new collective finance commitments for the coming years. And only a handful of countries stated what climate finance they would be providing in 2013-14.<sup>2</sup> The long-term commitment to mobilize \$100bn remains, but with no agreed roadmap, trajectory, or milestones for getting there. Without any such commitments, international climate finance is at risk of declining, when what is needed is an urgent and rapid scale-up.

*'Now the hard reality: no step change in overall levels of public funding from developed countries is likely to come anytime soon.'*

Todd D. Stern, US Special Envoy for Climate Change, October 2013

## High expectations for private finance

Developed countries are fiscally constrained, and momentum is gathering around the need to mobilize private finance as the solution to meeting the \$100bn commitment. In 2013, two US-hosted ministerial meetings and the pre-COP finance discussions focused almost exclusively on the role of private finance. Glaring uncertainties around the provision of public finance were barely discussed.

Women and men living in poverty are highly vulnerable to the impacts of climate change. How their adaptation needs will be supported is a question that must be front and centre in determining how international climate finance is scaled-up. Yet an analysis of the needs of the poorest has been alarmingly absent from discussions to date. The drive to scale-up private finance has been largely focused on mitigation. It lacks an analysis of the barriers and limits to private investment in adaptation in poorer countries, and an understanding of which activities and recipients are likely to benefit – and crucially – which are not.

## A 'triple whammy' for pro-poor adaptation

The upfront costs of moving to low-carbon, climate-resilient economies are high. Private investment has a critical role to play, given the scale of the challenge that adaptation and mitigation pose to countries, economies, and vulnerable communities.<sup>3</sup> But this paper argues that private finance cannot be a substitute for public finance, and a myopic focus on mobilizing private finance to meet the \$100bn commitment is unlikely to achieve pro-poor adaptation. Instead, over-reliance on private finance threatens to undermine pro-poor adaptation on three counts:

- Private finance will struggle to meet the essential adaptation needs of poor and marginalized people in all developing countries;
- It will favour mitigation activities, intensifying the neglect of adaptation finance; and
- Private finance will favour richer developing countries because they are more capable of absorbing private investment.

These countries must not be denied their fair share of vital support. The outcome of COP19 in Warsaw must be a commitment to an urgent scale-up in public finance for adaptation.

*The \$100bn commitment is one of the most important potential sources of public climate finance that poor and vulnerable countries are likely to have access to.*

## 2 ADAPTATION FINANCE: HOW MUCH AND FOR WHOM?

Adapting to climate change comes at a high price. From its work in developing countries, Oxfam knows that rising sea levels are already forcing people to move from their homes in the Pacific, Bangladesh, and elsewhere. Farmers in many parts of Africa are coping with the devastating consequences of prolonged drought. Poor consumers in many countries are regularly facing higher food prices as a result of climate impacts.

### How much? \$100bn is a floor not a ceiling

Estimates of adaptation costs in developing countries range from \$27bn to well over \$100bn per year (see Table 1). The true costs are likely to be much higher than this.<sup>4</sup> Where case studies and national assessments exist, many suggest adaptation costs in excess of existing global estimates. For example, the UNFCCC NEEDS study estimates Nigeria's annual adaptation costs to be around \$11bn per year between now and 2020 (10 per cent of the World Bank's global estimate),<sup>5</sup> while Kenya has estimated the cost of its National Climate Change Action Plan 2013–2017 (mitigation and adaptation) to be over \$12bn.<sup>6</sup>

Carbon emissions are rising at three per cent a year, putting the world on a potential path of 4°C or more of warming in this century. The \$100bn committed by developed countries is substantial, but it is likely

to be significantly lower than the actual financing required for adaptation. It is also substantially lower than the public finance required to catalyse the larger private investments needed for mitigation – estimated to be in excess of \$1 trillion globally – which is why Oxfam believes that the \$100bn commitment should be met through public finance.<sup>7</sup>

**Table 1: Estimates of adaptation finance needs in developing countries**

Source <sup>8</sup>	Finance needed (\$ billion per year)	Timescale and scenario	Notes
UNFCCC (2007)	27–66	Costs by 2030, based on IPCC SRES A1B and B1 scenarios.	This estimate is based on emissions scenarios that we are exceeding. It ignores many important aspects of adaptation.
Parry <i>et al.</i> (2009)	54–198, plus 65-300 for ecosystem protection	Costs by 2030, based on UNFCCC (2007), but modified to account for methodological concerns.	This estimate takes account of deficiencies in the UNFCCC scenario above. It estimates costs up to five times higher than the \$100bn commitment.
World Bank (2010)	75–100	Costs between 2010 and 2050 of adapting to 2°C of warming.	This estimate is based on warming of 2°C by 2050, but we are currently on track for higher levels of warming.

