Getting to Zero

A Poverty, Environment and Climate Call to Action for the Sustainable Development Goals

About the Poverty-Environment Partnership

The Poverty-Environment Partnership was established after the 2002 World Summit on Sustainable Development as an informal network of like-minded organisations committed to ending extreme poverty while sustaining the environment. PEP focused on the achievement of the Millennium Development Goals, playing a significant role in building a new evidence-based narrative on how the environment matters to the livelihoods and well-being of poor and vulnerable groups, and on the need for integrated approaches to poverty reduction and environmental management. With the agreement of the Sustainable Development Goals in 2015, the PEP committed to putting the goals into action at the country level with poverty reduction, climate resilience and environmental sustainability at their heart. This is presented in this paper as the 'getting to zero' call to action, in terms of reaching zero extreme poverty, zero net greenhouse house gas emissions, and zero net loss of natural assets. This call to action will shape PEP's future strategy as presented in the concluding section of this paper. Further information is available at www.povertyenvironment.net/partnership.

Disclaimer

While PEP papers and reports have benefited from discussions and input from the PEP Network, they do not necessarily represent a consensus among network participants and their funders on any given point. Although the information given in this report is the best available to the authors at the time, PEP and its members cannot be held liable for its accuracy and correctness.

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SDG 1: End poverty in all its forms everywhere

Urban residential area; Karachi, Pakistan

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Foreword

Since the World Summit on Sustainable Development in 2002, the world has been able to celebrate accelerated progress in reducing income poverty. The Millennium Development Goal of halving the proportion of people living on less than US$1.25 a day by 2015 was met five years early.
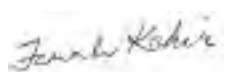
But there are still major problems in the environmental deprivations that affect poor people and developing countries disproportionately: climate impacts, 'land grabs', environmental injustices, unsustainable use of natural capital, and an increase in the number of slum-dwellers to 860 million. These problems all threaten development prospects. They have held back almost all Least Developing Countries from 'graduating' – and they explain why it will be increasingly difficult to eradicate poverty in middle-income countries. International cooperation in tackling linked poverty, environment and climate problems is therefore now a priority.

Formed in 2002 by development assistance and environmental groups, the Poverty-Environment Partnership understands that the crises of poverty, environment, climate and unequal economic growth are intimately linked. That there are linked structural barriers which leave environment and poverty issues with weaker voices in decision making and which tend to be marginalised. That well-meaning plans alone are not enough — people and business as well as government need to be mobilised. But also that progress is possible with an inclusive, integrated approach. The Poverty-Environment Partnership offers both a platform and — after 14 years of experience — a tremendous knowledge store of compelling evidence of how to structure such an approach, with examples of success to promote and build on.

2015 ushered in a hugely promising era, with the Paris climate agreements and the Sustainable Development Goals. For the first time, there are goals for all countries — that are integrated, universal and transformative. There is a realistic time-frame — to the year 2030. And there is greater political will and understanding — notably tackling climate change and building resilience to its impacts, and to 'leave no one behind.' But how can this be implemented in each country?
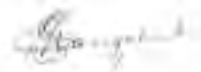
This paper makes the case that poverty, environment and climate linkages must no longer be marginalised if the 2030 agenda is to be achieved. It proposes a triple vi-

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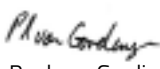
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sion for the next 15 years of "Zero extreme poverty, zero net climate emissions, zero net loss of natural assets" to keep these issues top of the agenda. In other words: 'leaving no-one behind' in eradicating extreme poverty; cutting greenhouse gas emissions so they match carbon fixation; and ensuring that net quantities and qualities of natural resources and their capabilities do not diminish, and as much as possible are restored.

Action must look towards the structural changes needed for wide-scale investment in inclusive, integrated institutions and finance that will enable poor groups and countries to achieve the Sustainable Development Goals at scale. The paper lays out a four-part call to action for countries and international cooperation:

① Increased empowerment and rights: poor women and men must be recognised, empowered and engaged — so that they can be effective agents and rights holders in their own future.

② Integrated institutions: an integrated approach is needed to develop inclusive and transformative institutions — creating resilience and achieving collective action on systemic opportunities and risks.

③ Inclusive finance and business: investment and business rules and mechanisms must be reformed — to better engage with poor people and environments too often marginalised by the prevailing systems.

④ New messages and metrics: the messages, 'business cases' and information used in poverty, environment and climate policies must be improved — to ensure inclusion, galvanise action, and measure real progress.

We, the undersigned Poverty-Environment Partnership members and like-minded organisations, are committed to supporting this call to action to tackle poverty, environment and climate issues.
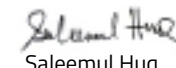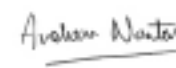
In 2016, the Poverty-Environment Partnership will be developing its strategy for collaboration with poor women and men and developing countries, helping to fully achieve the Sustainable Development Goals through the 'triple zero' call to action.

June 2016

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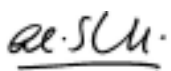
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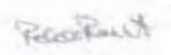
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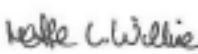
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Executive summary

SDG 2: **End hunger, achieve food security and improved nutrition and promote sustainable agriculture**
Organic rice harvest; China

The 2002 World Summit on Sustainable Development was a milestone in bridging poverty reduction and environmental management — two arenas that had been treated separately in spite of their strongly linked root causes and potential solutions. It gave rise to the Poverty-Environment Partnership (PEP), a network committed to ending extreme poverty while sustaining the environment. PEP chose to focus on comprehensive poverty reduction initiatives that offered potential to integrate poverty reduction with environmental management: initially Poverty Reduction Strategy papers, and later the Millennium Development Goals. Considerable success has been achieved by PEP members with country partners at project and sector levels. But these initiatives were not complemented by a globally agreed policy mandate for linking poverty and environment.

Thirteen years later, 2015 produced that policy framework. First an agreement on development financing was reached in Addis Ababa, with a renewed focus on domestic resource mobilisation and tackling tax evasion. Then in Sendai consensus was achieved on making disaster risk reduction a central element of poverty reduction. The transition from the 'siloed' Millennium Development Goals to 17 integrated Sustainable Development Goals (SDGs) was committed to in New York — aiming at zero extreme poverty by the year 2030, in ways that more fully integrate environmental, social and economic concerns. The subsequent Paris climate agreement plotted a course to net zero global greenhouse gas emissions — with, for the first time, strong engagement by the Least Developed Countries. All parties to the agreement committed to reduce extreme poverty while lowering climate emissions through their climate plans, known as Nationally Determined Contributions.

This paper builds on this new global sustainable development framework: making the case to mainstream poverty, environment — and now climate — issues into the centre of efforts to implement the SDGs, Nationally Determined Contributions and other initiatives towards the 2030 agenda. The paper addresses the significant scale of linked poverty, environment and climate problems and emphasises the need for structural reforms, especially to improve inclusion.

The paper updates the **context** — with a stock-take on how linked poverty, environment and climate issues have been addressed together. It makes the point that poverty, environment and climate issues are highly political, being both created and sometimes resolved by business and social actors, and not only government. Yet the initiatives that have dealt with them tend to have been too technocratic and limited by current political, governance and finance rules.

The paper then redefines the poverty, environment and climate **narrative** – based around five key messages:

¦ Due in particular to glaring income inequality, **poor women and men depend most on the natural assets** that are available to them, and are the most vulnerable to environmental damage and climate change.
¦ Poor women and men are often able to **manage the environment productively, sustainably and equitably** if the governance and market conditions are conducive.
¦ However, while policy awareness of linked poverty, environment and climate problems has improved (and there have been glimpses of success in tackling them), the **enabling conditions are not often in place and progress has been limited** relative to the scale of the challenge.
¦ It is principally **structural barriers that have held poor countries and people back** from reducing poverty alongside good environmental management. Dismantling these barriers is now key to transformation towards sustainable development. There is ample evidence that the structural reforms needed to resolve poverty, environment and climate problems will be integrated, interdisciplinary, and multi-stakeholder. Institutions with these characteristics urgently need to be identified, built on, and implemented at scale.