*Developed countries may be financially constrained, but the resources most developing countries have to cope with climate change are even more limited... many already lack sufficient resources to meet the basic needs of their citizens, such as health, education, and access to water.*

## For whom? Hardest hit and least able to pay

Developed countries may be financially constrained, but the resources most developing countries have to cope with climate change are even more limited. The challenge for poorer countries is particularly acute, given that many already lack sufficient resources to meet the basic needs of their citizens, such as health, education, and access to water.

Over the coming decades, billions of people in developing countries will face water and food shortages and increased risks to health and life as a result of climate change.<sup>9</sup> Women, children, and the elderly will be disproportionately affected. Climate finance is essential if we are to reduce and overcome these risks. Developed countries must live up to their commitments to deliver \$100bn per year by 2020 in a way that supports vulnerable populations most in need.<sup>10</sup>

### **Box 1: The international public finance gap for adaptation in developing countries**

- During the three-year Fast Start Finance period (2010-12), developed countries contributed around \$6bn in finance for adaptation (around 21 per cent of the total). This was less than the cost of the London Olympic Games.<sup>11</sup>
- Since 2003, the proportion of climate finance flowing to adaptation through dedicated climate funds is estimated to be only around 14 per cent, compared to mitigation which is around 77 per cent.<sup>12</sup>
- Demands for adaptation support in developing countries far outweigh the available funding: National Adaptation Programmes of Action (NAPAs) set out Least Developed Countries' (LDCs) areas of immediate adaptation need. More than 10 years on from the 2001 commitment to 'fully fund' NAPAs, developed country pledges amount to less than half of the finance required.<sup>13</sup>

International climate finance flows remain insignificant when compared with what developed countries spend on their own adaptation or on fossil fuel subsidies:

- The Netherlands is investing at least €1bn per year to protect low-lying land from flooding. In contrast, it contributed €60m to support adaptation in developing countries between 2010 and 2012.<sup>14</sup>
- Australia plans to spend \$12bn between 2008 and 2018 on domestic adaptation measures for water alone. Australia contributed \$300m to adaptation in developing countries between 2010 and 2012.<sup>15</sup>
- In 2011, Europe's subsidies for dirty energy were an estimated €26bn (\$42bn) – equivalent to more than the EU fair share of the \$100bn commitment.<sup>16</sup>

## **3 PRIVATE FINANCE AND THE \$100BN COMMITMENT: A 'TRIPLE WHAMMY' FOR THE POOREST**

An over-reliance on private finance in meeting the \$100bn commitment creates major risks that the adaptation needs of the poorest will not be met. This is because private finance will struggle to meet the essential adaptation needs of poor and marginalized people in all developing countries; it will favour mitigation measures over adaptation; and it will favour richer developing countries with better investment climates.

### **Private finance is too often poorly suited to the needs of the poorest**

Poor people's resilience to climate change relies on basic essential services and public goods that require public finance. The poorest are also often badly connected to markets, and community-based adaptation approaches that do not generate internal returns are unlikely to attract

private sector investment. For these reasons, significant public finance is vital, even where opportunities for private investment and public–private partnerships exist.

### **Essential services and public goods need public finance**

Climate change will create increased needs for essential services and public goods, such as water, healthcare, social protection, basic infrastructure and disaster preparedness. These must be affordable, of adequate quality, and accessible to those most in need.

It is estimated that two-thirds of the world's population lacks access to adequate social protections (including health benefits).<sup>17</sup> These are critical for building resilience against climate shocks and livelihoods stresses, and protecting people from increases in climate-related diseases.<sup>18</sup> In developing countries, these basic services are primarily publicly funded and publicly delivered, especially in higher performing and more redistributive systems.<sup>19</sup>

Scale-up of disaster risk reduction and early warning systems is essential, so that the poorest and most marginalized are better prepared to deal with climate shocks. Although the private sector may invest in some risk reduction measures to protect their own operations, private investment will never guarantee full coverage at the appropriate quality. For this reason FEWS NET – the pre-eminent famine early warning system – is delivered by private contractors but funded entirely through public money from USAID.

Climate change will have a major impact on the quality and availability of water in developing countries, and water investments are likely to be among the most costly adaptation measures needed.<sup>20</sup> Research by the Overseas Development Institute (ODI) indicates that the water sector in most developing countries is unattractive to private investors. This is 'due to the low price of water, as well as to the associated high risks (e.g. physical, community, reputational, geopolitical, and regulatory)'.<sup>21</sup> In poorer countries in particular, private investment has been extremely low. For example, over the last 10 years only 16 private investment water projects, worth \$141m in total, have reached financial closure in sub-Saharan Africa.<sup>22</sup> The very limited scope of private investment within the provision of water in poorer countries is a major barrier to investments in adaptation, meaning that significant public finance will be essential.

In developing countries, adaptation adds to the strain on already underfinanced basic infrastructure.<sup>23</sup> According to one study,<sup>24</sup> building and adapting infrastructure to withstand a changing climate, such as through improved flood defences, is often very costly. Such infrastructure has economy and society-wide benefits that extend beyond the private investor and therefore require a significant contribution from public finances.

### **The poor are badly connected to markets**

Private sector actors in developing countries have an essential role to play in building the resilience of their own operations, including the supply chains on which they depend. For a sector like agriculture, which

*The cost to every African country of keeping already substandard road infrastructure in its current condition in the face of climate change will be \$22-54 million per year.*

is vulnerable to increasing climate threats throughout the developing world, this presents a clear incentive and rationale for private investment. Such investments are vital, but they are only part of the solution.

There is no guarantee that functioning markets will always deliver benefits for poor people, but a basic pre-condition for this to even be possible is that poor people have to be connected to them. However, in many areas of high-risk adaptation, markets either do not function or the poorest communities are not connected to them.

Agriculture is a case in point. Globally, an estimated 500 million small-scale farms support around two billion people.<sup>25</sup> Of these, 2–10 per cent are currently connected to existing value chains – the rest are marginalized and excluded from formal markets.<sup>26</sup> Just two per cent of maize producers in southern Africa dominate the maize market.<sup>27</sup> For the poorest and least market-ready small-scale producers, with whom companies currently have little incentive to engage or support, there is a significant role for public finance in providing adaptation services and support.

### **Community-based adaptation is unlikely to attract private investment**

Adaptation cannot be solved through top-down approaches alone. Strategies must meet community needs, and the needs of those disproportionately affected by climate change, notably women. Community-based adaptation poses a number of challenges for the private sector. Processes of needs assessment, decision-making, and planning are complex, requiring extensive consultation and high transaction costs. They represent a different operating model from that usually associated with the private sector. Community-based adaptation is also usually too small-scale or fragmented to attract private interest; while identified project activities may not provide opportunities for private investment (see Box 4). Community-based adaptation can significantly build the resilience of affected communities, but it invariably requires public investment, or at a minimum requires strong incentives for private engagement, combined with extensive public support.

#### **Box 2: A community-based adaptation project in Bangladesh underscores the importance of public finance**

The Bangladesh NAPA includes a programme focused on the reduction of climate change hazards through coastal afforestation with community participation.<sup>28</sup> Analysis of the project activities shows that most are focused on ‘soft’ measures, such as social forestry programmes and capacity building. Aside perhaps from activities providing seeds or cultivation expertise, training, and technology, the NAPA project activities do not present obvious opportunities for private sector investment.<sup>29</sup> Attracting private investment in community capacity building and adaptation is challenging. It is of note that all of the community-based afforestation projects that have been funded in Bangladesh have been backed by public finance from the Global Environment Facility, the Least Developed Country Fund, and the national government.

## Private finance favours mitigation over adaptation

Both adaptation and mitigation require high levels of financial support and action from the public and private sectors. However, analyses of existing global private investment flows show a preference for mitigation over adaptation.

- The ODI recently compiled data on 73 initiatives aimed at using public money to mobilize private climate finance. Of these investments, more than 99 per cent were spent on mitigation projects.<sup>30</sup>
- The Climate Finance Landscape 2013 study estimates that the private sector contributed almost 62 per cent of global climate finance flows in 2010-11 (\$224bn), and that all of this money was for mitigation. The report acknowledges that private finance for adaptation projects does exist, but that it is difficult to track and estimate the level of this financing.<sup>31</sup>

### Box 3: Why adaptation in developing countries poses challenges for private sector investment

Adaptation action has characteristics which present challenges for private sector investment, particularly in poorer countries:

**Adaptation often requires intervention in areas that are traditionally the responsibility of the public sector:** Many adaptation actions provide benefits for a country's economy and its society as a whole for which no single private sector entity can or should foot the bill, such as social protection or ecosystem restoration/protection. Whilst the private sector may be a delivery partner, such interventions generally are not and should not be governed by markets and profit-orientated principles. Hence they require predominantly public funds.

**Markets are limited or do not exist:** The private sector plays a strong role in key sectors, with mitigation potential in all countries, in the energy sector in particular. In contrast, in many areas of adaptation (such as ecosystems or water), and in LDCs in particular, markets are limited or do not function. This makes it difficult to introduce incentives and mechanisms for private sector investment.

**Long-term investment horizons and uncertainty of climate impacts:** Some companies' business planning horizons may be too short to consider long-term climate change impacts.<sup>32</sup> Uncertainty about how climate change will manifest at a local level can also increase capital costs and make basic questions of risk and return hard to quantify. These factors create barriers to private sector investment in adaptation.<sup>33</sup>

**High transaction costs:** Adaptation action is complex, location specific, and often requires detailed knowledge of local communities. This can result in prohibitive transaction costs.