The 2015 agreements now offer both a policy mandate and opportunities for action; they open doors for the structural reform that is so urgently needed and for scaling up a diverse 'catalogue' of best practices from local-level innovations and projects.

SDG 3: Ensure healthy lives and promote well-being for all at all ages
Professor Dorine Brand develops behavioral strategies and implements health promotion activities to improve health outcomes among minorities; Springfield, Illinois, USA

A triple vision of 'zero extreme poverty, zero net greenhouse gas emissions, zero net natural asset loss' is proposed to guide the structural reform that will enable poor groups and countries to achieve the SDGs at scale. In other words, 'leaving no-one behind' in eradicating extreme poverty; cutting greenhouse gas emissions so they match carbon fixation; and ensuring net quantities and qualities of natural resources and their capabilities do not diminish, and as much as possible are restored. These three complementary approaches together will achieve other benefits, notably minimising climate and disaster risks and achieving resilience.

This 'triple zero' rallying cry expresses the systemic nature of the poverty, environment and climate agenda today and is based both in good science and progressive policy. It demands an integrated **four-part call for action** by countries and international cooperation for the next 15 years - focused on structural changes that address empowerment, integrated institutions, finance and metrics (see Figure 1):

① **Increased empowerment and rights:** poor women and men must be recognised, empowered and engaged — so that they can be effective agents and rights-holders in their own future.

② **Integrated institutions:** an integrated approach is needed to develop inclusive and transformative institutions — creating resilience and achieving collective action on systemic opportunities and risks.

③ **Inclusive finance and business:** investment and business rules and mechanisms must be reformed — to better engage with the poor people and environments too often marginalised by prevailing systems.

④ **New messages and metrics:** the messages, 'business cases' and information used in poverty, environment and climate policies must be improved — to ensure inclusion, galvanise action, and measure real progress.

Achieving zero extreme poverty, zero net greenhouse gas emissions and zero net natural asset loss will require action in all four areas, albeit with different emphases:

» Zero extreme poverty will require empowerment for poor women and men as well as institutional and financial reforms to ensure that growth is inclusive.
» Zero net greenhouse gas emissions will focus on the institutional, financial and market reforms needed to drive technical progress and behaviour change.

» Zero net natural asset loss will require institutional and financial reforms and new metrics to incentivise natural asset conservation and restoration, put a price on environmental damage, and ensure that growth is environmentally sustainable.

Catalytic activities are suggested to get the major actors started, emphasising that the SDGs— and the structural changes they require to improve integration and resilience — are not solely a technocratic planners' affair. The 'triple zero' call to action needs to engage politicians, civil society, business and science as well as the wider public.

The **Poverty-Environment Partnership** and like-minded organisations are committed to supporting these reforms to tackle poverty-environment-climate issues. In 2016, PEP will be developing its strategy which is expected to include six areas of catalytic activities:

¦ Country readiness for SDGs: a readiness diagnostic could be developed, based on this 'getting to zero' call to action.
¦ Poverty, environment and climate mainstreaming: guidance on 'measurement of successful mainstreaming/integration' of SDGs in budgeting and planning processes, combined with capacity building.
¦ Integrated institutions and capacity: guidance and country level diagnostics on the kinds of integrated institutions that can achieve getting to zero at the country level.
¦ Whole of society approach: a more systemic engagement with civil society and the private sector, especially small business in SDG implementation. This could involve analytic work followed by country diagnostics on the potential of the small enterprise sector to deliver poverty, environment and climate solutions.
¦ Finance: analysis and advocacy on defining climate finance, on delivering finance to the local level, on linking environmental accounting with poverty and an initiative on Environment Fiscal Reform.
¦ Knowledge into practice and communications: providing knowledge useful for practitioners and keeping poverty, environment and climate change at the top of SDG implementation through more effective communications and outreach strategies, including improved accessibility of PEP (http://www.povertyenvironment.net/) and other relevant websites and better use of social media.

PEP joint work in these and other potential areas will seek to promote South-South and South-North learning, analysis and advocacy to advance the 'triple zero' call to action and help achieve the universal and transformative agenda of the SDGs.

FIGURE 1 'Getting to zero' call to action
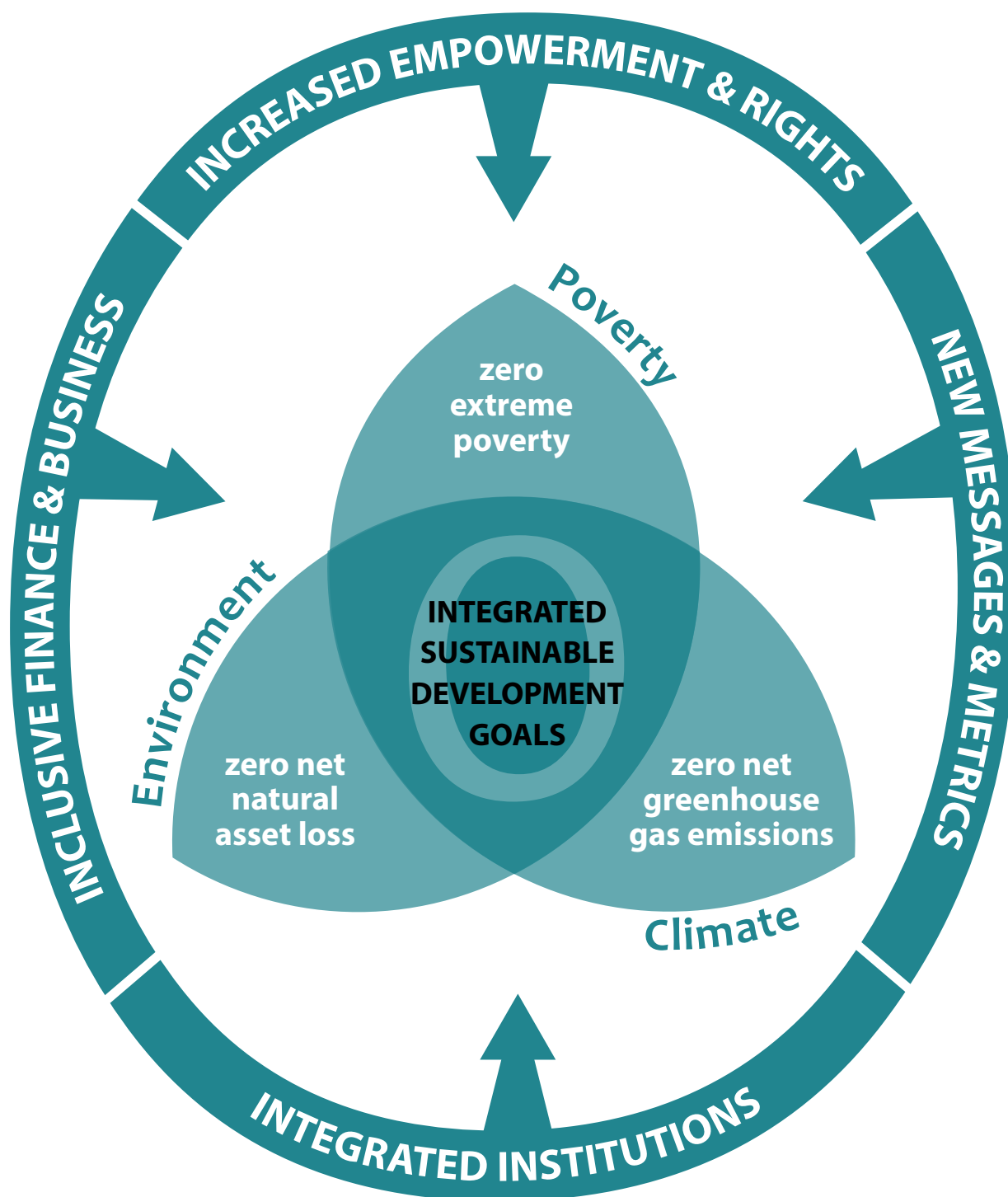
"We are the first generation that can end poverty, the last that can end climate change"

BAN KI-MOON, UN SECRETARY-GENERAL (UN, 2015A)

Introduction: objectives of this paper

SDG 4: Ensure inclusive and quality education for all and promote lifelong learning

School on boat run by NGO Shidhulai; Natore, Bangladesh

Poverty and environmental problems feed off one another in ways that severely damage both human and environmental wellbeing. They have similar causes — inequality in power, information, rights and access. Their resolution also depends on a common need — governance and finance must be redirected away from exclusionary and environmentally damaging practices, and towards inclusive investments that help poor people to thrive in their own environments. Yet poverty and environment have been treated as separate issues for too long — with 'siloed' thinking and policies, and fragmented institutions and finance.

The landmark publication, *Linking poverty reduction and environmental management*, was the first to explain this disconnect (DFID *et al.*, 2002). It was launched at the 2002 World Summit on Sustainable Development by the heads of the United Nations Development Programme, the European Commission, the World Bank and the UK Department for International Development. Soon after they formed the Poverty-Environment Partnership (PEP) as a network to bridge the gap between the environment and poverty reduction agendas — ending extreme poverty while sustaining the environment. PEP focused on development frameworks offering mandates to integrate environment, initially Poverty Reduction Strategy papers and later the Millennium Development Goals and climate change commitments, as well as PEP members' own programmes.

In May 2015, PEP held its 20th meeting in Edinburgh to review progress made on poverty, environment and climate issues since 2002. With significant changes in the global development context, and new and emerging challenges and opportunities, PEP members agreed on the need for a renewed poverty, environment and climate 'narrative' and policy framework, anticipating that the international appetite for action would become more promising in late 2015. Indeed, the expected agreements were all reached: at the United Nations General Assembly on 17 universal Sustainable Development Goals (SDGs); in Sendai on the need for a comprehensive approach to disaster risk reduction, in Addis Ababa on new approaches to financing; and in Paris on action

to limit climate change across all nations. They generated a political head of steam that exceeded expectations. Taken together, 2015's global agreements present breakthrough opportunities for transforming development policy and practice, and for mobilising all sectors of society, unleashing the power of local innovation and action, and putting in place the enabling conditions for sustained prosperity and well-being for all.

This paper seeks to show how linked poverty, environment and climate issues are central to achieving the 2015 agreements and must no longer be marginalised. It begins with a rapid sweep of the changing context for meeting poverty, environment and climate challenges; summarises PEP's findings of progress and barriers in the form of five key messages; and concludes with a call to action from 2015 to 2030 to ensure poverty, environment and climate issues are fully integrated during this 'SDGs era'. The call to action is presented as 'getting to zero' to reduce extreme poverty to zero, net climate emissions to zero, and net loss of natural assets to zero — and a **four-part set of reforms** over the next 15 years that focuses on increased empowerment, integrated institutions, inclusive finance and business, and new messages and metrics.

This paper addresses three audiences:

¦ **Governments and development organisations in rich and poor countries alike:** to make the case that the 2030 agenda can be achieved only with greater leadership in tackling linked poverty, environment and climate challenges within and between nations
¦ **Civil society:** to open up the poverty, environment and climate agenda to others who are best able to root implementation in the realities of the poor and their environments, notably social movements, non-governmental organisations, and interdisciplinary science
¦ **The private sector:** to recognise and call for accountable roles in business big and small, formal and informal, in planning and implementing the SDGs with poor people and environment actively at the centre of the business model.

Context: trends that impact getting to zero

SDG 5: Achieve gender equality and empower all women and girls

Young woman participating in discussion at University of Abuja; Nigeria

While the 2015 agreements provide an aspirational framework for reducing poverty and managing the environment, much remains to be done to implement them. The challenges are considerable, as the agreements relate to highly diverse political, business and institutional contexts. Many trends are moving in the wrong direction, summarised in Box 1. This section explores the contexts and trends in more detail, and summarises where they present serious constraints to progress as well as opportunities (developed from Bass *et al.* 2016).

BOX 1 **Poverty, environment and climate 'traffic lights' — where is progress good ●, mixed ●, or poor ●?**

● 1. Commitment to poverty, environment and climate goals (through SDGs)

● 2. Absolute income poverty reduced

● 3. Many remain vulnerable — structural problems continue

● 4. Water and sanitation improved — though the metrics are contested

● 5. Slum-dweller absolute numbers are up

● 6. Climate change and pollution impacts are up

● 7. Biodiversity losses have increased, both terrestrial and marine

● 8. Land-grabs from poor groups and environmental injustices are up

● 9. Inequality is up — exclusion worsening

Economic and business trends relevant to poverty, environment and climate issues

A growing minority of businesses is now better informed, both of the need to tackle poverty, environment and climate, and of the market potentials from doing so. It is increasingly recognised that private business and finance drives development, and that public policy must encourage and enable best practice. But it remains the case that many businesses seek under-priced and under-scrutinised labour and natural resources. More positively, poor people, once considered 'outside the market', are now recognised as 'bottom of the pyramid' consumers for goods and services designed and packaged to meet their needs. The spread of mobile phones and associated technology (such as mobile banking) is helping poor people to exercise their purchasing power to create large and profitable markets. Markets for renewable energy technologies, such as solar energy devices, have fully taken off — the key often being to make technologies available in smaller, cheaper, decentralised units. And business is increasingly recognising that exploitative, high-carbon, polluting production is inefficient and risky.

Poor producers are also playing larger roles in value chains, even if notions of 'inclusive business' tend to be defined by corporations; and the voluntary sustainability instruments they apply, such as certification and labelling, are governed by export markets and are rarely tailored to the needs of poor producers. While the progress of large international companies has been the focus of attention, for instance in sourcing agricultural products from smallholders, the **rise of domestic private capital** through commodity booms such as in African "Lion" economies means national private companies are going to be increasingly important in meeting linked poverty, environment and climate needs.

We can expect to see more attention to small players, notably in the informal economy, and the social enterprises that support them. In part because the informal economy is the biggest private sector arena: the non-agricultural informal economy accounts for 82 per cent of employment in South Asia, 66 per cent in sub-Saharan Africa, and 51 per cent in Latin America (ILO, 2014). And it is innovative in handling poverty, environment and climate needs: getting energy, water, sanitation, waste management and transport to poor people in low-cost ways.

Social trends

The most rapidly growing economies are often those with the highest numbers of poor people — Asia and Latin America, with Africa lately having over half of the world's fastest growing economies. Yet trickle-down of growth to the general population remains slow, with growth diluted by rising populations and inequality.

In many developing countries the majority of the population is less than 25 years of age. Where political leaders and structures remain entrenched and youth unemployment is high, such as in parts of Africa and the Middle East, there can be **social and political unrest**, with violent extremism and terrorism at once linked to perceived exclusion and enabled by information technology. Together with environmental stress, this has contributed to a sharp rise in international **migration**, almost doubling from 154 million to 232 million between 1990 and 2013 (UNFPA, 2014).

As well as becoming younger, developing country societies are becoming more urban with a growing middle class. 2014 was the first year that most people lived in cities — at 54 per cent, up from 30 per cent in 1950 and reaching 66 per cent by 2050. The rural population has grown steadily to 3.4 billion, and is expected to reach its peak in a few years and then fall to 3.2 billion by 2050. Africa and Asia remain mostly rural, at 60 and 52 per cent of their populations, but they are urbanising faster than other regions (UNDESA, 2014).

Poor groups' agency is still undermined by local elites and the influence of distant economies. This is seen most clearly in what is happening to poor people's land: once primarily of value for local food and fibre production, it is now also valued by others for export crops such as animal feed, biofuels, and now also carbon. This has

prompted both extractive and 'green' land-grabs and is associated with some of the 900 murders of environmental and land-rights activists from 2001 to 2013 (Global Witness, 2014). **However, poor groups' powers have also increased in other respects**— for example through their 'tele-connectedness': smartphones, introduced in 2006, are already owned by a quarter of the world's population.

Poverty and inequality trends

While absolute poverty has fallen, with the MDG target of halving extreme income poverty achieved five years ahead of time, at least a billion people still live on less than US$1.25 per day (UN, 2014a). Hundreds of millions live barely above this figure, and are vulnerable to slipping back— as many people did during the 2008 global financial crisis.