*A focus on mobilizing private finance – which has flowed almost exclusively to mitigation – risks intensifying the ongoing neglect of adaptation.*

Historical patterns cannot be the sole indicator of future opportunities. But the marginal contribution of private finance to developing country adaptation to date, combined with the challenges set out above, raises real concerns about the potential for significant scale-up. A focus on mobilizing private finance – which has flowed almost exclusively to mitigation – risks intensifying the ongoing neglect of adaptation.

## Low-income countries are likely to be neglected by private sector investment

Private sector investment is spread unevenly between developing countries.<sup>34</sup> Domestic and cross-border investment are highest in emerging economies. Poor countries attract the least foreign investment and have smaller and less-established formal private sectors.

- Global foreign direct investment (FDI) flows in 2012 were \$1.35 trillion, of which LDCs received 1.9 per cent.<sup>35</sup> Over the period 2000-10, the LDC share of world FDI flows was only 0.96 per cent.<sup>36</sup>
- The formal private sector in poorer countries is significantly less developed than in richer developing countries, which presents a challenge to private investment.<sup>37</sup> For example, in 2011 the per capita value of public and private sector investments (excluding FDI) was significantly lower in low income countries (\$119) and lower-middle income countries (\$526.4) than in high income countries (\$6,751).<sup>38</sup>
- The World Bank's 'Ease of doing business' index is an imperfect ranking, but it illustrates that poorer countries are perceived to be less attractive to private investors. In 2013, high and upper-middle income countries had average ranks of 40 and 83 respectively out of a total of 185 countries, whilst only two low income countries featured in the top 100.<sup>39</sup>
- LDCs have attracted a tiny fraction of Clean Development Mechanism investments, which have overwhelmingly flowed to richer developing countries that offer higher returns and lower perceived risks. China has secured over 50 per cent of investment to date, and India nearly 20 per cent.<sup>40</sup>
- ODI research on 73 climate finance initiatives using public money to mobilize private finance, found that 84 per cent of investment was directed toward middle-income countries.<sup>41</sup>

*If mobilization of private finance becomes a dominant priority in meeting the \$100bn commitment, flows will continue to gravitate towards upper middle and high income developing countries... chasing the money and opportunity to mobilize rather than need.*

### Box 4: FDI flows may not match adaptation priorities

Not only do poor countries attract little FDI, but there seems little scope in re-directing that which they do attract to build adaptive capacity as it is often in sectors which may not reflect their adaptation priorities. In 2011, Bangladesh attracted \$1.1bn in FDI.<sup>42</sup> There seems to be little overlap between current FDI flows and priority areas for adaptation. For example, agriculture received only \$5.6m – 0.5 per cent of Bangladesh's total FDI – and construction even less. Similarly, of the 10 sectors identified by the Board of Investment Bangladesh as having strong investment potential, only 'agribusiness' was of relevance to adaptation.<sup>43</sup>

Nepal receives the lowest amount of FDI for the South Asia region - \$95m in 2011.<sup>44</sup> Calculations based on data available from the Department of Industry for 2011 demonstrate that areas of priority for adaptation do not receive much investment. The manufacturing and energy-based sectors receive the most (38 per cent and 21 per cent respectively), while FDI for agriculture is the lowest at one per cent of total inflows.<sup>45</sup>

As poorer countries develop economically, conditions for private sector action and investment in adaptation will improve, and policy and regulatory frameworks and incentives can help to foster that development. But creating enabling environments for investment requires significant government capacity, which is lower in poorer countries. Such is the scale of transformation needed in many poor countries that private sector investment is unlikely to replace the overriding need for substantial public support for adaptation in the short to medium term – even in the case of countries that develop rapidly.

If mobilization of private finance becomes a dominant priority in meeting the \$100bn commitment, in the short- to medium-term, flows will continue to gravitate towards upper middle and high income developing countries where there are more immediate investment opportunities: chasing the money and opportunity to mobilize rather than need. These distributional effects risk intensifying the inequitable disbursement of climate finance provision, which to date has favoured emerging economies and neglected LDCs.<sup>46</sup>

## 4 CONCLUSION AND RECOMMENDATIONS

There is increasing developed country enthusiasm for the role that private finance can play in meeting the \$100bn commitment. But for adaptation in the world's poorest countries and communities there is currently little evidence to support the high expectations that private finance will be able to deliver to the scale required.

Public finance has a major role to play in the delivery of essential services, public goods, and other activities that are vital to increasing poor people's resilience to climate change. Along with strong policy frameworks, public finance is also essential for realizing the potential of private sector investment in adaptation.

Failure to scale-up public finance will starve vulnerable people of vital support. It will also undermine trust and the potential for a successful global climate agreement in 2015 that is applicable to all.<sup>47</sup>

COP19 in Warsaw in November 2013 must turn ambiguity into action by advancing strategies to scale-up public finance for adaptation, and by providing assurances that commitments to critical support over the coming years will be met.

### At COP 19:

- **Parties must agree to secure a minimum of at least 50 per cent of all public climate finance for adaptation.** This is in recognition of the vital importance of public finance to adaptation, and in order to address the current neglect of financial support. Agreeing to allocate at least 50 per cent will ensure that, as the public finance pot expands (or if it remains small), adaptation will be guaranteed a fairer share of vital support.<sup>48</sup>

*Mobilizing private finance is a means, not an end. There is a real risk that a myopic focus on mobilizing private finance will leave the poorest neglected.*

- **All developed countries must set out what public climate finance they will provide over the period 2013–2015.** This includes most countries that made political announcements in Doha, which now need to strengthen their commitments. Commitments must be new and additional to existing aid commitments and provided in a way that is transparent and comparable.
- **Parties should agree on a global roadmap for scaling-up public climate finance from 2013 to 2020.** The \$100bn is a collective commitment; therefore collective ambition and accountability are needed to meet it. The roadmap needs to include intermediate targets for public climate finance levels for the years 2015 and 2017.
- **Parties should agree on steps to progress alternative sources of public finance to supplement budget contributions by governments.** Potential sources include: revenues from carbon pricing of international shipping and aviation emissions; revenue raised from the EU's Financial Transaction Tax; revenues raised from the EU- ETS and other emissions trading schemes; redirection of fossil fuel subsidies; and allocation of revenues recouped from addressing tax avoidance in developed countries.
- **Parties should agree to carry out a bottom-up assessment of needs for pre-2020 and post-2020 adaptation finance, including an assessment of the potential scale of public finance required.** This should be guided by the latest science, and include scenarios for different emission and temperature increase trajectories.

# NOTES

All URLs last accessed November 2013.