The geography of poverty is also changing. The largest number of poor people live in middle-income countries. But in ten years poverty will become more concentrated in fragile Least Developed Countries facing conflict and climate stress. And, while poverty remains primarily rural, the share of urban poverty has increased to 28 per cent, in part due to rural-urban migration, with up to 80 per cent of some urban populations living in slums (UN, 2014a).

FIGURE 2 **Paradox of global GDP growth alongside persistent poverty**
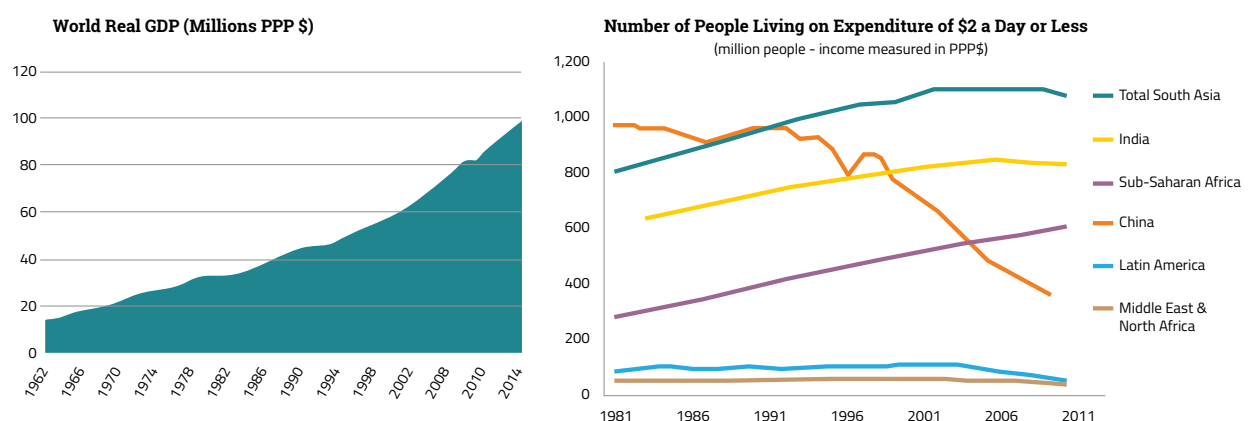
Sources: Left-hand figure — Tani (2015), based on World Economics Global GDP database and IMF WEO database; right-hand figure — Chen and Ravallion (2012), based on World Bank PovcalNet
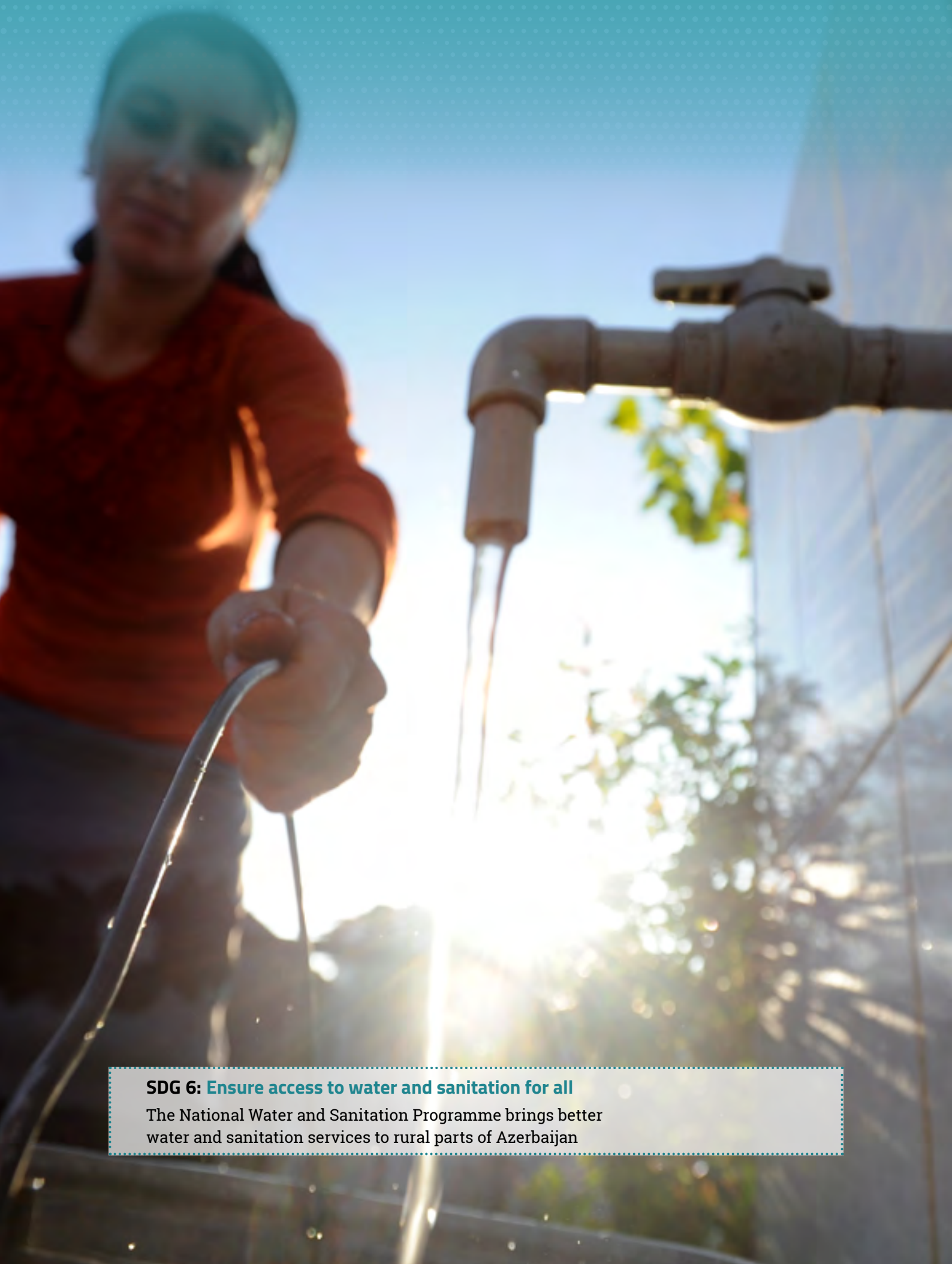
SDG 6: Ensure access to water and sanitation for all

The National Water and Sanitation Programme brings better
water and sanitation services to rural parts of Azerbaijan

Inequality is increasing, and has been shown to constrain both poverty reduction (UNDP, 2013) and environmental sustainability (Dorling, 2010 and PEP, 2013). Wealth is increasingly concentrated: an estimated 85 people own more than the 3.5 billion poorest 50 per cent (Oxfam, 2014). There is now growing political momentum in many countries to address inequality, even if it is phrased in more politically acceptable terms such as 'inclusion'.

Gender discrimination is one of the starkest examples of inequality. Countries with data show that women spend at least twice as much time as men on unpaid domestic and care work. Even where women provide most agricultural labour, more agricultural land is owned by men: in India, Nepal and Thailand, for example, less than 10 per cent of women farmers own the land they farm, while in Kenya the figure is only 1 per cent, despite women providing 70 per cent of agricultural labour (IFAD, 2008). Yet some improvements bode well for the future: women now make up 20 per cent of parliamentarians (IPU, 2014), and there is now almost 100 per cent enrolment of girls in primary education in many countries. However other indicators, such as estimates of female infanticide, gender-based violence, and child marriages indicate that women and girls remain seriously excluded in many countries.

Finally, the cultural values that shape people's aspirations are changing, and with them notions of 'poverty'. There are both positive and negative trends, for instance in relation to gender, consumption and notions of how best to earn a living. Yet income remains the main indicator used to measure wellbeing, even if there are niche multi-dimensional measures, some of which recognise environmental deprivations. And too many social structures are breaking down, especially those that once provided public goods such as social and environmental services.