- <sup>1</sup> The Fast Start Finance period committed developed countries to mobilizing \$30bn in climate finance between 2010 and 2012.
- <sup>2</sup> Only the UK, Germany, Denmark, Sweden, Finland, Norway, and France made announcements in Doha on their provision of climate finance post the Fast Start Finance period. Most were limited in detail and only for 2013.
- <sup>3</sup> M. Forstater, S. Huq and S. Zadek (2009) 'The Business of Adaptation', London: IIED, [http://www.zadek.net/wp-content/uploads/2010/01/THE-BUSINESS-OF-ADAPTATION-BRIEFING-PAPER\\_November2009.pdf](http://www.zadek.net/wp-content/uploads/2010/01/THE-BUSINESS-OF-ADAPTATION-BRIEFING-PAPER_November2009.pdf)
- <sup>4</sup> For example, most adaptation estimates do not account for the significant implications of catastrophic climate impacts, faster warming, or costs of sudden shocks. M. Parry *et al.* (2009) 'Assessing the Costs of Adaptation to Climate Change. A Review of the UNFCCC and Other Recent Estimates'. <http://pubs.iied.org/pdfs/11501IIED.pdf>
- <sup>5</sup> UNFCCC (November 2010) 'Synthesis Report on the National Economic, Environment and Development Study (NEEDS) for Climate Change Project', Bonn: UNFCCC, <http://unfccc.int/resource/docs/2010/sbi/eng/inf07.pdf>
- <sup>6</sup> The total estimated investment costs required to implement the National Climate Change Action Plan is estimated to be one trillion Kenyan Shillings (\$12.76bn) from 2013 to 2017. Government of Kenya (2012) 'National Climate Change Action Plan 2013 - 2017 Executive Summary', [http://cdkn.org/wp-content/uploads/2012/12/Kenya-Climate-Change-Action-Plan\\_Executive-Summary.pdf](http://cdkn.org/wp-content/uploads/2012/12/Kenya-Climate-Change-Action-Plan_Executive-Summary.pdf)
- <sup>7</sup> For example, see statements by the International Energy Agency (IEA): 'IEA urges governments to seize the opportunity to accelerate clean energy deployment', press release, IEA, <http://www.iea.org/newsroomandevents/pressreleases/2012/april/name,26949,en.html>
- And a study from Imperial College London that says society can avoid the worst effects of climate change if \$2 trillion a year (1 per cent of GDP in 2050) is invested: Energy Futures Lab and the Grantham Institute for Climate Change (2013) 'Halving Global CO2 by 2050: Technologies and Costs', Imperial College London, <http://www3.imperial.ac.uk/climatechange/publications/collaborative/halving-global-co2-by-2050>
- <sup>8</sup> See: UNFCCC (2007) 'Climate Change: Impacts, Vulnerabilities and Adaptation in Developing Countries', Bonn: UNFCCC, <http://unfccc.int/resource/docs/publications/impacts.pdf>; M. Parry *et al. op.cit.*; World Bank (2010) 'The Costs to Developing Countries of Adapting to Climate Change. New Methods and Estimates', Washington DC: World Bank, <http://documents.worldbank.org/curated/en/2010/01/12563514/costs-developing-countries-adapting-climate-change-new-methods-estimates-global-report-economics-adaptation-climate-change-study>
- <sup>9</sup> UNFCCC (2007) *op. cit.*
- <sup>10</sup> As set out in both the Copenhagen Accord: [https://unfccc.int/documentation/documents/advanced\\_search/items/6911.php?prif=600005735#beg](https://unfccc.int/documentation/documents/advanced_search/items/6911.php?prif=600005735#beg); and the Cancun Agreements: <http://unfccc.int/resource/docs/2010/cop16/eng/07a01.pdf>
- <sup>11</sup> See: Oxfam (2012) 'The Climate 'Fiscal Cliff': An evaluation of Fast Start Finance and lessons for the future', Oxfam Media Brief, November 2012, Oxford: Oxfam International, <http://www.oxfam.org/sites/www.oxfam.org/files/oxfam-media-advisory-climate-fiscal-cliff-doha-25nov2012.pdf>
- The UK government estimates the total investment in the London Olympic Games was £8.9bn from the public sector and £2bn from the private sector. UK Government and Mayor of London (2013) 'Inspired by 2012: The legacy from the London 2012 Olympic and Paralympic Games', [https://www.gov.uk/government/uploads/system/uploads/attachment\\_data/file/224148/2901179\\_OlympicLegacy\\_acc.pdf](https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/224148/2901179_OlympicLegacy_acc.pdf)
- <sup>12</sup> The remainder is multiple-foci. See: Climate Funds Update 'Focus of Funding', <http://www.climatefundsupdate.org/themes>
- <sup>13</sup> Forty-nine NAPAs have been submitted to date. Total costs of NAPAs for LDCs are estimated to be approximately \$2bn, but only \$775m has been pledged (as of July 2013). This is despite the commitment on establishment of the LDC Fund in 2001 to 'fully fund' the NAPAs. See: Global Environment Facility, 'What is the Least Developed Countries Fund (LDCF)?', <http://www.thegef.org/gef/LDCF>
- A breakdown of the amounts pledged can be found here: <http://www.climatefundsupdate.org/listing/least-developed-countries-fund>
- <sup>14</sup> See: the State Budget Delta Fund for the Netherlands' 2014 budget proposal: [http://www.rijksbegroting.nl/2014/voorbereiding/begroting.kst186664\\_16.html](http://www.rijksbegroting.nl/2014/voorbereiding/begroting.kst186664_16.html)
- The Netherlands' Fast Start Finance commitment is set out in a flyer produced by the government: [http://www.forestcarbonpartnership.org/sites/forestcarbonpartnership.org/files/Documents/PDF/Jun2010/10\\_05\\_28\\_Flyer\\_Fast\\_Start\\_CIM.pdf](http://www.forestcarbonpartnership.org/sites/forestcarbonpartnership.org/files/Documents/PDF/Jun2010/10_05_28_Flyer_Fast_Start_CIM.pdf)
- <sup>15</sup> Numbers stated are US dollars. See Australia's 'Water for the future' project: <http://www.environment.gov.au/system/files/resources/2c587793-cb4a-4db4-9985-b30e959bf336/files/securing-water-future.pdf>
- Australia's Fast Start Finance commitment is set out here: <http://www.climatechange.gov.au/sites/climatechange/files/files/Australia-FastStart-Report-2012-PDF.pdf>