Environmental and climate trends affecting poor people

Climate has become almost universally recognised as a massive short-term threat to societies and economies. While its financial impacts are greater in emerging economies, the human toll hits Least Developed Countries and Small Island Developing States hardest (World Bank and GFDRR, 2012). 100 million people will be pushed into poverty by the year 2030 without climate-informed development. Yet the World Bank and others find that the emissions reduction policies required to combat climate change need not threaten short-term poverty reduction if they are well-designed and supported internationally (ODI, 2015; Hallegatte *et al.*, 2016). Unsurprisingly, climate change is no longer 'merely' an environmental policy priority, and is gradually moving to the heart of government, with greater engagement by ministries of finance and planning (UNDP and UNEP, forthcoming). Yet some still favour a 'grow first and clean up later' approach.

While global climate change worsens, the local impacts of air pollution are also worsening. In 2012, indoor air pollution killed 4.3 million people from cooking over biomass; and outdoor air pollution killed 3.7 million, poorer people being most exposed (WHO, 2014).

Access to quality land and other natural resources by smallholders and the landless is continuing to decline. This is due to population pressure combined with gender inequity and the rise of commercial farming. Land and resource quality is also declining through soil erosion and salinisation, and wider ecosystem decline exacerbated by climate change.

In contrast, access to improved water supplies and sanitation has increased. In 2012, 89 per cent of the world's population had access to an improved drinking water source, up from 76 per cent in 1990, although this still leaves 750 million people exposed to unsafe water sources (UN, 2014a). Sanitation coverage increased from 49 per cent in 1990 to 64 per cent in 2012; although this leaves 2.5 billion without improved sanitation, including one billion who have to resort to open defecation (UN, 2014a). Moreover, some river basins are becoming highly water-scarce, often exacerbated by climate change.

By 2012, the proportion of people living in slums in developing countries had fallen from 40 per cent to nearly 33 per cent. Despite this, rapid urban population growth means that the number living in slums has risen sharply, from 650 million in 1990, to 760 million in 2000, reaching 863 million in 2012 (UN, 2014a).

Development assistance and financing trends

Official development assistance remains fundamental for the Least Developed Countries, providing over 25 per cent of government expenditures in many countries (UNDP, 2011), equivalent to 77 per cent of tax revenue in Least Developed Countries that are fragile, and 55 per cent in those that are not (Shine and Campillo, forthcoming). But official development assistance is succumbing to donor nations' interests in its aims and its delivery mechanisms. The more idealistic notions — of public goods, equity generation, altruism and solidarity are being challenged in the face of austerity and changing public attitudes. Among European donors there is a growing focus on security issues—tackling conflicts that drive migration to Europe and a general perception of fragile states as sources of terrorism. The trends towards 'results-based' aid on the one hand, including through business (and often from the host country), and humanitarian aid on the other, may bias against resolving the long-term structural causes and slow-burn symptoms of poverty, environment and climate problems.

Aid architecture has changed over the last decade. It is now comprised of 48 Least Developed Countries, further aid-recipient low-income countries, and 30 aid donors — but now also about 130 middle-income countries, some of which are shifting from recipient to donor, often through new forms of South-South cooperation (Kharas *et al.*, 2014). First generation multilateral banks and bilateral donors may soon form a shrinking share of development finance. Their poverty, environment and climate objectives and safeguards may be less influential, while middle-income country aid, businesses, national development banks and institutions in the BRICS — Brazil, Russia, India, China and South Africa — step up with their own poverty and environment provisions. This architecture is now supplemented by — and sometimes confused by — climate finance.

Climate finance is complex, fragmented, and difficult to access by poor countries. The Paris agreement calls for simplifying it, and some hope that the Green Climate Fund might become a streamlining vehicle (Shine and Campillo, forthcoming). The convergence of official development assistance and climate finance may reduce rather than amplify options for poorer countries, with a trend for using official development assistance to finance climate mitigation in middle-income countries and declining aid for Least Developed Countries (Steele, 2015). Significant ambition is needed to use the 'billions' in development assistance to attract, leverage, and mobilise the 'trillions' required in other investments from two main sources: public domestic resources (such as tax revenues), and commercial finance and investment (World Bank, 2016). The post-2015 agreements present an opportunity to break down silos between climate and development finance, in particular given the commonality of some principles, including country ownership, transparency and partnership (Shine and Campillo, forthcoming).

There is a welcome and growing emphasis on increasing tax collection and reducing tax evasion through international cooperation (UN, 2014b). Even in low-income countries, domestic resource mobilisation has doubled over the last decade. But there is still a way to go: while tax revenues account for 10–14 per cent of gross domestic product in low-income countries, this remains about half the levels in high-income countries.

Coherence of aid with other international policy aims is improving. The 2015 agreements including the Addis Ababa Financing for Development conference improved the potential for a more coherent response to the needs of development, financing the SDGs and the climate agreement. And there are valuable examples of aid and science working together to build an evidence base and solutions to poverty, environment and climate issues – such as the UK's Ecosystem Services for Poverty Alleviation (see www.espa.ac.uk).

Narrative: the challenge of getting to zero

Five key messages on why poor people's poverty, environment and climate needs and capabilities must be central to the 2030 agenda and the need for structural reform

SDG 7: Ensure access to affordable, reliable, sustainable and modern energy for all

Woman maintains the solar street lighting in her village of Tinginaput, India

MESSAGE 1
Due to glaring income inequality, poor people depend most on natural capital. They have demonstrated their ability to be good natural resource managers under the right conditions, but are also highly vulnerable to environmental damage and climate change

The bottom 20 per cent of the world's population shares less than two per cent of global income. With such limited access to financial capital, it is not surprising that the poorest people disproportionately turn to available natural assets such as forests, fisheries and farmland for their livelihood, nutrition, health and employment, especially in rural areas. Some 2.6 billion people are either partially or fully dependent for their livelihoods, nutrition, health, and employment on agriculture; 1.6 billion on forests; and 250 million on fisheries (Lee, 2012). Natural capital is therefore of critical importance for low-income countries — forming 25 per cent of national wealth, compared to just two per cent in Organisation for Economic Co-operation and Development member countries (World Bank, 2006).

This is why farming, forestry and fisheries make up 57 per cent of what has been called 'the GDP of the poor' in India — even if they contribute just 7 per cent to India's formal gross domestic product. It is why forest communities choose to invest an estimated US$2.5 billion each year of their own labour and inputs in sustainable forestry — more than all international organisations put into forestry aid (ITTO and RRI, 2007).

But it is also why exclusion from natural assets, and damage to them, disproportionately affects the well-being of already under-privileged people. And why the ravages of climate change greatly harm the poor: in rural areas especially, it damages the natural capital that is their main hope for prosperity; and in urban areas they lack access to protection from climate change.

There is also a positive side: with close dependence often comes knowledge and understanding, and many poor groups have developed the skills to manage natural capital well. Yet too often, prevailing governance and fiscal rules fail to enable them to do so. This is why it is a mistake to assume that increasing the value of natural assets will always benefit the excluded and poor — higher prices for natural resources may also attract influential outsiders, leading to 'land grabs' and 'green grabs'.

MESSAGE 2
While there is better awareness of linked poverty, environment and climate problems — and glimpses of success in tackling them — progress does not match the scale of the challenge

The SDGs can be achieved. But only if the SDG implementation process addresses the way poverty, climate and environment problems are linked in a 'downward spiral' of human and ecosystem ill-health and damage. And, more positively, how poverty reduction and environmental management can work together to create a 'virtuous circle' of human and environmental well-being.