- <sup>16</sup> See Climate Action Network (2013) 'Commissioner Oettinger censors Commission documents to support the fossil fuel industry', October 2013, <http://www.climnet.org/ets-articles-list-2/611-commissioner-oettinger-doctors-commission-documents-to-support-the-fossil-fuel-industry>
- <sup>17</sup> M. Bachelet (2011) 'Social Protection Floor for a Fair and Inclusive Globalisation', Geneva: International Labour Organisation, [http://www.ilo.org/global/publications/books/forthcoming-publications/WCMS\\_165750/lang-en/index.htm](http://www.ilo.org/global/publications/books/forthcoming-publications/WCMS_165750/lang-en/index.htm)
- <sup>18</sup> For example, malaria, heat stroke, and cholera. Climate change already contributes to the global burden of disease and premature deaths. See U. Confalonieri *et al* (2007) 'Human Health', in M.L. Parry *et al* (eds.) (2007) 'Climate Change 2007: Impacts, Adaptation and Vulnerability. Contribution of Working Group II to the Fourth Assessment Report of the Intergovernmental Panel on Climate Change', Cambridge: Cambridge University Press, <http://www.ipcc.ch/pdf/assessment-report/ar4/wg2/ar4-wg2-chapter8.pdf>
- <sup>19</sup> WHO Commission on the Social Determinants of Health (2007) 'Challenging Inequity through Health Systems', Geneva: WHO, [http://www.who.int/social\\_determinants/resources/csdh\\_media/hskn\\_final\\_2007\\_en.pdf](http://www.who.int/social_determinants/resources/csdh_media/hskn_final_2007_en.pdf).  
No low- or middle-income country has achieved universal or near universal access to health care in Asia without, for example, relying solely or predominantly on tax-funded public sector delivery.
- <sup>20</sup> See, for example, analysis of adaptation costs in Africa: S. Fankhauser and G. Schmidt-Traub (2010) 'From Adaptation to Climate-resilient Development: The costs of climate-proofing the Millennium Development Goals in Africa', London: CCCEP and Grantham Institute, <http://www.lse.ac.uk/GranthamInstitute/publications/Policy/docs/PPFfromadaptationFeb10.pdf>
- <sup>21</sup> I. Massa (2011) 'Sub-Saharan Africa in global trends of water investment. Drivers and the challenge of the private sector', in *European Report on Development*, London: ODI, [http://erd-report.eu/erd/report\\_2011/documents/dev-11-001-11researchpapers\\_massa.pdf](http://erd-report.eu/erd/report_2011/documents/dev-11-001-11researchpapers_massa.pdf)
- <sup>22</sup> Investments in developing countries are highly concentrated in China (around 60 per cent since 2001) with very few low-income countries receiving investment. E. Perard (2012) 'Private Sector Participation in Water Infrastructure: Review of the last 20 Years and the Way Forward', Public Private Infrastructure Advisory Facility, Washington DC: World Bank, <http://ppi.worldbank.org/features/Feb-2012/Review-of-PSP-in-water-infrastructure-over-the-last-20-years.pdf>
- <sup>23</sup> H. Strauss (2010) 'Public and Private Financing of Infrastructure: Policy Challenges in Mobilizing Finance', EIB Papers, Luxembourg: European Investment Bank, [http://www.eib.org/attachments/efs/eibpapers/eibpapers\\_2010\\_v15\\_n02\\_en.pdf](http://www.eib.org/attachments/efs/eibpapers/eibpapers_2010_v15_n02_en.pdf)
- <sup>24</sup> The cost of upgrading and maintaining Africa's millions of miles of secondary roads and tracks, which can be expected to deteriorate even further with climate change, is not calculated. P. Chinowsky and C. Arndt (2012) 'Climate change and roads: A dynamic stressor–response model', *Review of Development Economics*, 16(3): 448–62.
- <sup>25</sup> IFAD (undated) 'Food Prices: Smallholder Farmers Can Be Part of the Solution', <http://www.ifad.org/operations/food/farmer.htm>
- <sup>26</sup> See: E. Sahan and M. Mikhail (2012) 'Private Investment in Agriculture: Why it's Essential and What's Needed', Oxfam Discussion Paper, Oxford: Oxfam, p.4, <http://oxf.am/JC2>  
Drawing on research from: G. Jayadevan (2011) 'Growing partnerships – private sector working with farmers in Sri Lanka', in S. Baden *et al* (eds.) *Small Farmers, Big Change: Scaling Up Impact in Smallholder Agriculture*, Rugby: Practical Action Publishing, <http://oxf.am/wkZ>
- <sup>27</sup> *Ibid.*
- <sup>28</sup> Ministry of Environment and Forest (2005) 'National Adaptation Programme of Action (NAPA)', Dhaka: Government of the People's Republic of Bangladesh, <http://unfccc.int/resource/docs/napa/ban01.pdf>
- <sup>29</sup> Applying International Finance Corporation (IFC) analysis of where market opportunities may exist as set out in:  
S. Patel (2011) 'Climate Finance: Engaging the Private Sector', IFC, [http://www.ifc.org/wps/wcm/connect/topics\\_ext\\_content/ifc\\_external\\_corporate\\_site/home/publications/publication\\_climatefinance](http://www.ifc.org/wps/wcm/connect/topics_ext_content/ifc_external_corporate_site/home/publications/publication_climatefinance);  
Asian Tiger Capital Partners (2010) 'A strategy to engage the private sector in climate change adaptation in Bangladesh', IFC, [http://www.climateinvestmentfunds.org/cif/sites/climateinvestmentfunds.org/files/IFC\\_pres\\_CC\\_PS\\_V8\\_Sep12\\_010-IFC\\_%20sk.pdf](http://www.climateinvestmentfunds.org/cif/sites/climateinvestmentfunds.org/files/IFC_pres_CC_PS_V8_Sep12_010-IFC_%20sk.pdf)
- <sup>30</sup> Initiatives from the UK, Japan, Germany, and the US, between 2010 and 2012, were reviewed. S. Whitley (2013) 'Five Early Lessons from Donors' Use of Climate Finance to Mobilise the Private Sector', February, London: ODI, <http://www.odi.org.uk/opinion/7268-climate-finance-private-sector-donor-lessons>
- <sup>31</sup> Furthermore, the report states that 'the predominance of the public sector in delivering adaptation finance stems from its long-standing expertise in providing development assistance in areas with relevance to adaptation.' Deficiencies in tracking private sector finance for adaptation relate in part to the fact that 'there is still little agreement on what qualifies as adaptation finance or ... what qualifies as an adaptation intervention ... most institutions do not yet have a proper methodology for measuring adaptation finance.' B. Buchner *et al* (2013) 'The Global Landscape of Climate Finance 2013', Climate Policy Initiative, p. 12, <http://climatepolicyinitiative.org/publication/global-landscape-of-climate-finance-2013/>