FIGURE 3 **Composition of total wealth in low-income countries**
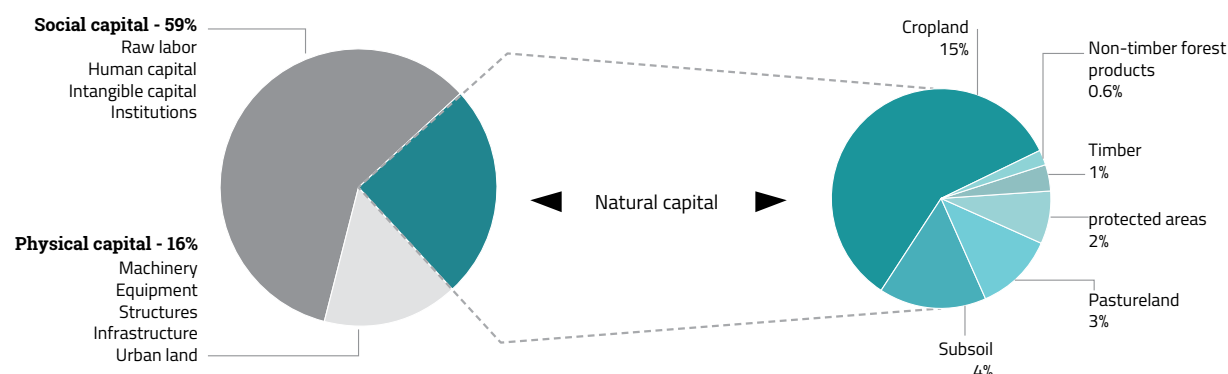
Source: World Bank (2006)

A quick review of progress in tackling poverty, environment and climate problems reveals a mixed record. At policy level, the importance of linked poverty, environment and climate problems has been recognised in the agreement on the SDGs. And in practical terms, absolute income poverty has been greatly reduced. But on the other hand, this and other gains — in clean water, sanitation, gender equity, and job and wealth creation — are inadequate and fragile due to structural problems in governance and markets. According to respondents to the World Economic Forum's 2015 Global Risks survey, six of the top eight global risks concern poverty and/or environment and climate (World Economic Forum, 2014).

Moreover, the remaining poor will be tougher to reach and are likely to have many non-income needs; they are more remote physically and may be utterly dependent on unproductive land and limited water. Or they may be separate from the formal economy with limited access to development support. An increasing proportion will be either very young or aged. Many will be migrants and/or live in states undergoing conflict with insecure access to environmental services.

Poverty, environment and climate responses will therefore need to be framed in the context of the 'poverty tripod' – tackling chronic poverty; stopping falling back into poverty; and sustaining poverty escape routes (ODI, 2015). While beyond the scope of this paper, this points to the need for support for complementary action in other sectors such as health and infrastructure.

MESSAGE 3
Structural barriers limit progress in tackling linked poverty, environment and climate problems

The glimpses of poverty/environment/climate progress are too few and too isolated. Poor groups could realise higher returns from their natural assets, adapt to climate change, and produce public goods like watershed protection, but too many barriers remain. Most are structural. Some bureaucratic barriers could be removed relatively easily, but deeper-rooted institutional and knowledge barriers will take time and collaboration to tackle. They cover:

- Planning horizons favouring short-term growth — 'tragedy of horizons' and 'quarterly capitalism'
- Siloed goals and procedures — fragmentation in and between government, business and science
- Marginalisation of poor groups — with too little involvement in policy, practice and reaping benefits
- Weak rights regimes — for resources, their use and trading, and distribution of benefits
- Inaccessible finance — formal credit markets, most financial instruments, and even basic banking loans excluding poor people due to lack of collateral, low earnings and remoteness
- Extent of the informal economy — which is unrecognised, unmeasured and unsupported, meaning large numbers of poor people cannot realise their potential
- Fiscal drivers of 'brown' development — with taxes and expenditures which support elites and maintain the status quo
- Poor information — on poor people's natural, human, social and intellectual capital and their linked potential
- Poor policy monitoring — especially of the distributional impacts of policy across social groups and landscapes
- Exclusive intellectual property systems — which are biased in favour of private, corporate and rich-country knowledge protection and do not reward traditional and 'soft' knowledge
- Clashes in value systems — regarding the relationship between society and nature.

Now, however, there are reasonable policy frameworks for tackling poverty, environment and climate together, notably in the SDGs and in emerging concepts of inclusive green growth. Poverty, environment and climate understanding is greater than it was in 2002. And we have enough 'glimpses' of success to know what to do.

MESSAGE 4
Integrated approaches are needed to break down barriers to solving poverty, environment and climate problems

If we have begun the transition to sustainable development, we are certainly at the 'chaos' stage – the old economy and institutions are no longer working well, with wildly fluctuating resource prices and reactionary politics, but neither are 'new economy' leaders being recruited and innovations being fully rolled out.

SDG 8: Decent work and economic growth

This market brings together a vast array of products, from fruits and vegetables to clothes and meats; Uganda

Nevertheless, various integrated approaches to poverty, environment and climate in policy, planning, investment and business activity have worked in different contexts. Their clear results, albeit not yet system-wide, must inform implementation of the SDGs, and can be built on and scaled up:

¦ **Interdisciplinary conceptual frameworks** such as ecosystem services, wellbeing, landscape and nexus approaches, and resilience are increasingly moving from niche scientific interest to engage with mainstream institutions, even if they have not yet been brought together.

¦ **Integrated procedures and tools**, such as public environment and climate expenditure reviews, natural capital valuation and accounting, strategic environmental assessment, and sustainable development scenarios and modelling, are beginning to be deployed in decision-making (OECD, 2013).

¦ **Poverty, environment and climate 'bridging' or mainstreaming initiatives** have pioneered ways of linking poverty with environment/climate analysis and decision-making in developing countries. Over the last 30 years, there are many drivers of bridging initiatives – sometimes from development, such as the UNDP-UNEP Poverty-Environment Initiative, but other times from conservation, from finance, or from science (Bass, 2015). This suggests that silos are breaking down.

¦ **Inclusive business and technology** — large companies have begun to include small players in their value chains, even if 'inclusive business' is sometimes too much on their own terms. Meanwhile green micro-businesses, such as in solar energy and materials recycling, have emerged in informal economies; creating jobs in the process at much lower financial cost and with lower continuing energy requirements than in the formal economy (Benson *et al.*, 2014).

¦ **Local integrated solutions** — sustainable development is a spatial challenge, as demonstrated by the current focus on landscape and 'nexus' approaches. Poverty and environment are deeply local in their expression, if not always in their causes, and there is a need for local actors to work together. Local government and civil society are critical for devising and delivering solutions.

But integration is not all about planned initiatives. **Ultimately, a combination of top-down leadership and bottom-up societal demand** will drive an integrated approach to poverty/environment/climate:

¦ **Much progress can be attributed to high-level drivers**.

In large part there are enlightened economic interests — ministries of finance and chief executive officers have realised both the environmental dependence and potentials of poor producers and consumers, and that there are win-win ways to reduce the social costs associated with environmental damage and to secure the social right to operate (UNDP and UNEP, 2015).

¦ **However, local-level drivers have been essential to effective and sustainable solutions** — such as indigenous and poor people advocating for environmental rights, and campaigning against the poverty-inducing aspects of climate change. Inequalities such as economic deficits and identity- or location-based discrimination have often been overcome by social movements demanding changes in the 'rules of the game', supported either by political and constitutional change or by their own creation of spaces for change (ODI, 2014; Zibechi, 2008; Raworth *et al.*, 2014).

MESSAGE 5
The 2015 agreements create a policy mandate for getting to zero

2015 gave the world hope for scaling up progress in poverty, environment and climate issues. The political mandate for tackling them was raised to much higher levels, with commitment across all countries:

¦ Zero extreme poverty: the transition from the eight 'siloed' Millennium Development Goals to 17 much more integrated Sustainable Development Goals took place — aiming at zero extreme poverty by the year 2030 in ways that integrate environment and climate issues. Table 1 identifies the SDGs' many poverty, environment and climate root concerns.

The SDGs commit all countries for the first time in human history to "end poverty in all its forms everywhere". This is measured by the target to: "By 2030, eradicate extreme poverty for all people everywhere, currently measured as people living on less than US$1.25 a day (UN, 2015b).

¦ Zero net loss of natural assets: for terrestrial and marine ecosystems, the SDGs are consistent with no net loss of natural assets, as the SDGs state that certain types of ecosystem loss must be "halted" and in some cases made "neutral". Some targets go further and promote restoration.