- <sup>32</sup> S. Agrawala (2013) 'Private Sector Engagement in Adaptation to Climate Change: Approaches to Managing Climate Risks', OECD Environment Working Paper No. 39, Paris: OECD Publishing, <http://dx.doi.org/10.1787/5kg221jkf1g7-en>
- <sup>33</sup> Questions like: Is the future going to be wetter or drier and what will that mean for agricultural production? Where, when and by how much might sea levels rise and how will that affect the value of coastal development? And uncertainties associated with local climate impacts – for example, whether to build for wetter or drier conditions in the future – add to the cost of capital, making private finance even more difficult to attract. See discussion in D. Helm (2010) *op. cit.*
- <sup>34</sup> A. Atteridge (2011) 'Will Private Finance Support Climate Change Adaptation in Developing Countries? Historical Investment Patterns as a Window on Future Private Climate Finance', Stockholm: Stockholm Environment Institute, <http://www.sei-international.org/mediamanager/documents/Publications/Climate/SEI-WP-2011-05-Private-Sector-Adaptation-Finance-ES.pdf>
- <sup>35</sup> UNCTAD (2012) 'World Investment Report 2013: Global Value Chains: Investment and Trade for Development', Geneva: UNCTAD, [http://unctad.org/en/PublicationsLibrary/wir2013\\_en.pdf](http://unctad.org/en/PublicationsLibrary/wir2013_en.pdf)
- <sup>36</sup> Author's analysis using data from the UNCTAD database: <http://unctadstat.unctad.org/>
- <sup>37</sup> Whilst this may be challenging, using public finance to mobilize private investment in the domestic private sectors of developing countries is preferable to reliance on transnational co-operations, as set out in: J. Pereira (2013) 'Pro-Poor Climate Finance: Is There a Role for Private Finance in the Green Climate Fund?', Washington DC: Friends of the Earth US and Pan African Climate Justice Alliance, <http://www.foe.org/news/archives/2013-04-pro-poor-climate-finance-is-there-a-role-for-private>
- <sup>38</sup> J. Pereira (2013) *op. cit.*  
Data on per capita gross capital formation was elaborated by J. Pereira using the World Bank World Development Indicators Database (2012).
- <sup>39</sup> Authors calculations based on data in World Bank (2013) 'Doing Business 2013', <http://www.doingbusiness.org/custom-query>
- <sup>40</sup> See: UNFCCC statistics, 'Distribution of registered projects by host party' (Data as of 30 September 2013), [http://cdm.unfccc.int/Statistics/Public/files/201309/proj\\_reg\\_byHost.pdf](http://cdm.unfccc.int/Statistics/Public/files/201309/proj_reg_byHost.pdf)
- <sup>41</sup> S. Whitley (2013) *op. cit.*
- <sup>42</sup> UNCTAD (2012) *op. cit.*
- <sup>43</sup> Only a few of the opportunities identified were relevant to priority adaptation action in the agriculture sector. See 'potential sectors' section of the Board of Investment Bangladesh website <http://www.boi.gov.bd>
- <sup>44</sup> UNCTAD (2012) *op. cit.*
- <sup>45</sup> R. Adhikari (2013) 'Foreign Direct Investment in Nepal: Current status, prospects, challenges', Working Paper No. 01/13, Kathmandu: SAWTEE, [http://www.sawtee.org/Research\\_Reports/R2013-01.pdf](http://www.sawtee.org/Research_Reports/R2013-01.pdf)
- <sup>46</sup> See Climate Funds Update data on recipient countries, <http://www.climatefundsupdate.org/country-pages>
- <sup>47</sup> An agreement 'applicable to all' seems unlikely to emerge if developing countries have not seen increased action on finance in the period leading up to that agreement.
- <sup>48</sup> Oxfam believes that the \$100bn commitment should be met through public finance, and that the scale of public finance needed for adaptation is in excess of \$100bn. In meeting the \$100bn commitment, Oxfam therefore believes that at least 50 per cent should be allocated to adaptation – that is \$50bn in public finance.



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