SDG 9: Build resilient infrastructure, promote sustainable industrialization and foster innovation

Electric car charging station; Paris, France

On terrestrial natural ecosystems and assets, Sustainable Development Goal 15 states: "Protect, restore and promote sustainable use of terrestrial ecosystems, sustainably manage forests, combat desertification, and halt and reverse land degradation and halt biodiversity loss". The targets also say: "By 2020, promote the implementation of sustainable management of all types of forests, halt deforestation, restore degraded forests and substantially increase afforestation and reforestation globally". In addition, there is a target to: "By 2020, combat desertification, restore degraded land and soil, including land affected by desertification, drought and floods, and strive to achieve a land degradation-neutral world. On biodiversity the target is to: "Take urgent and significant action to reduce the degradation of natural habitats, halt the loss of biodiversity and, by 2020, protect and prevent the extinction of threatened species". (UN, 2015b)

For marine ecosystems, Goal 14 states: "Conserve and sustainably use the oceans, seas and marine resources for sustainable development". The targets include: "By 2020, conserve at least 10 per cent of coastal and marine areas, consistent with national and international law and based on the best available scientific information". (UN, 2015b)

| Zero net greenhouse gas emissions: the successful climate agreement in Paris plotted a new course to net zero greenhouse gas emissions, with almost universal national climate commitments (known as Nationally Determined Contributions) to be reviewed every five years, greater efforts to channel finance into the low-carbon economy, US$100 billion a year in climate finance for developing countries by 2020 and a greater ambition to aim for a reduced global temperature target of 1.5 degrees Celsius — the latter driven largely by poor and vulnerable countries.

The agreement also included an adaptation target for the first time. The agreement will drive the shift towards adaptation (including 'ecosystem-based' adaptation), forests and REDD+, and shifts from fossil fuels to renewables — all with implications for poor groups in terms of jobs, energy prices, access to land and its use.

The agreement also included the first universally agreed indication of a fossil-fuel free future, stating that, "Parties aim to reach global peaking of greenhouse gas emissions as soon as possible, recognising that peaking will take longer for developing country Parties, and to undertake rapid reductions thereafter in accordance with best available science, so as to achieve a balance between anthropogenic emissions by sources and removals by sinks of greenhouse gases in the second half of this century, on the basis of equity, and in the context of sustainable development and efforts to eradicate poverty" (UNFCCC, 2015).

The Paris agreement also states, "Parties hereby establish the global goal on adaptation of enhancing adaptive capacity, strengthening resilience and reducing vulnerability to climate change, with a view to contributing to sustainable development and ensuring an adequate adaptation response in the context of the temperature goal" (UNFCCC, 2015).

TABLE 1 **Getting to zero: the triple zeros**

Triple zeros	Details	Source
Zero extreme poverty by 2030	┆ By 2030, eradicate extreme poverty for all people everywhere, currently measured as people living on less than $1.25 a day	Sustainable Development Goals
Zero net greenhouse gas emissions (and reduced vulnerability goal)	┆ To achieve a balance between anthropogenic emissions by sources, and removals by sinks, of greenhouse gases in the second half of this century ┆ Parties hereby establish the global goal on adaptation of enhancing adaptive capacity, strengthening resilience and reducing vulnerability to climate change, with a view to contributing to sustainable development and ensuring an adequate adaptation response in the context of the temperature goal	Paris climate agreement
Zero net loss of natural assets	┆ By 2020, promote the implementation of sustainable management of all types of forests, halt deforestation, restore degraded forests and substantially increase afforestation and reforestation globally ┆ By 2020, combat desertification, restore degraded land and soil, including land affected by desertification, drought and floods, and strive to achieve a land degradation-neutral world ┆ Take urgent and significant action to reduce the degradation of natural habitats, halt the loss of biodiversity and, by 2020, protect and prevent the extinction of threatened species ┆ By 2020, conserve at least 10 per cent of coastal and marine areas, consistent with national and international law and based on the best available scientific information	Sustainable Development Goals

Sources: UN (2016); UNFCCC (2015)

┆ 2015's development financing and aid architecture agreements noted the scale of the task and laid out the responses required — calling for integrated public and private finance and for aid innovations such as pioneering risk-sharing instruments and blended finance.

At the same time, many green economy or green growth initiatives have come to identify poverty reduction and inclusion as major goals to build into their work — from the Green Growth Knowledge Platform commissioning a research committee on 'inclusiveness', to the diverse members of the Green Economy Coalition singling out inequality as the main issue requiring exploration together.

Powerful new business and finance players are emerging — development banks in Asia, Latin America and Africa, and growing business interest in poor peoples' land, natural resources and markets. Few have shown their hand yet in relation to how they will tackle poverty, environment and climate issues. How best to engage them in poverty, environment and climate leadership and action will need exploring.

It is clear that the SDGs focus on poverty, environment and climate actions in many of their targets as shown by Table 2.

SDG 10: Reduce inequality within and among countries

Community Mapping; Kenya

TABLE 2 SDG targets that address poverty-environment-climate links

Triple zeros	Details
Goal 1: **Poverty**	**1.4** By 2030, ensure that all men and women, in particular the poor and the vulnerable, have **equal rights** to economic resources, as well as **access** to basic services, ownership, and control over land and other forms of property, inheritance, natural resources, appropriate new technology and financial services, including microfinance **1.5** By 2030, build the **resilience** of the poor and those in vulnerable situations and reduce their exposure and **vulnerability** to climate-related extreme events and other economic, social and environmental shocks and disasters
Goal 2: **Hunger and food security**	**2.1** By 2030, end hunger and ensure **access** by all people, in particular the poor and people in vulnerable situations, including infants, to safe, nutritious and sufficient food all year round **2.3** By 2030, double the agricultural productivity and **incomes** of small-scale food producers, in particular women, indigenous peoples, family farmers, pastoralists and fishers, including through secure and equal access to land, other productive resources and inputs, knowledge, **financial services**, markets and opportunities for value addition and non-farm employment **2.4** By 2030, ensure sustainable food production systems and implement **resilient** agricultural practices that increase productivity and production, that help maintain ecosystems, that strengthen **capacity for adaptation** to climate change, extreme weather, drought, flooding and other disasters and that progressively improve land and soil quality
Goal 3: **Health**	**3.9** By 2030, substantially reduce the number of **deaths and illnesses** from hazardous chemicals and air, water and soil pollution and contamination
Goal 4: **Education**	**4.7** By 2030, ensure all learners acquire **knowledge and skills** needed to promote sustainable development, including, among others, through education for sustainable development and sustainable lifestyles, human rights, gender equality, promotion of a culture of peace and non-violence, global citizenship and appreciation of cultural diversity and of culture's contribution to sustainable development
Goal 5: **Gender**	**5.a** Undertake reforms to give women **equal rights** to economic resources, as well as **access** to ownership and control over land and other forms of property, **financial services,** inheritance, and natural resources, in accordance with national laws
Goal 6: **Water**	**6.1** By 2030, achieve universal and equitable **access** to safe and affordable drinking water for all **6.2** By 2030, achieve **access** to adequate and equitable sanitation and hygiene for all and end open defecation, paying special attention to the needs of women and girls and those in vulnerable situations **6.4** By 2030, substantially increase water-use efficiency across all sectors and ensure sustainable withdrawals and supply of freshwater to address water scarcity and substantially reduce the **number of people suffering** from water scarcity
Goal 7: **Energy**	**7.1** By 2030, ensure universal **access** to affordable, reliable and modern energy services **7.2** By 2030, increase substantially the share of renewable energy in the global energy mix

[1] Table 2 is illustrative, with a limited selection of key poverty-environment-climate related SDG targets. Additional targets could be added, including from the 'means of implementation' targets that form part of each goal.

Triple zeros	Details
Goal 8: **Growth**	**8.3** Promote development-oriented policies that support productive activities, decent **job creation** , **entrepreneurship** , creativity and innovation, and encourage **formalisation** and growth of micro-, small- and medium-sized enterprises, including through **access** to **financial** services
	8.4 Improve progressively, through 2030, global resource efficiency in consumption and production and endeavour to decouple economic growth from environmental degradation, in accordance with the 10-year framework of programmes on sustainable consumption and production, with developed countries taking the lead
Goal 9: **Infrastructure**	**9.1** Develop quality, reliable, sustainable and resilient infrastructure, including regional and transborder infrastructure, to support economic development and human **well-being,** with a focus on affordable and equitable **access** for all
Goal 10: **Inequality**	**10.1** By 2030, progressively achieve and sustain **income** growth of the bottom 40 per cent of the population at a rate higher than the national average
Goal 11: **Cities**	**11.1** By 2030, ensure **access** for all to adequate, safe and affordable housing and basic services and upgrade slums
	11.6 By 2030, reduce the adverse per capita **environmental impact** of cities, including by paying special attention to air quality and municipal and other waste management
Goal 12: **Sustainable consumption and production**	**12.2** By 2030, achieve the **sustainable management** and **efficient use** of natural resources
	12.4 By 2020, achieve the environmentally sound management of chemicals and all wastes throughout their life cycle, in accordance with agreed international frameworks, and significantly reduce their release to air, water and soil in order to minimise their adverse **impacts on human health** and the environment
Goal 13: **Climate**	**13.1** Strengthen **resilience** and **adaptive capacity** to climate-related hazards and natural disasters in all countries
	13.2 **Integrate** climate change measures into national policies, strategies and planning
Goal 14: **Oceans**	**14.2** By 2020, **sustainably manage** and protect marine and coastal ecosystems to avoid significant adverse impacts, including by strengthening their **resilience** , and take action for their restoration in order to achieve healthy and productive oceans
	14.7 By 2030, increase the **economic benefits to Small Island developing States and least developed countries** from the **sustainable use** of marine resources, including through **sustainable management** of fisheries, aquaculture and tourism
Goal 15: **Ecosystems**	**15.1** By 2020, ensure conservation, restoration and **sustainable use** of terrestrial and inland freshwater ecosystems and their services, in particular forests, wetlands, mountains and drylands, in line with obligations under international agreements
	15.2 By 2020, promote the implementation of **sustainable management** of all types of forests, halt deforestation, restore degraded forests and substantially increase afforestation and reforestation globally
	15.3 By 2030, combat desertification, **restore degraded land** and soil, including land affected by desertification, drought and floods, and strive to achieve a land degradation-neutral world
	15.9 By 2020, **integrate** ecosystem and biodiversity values into national and local planning, development processes, **poverty reduction strategies** and accounts

Triple zeros	Details
Goal 16: **Governance**	**16.3** Promote the rule of law at the national and international levels and ensure equal `access` to justice for all
	16.7 Ensure `responsive, inclusive, participatory and representative decision-making` at all levels
	16.10 Ensure public `access` to information and protect fundamental freedoms, in accordance with national legislation and international agreements
Goal 17: **Global** **partnership**	**17.7** Promote the development, transfer, dissemination and diffusion of environmentally sound `technologies to developing countries` on favourable terms, including on concessional and preferential terms, as mutually agreed
	17.14 Enhance `policy coherence` for sustainable development
	17.19 By 2030, build on existing initiatives to develop `measurements of progress` on sustainable development that complement gross domestic product, and support statistical capacity-building in developing countries

Source: UN (2015b)

Analysis of the SDG targets in Table 2 reveals a common concern for nine poverty/environment/climate issues: rights, access, employment, natural capital, technology, resilient institutions, finance, metrics and mainstreaming:

① **Rights**: the rights, powers and representation of marginalised groups are improved;

② **Access**: inclusive access to justice, decision-making, information, and benefits is ensured;

③ **Employment**: decent jobs are created and entrepreneurship is supported among poor groups;

④ **Natural capital**: natural capital critical to poor people is protected, restored and sustainably managed;

⑤ **Technology**: poor people and countries receive technology and capacity support;

⑥ **Resilience**: vulnerability is recognised and tackled, while adaptation and resilience is supported;

⑦ **Finance**: development finance, climate finance, humanitarian finance and environmental finance address poor people needs in an integrated, demand-driven way;

⑧ **Metrics**: broader aspects of 'progress' and 'well-being' are measured and reviewed;

⑨ **Mainstreaming**: poverty/environment/climate issues are integrated in institutions, policies and plans in a coherent way.

Call to action: how to get to zero

Four actions to help SDG implementation address the triple zero of zero extreme poverty, zero net greenhouse gas emissions and zero net loss of natural assets

SDG 11: Make cities inclusive, safe, resilient and sustainable

Bamboo is an affordable construction material used for urban settlements in Jakarta, Indonesia

SDG 12: Ensure sustainable consumption and production patterns

Eco-efficient agriculture; Reserva Natural El Hatico,
Familia Molina Durán, near Palmira, Colombia

While the trends for getting to zero are challenging, there has been some progress between the years 2002 (when PEP started as a network) and 2016 — and we can build on this. This progress includes key areas of scope, institutional drivers, poor people's roles, business interest, finance and institutions for poverty, environment and climate as shown in the first two columns of Table 3.

But by 2030, as Table 3 also suggests, we need to get to zero poverty, zero net greenhouse emissions and zero net natural asset loss, more rapidly. We therefore propose a new and timely action agenda based on four areas of activity: increased empowerment, integrated institutions, inclusive finance and business, and new messages and metrics.

TABLE 3 **Summary of poverty, environment and climate trends and drivers**

	World Summit on Sustainable Development — 2002	**➜ Now — 2016 ➜**	**In future — to 2030**
Scope	Summit launches poverty environment idea Millennium Development Goal 7 touches on poverty-environment link	SDGs integrate many poverty, environment and climate issues	Universal interest/norm? Least Developed Countries' leapfrog potential?
Institutional drivers	Environment actors 'push' hardest for poverty, environment and climate concerns	Development/finance actors now 'pull' — ask questions, set scope	Both higher authorities and public engagement in poverty, environment and climate?
Poor people's roles	Poor people as a problem or as recipients	Poor people as participants	Poor people as active agents: represented, innovating and investing?
Business interest	Corporate social responsibility 'Do no harm' approaches	'Inclusive business' Growing focus on micro, small and medium-sized enterprises	Informal economy formalised to enable poverty, environment and climate outcomes? Southern markets engage?
Finance	Aid funds poverty, environment and climate projects	Aid reform (including from project to policy/programme approaches Climate finance	Sustainable development investment, domestic? Public/private/people partnerships for poverty, environment and climate?
Institutions	Separate, siloed institutions for poverty, environment and climate Some safeguards	Some poverty, environment and climate synergies, via mainstreaming initiatives, eg. Poverty-Environment Initiative	System transformation? Integrated institutions with poverty, environment and climate standards?

ACTION 1
Increase empowerment and rights: recognising, empowering and engaging poor women and men — so they can be effective agents and rights-holders in their own future

Poor people are the actors and holders of human rights who can most credibly draw attention to poverty, environment and climate agendas and contemplate solutions in an enduring way. But prevailing dialogue and decision-making structures are not open to them, and may have been part of the problem. Ultimately, a system change with new institutions is needed (Action 2). Poor women and men must as rights-holders be able to hold the duty-bearer to account for their actions (MRF-CJ, 2015). The duty-bearers are those in the government and state that have legal obligations to protect, respect and fulfill the rights of the rights-holder (UN, 2016). To work towards this an empowerment and human rights-based strategy consistent with the UN Declaration of Human Rights should be pursued as part of the SDG implementation process:

¦ **Promote genuine inclusion of poor groups** and their representatives in existing and emerging poverty, environment and climate initiatives, such as inclusive green growth programmes, and in decision making to achieve sustainable development. This can include technology to connect poor and indigenous people with data to inform their lives and to make decisions about their own lives.

¦ **Ensure local and national strategies recognise, protect and enhance poor people's assets as integral components of SDG implementation processes**: supporting human capital development through informal labour markets; improving information flows to poor groups; enabling investments in local natural capital; recognising local, often low-cost environmental technologies; and accessing external technology that uses natural capital in pro-poor ways, such as the locally controlled slum upgrading schemes supported by the poor people's federation, Slum and Shack Dwellers International.

¦ **Focus on governance contexts, sectors and/or ecosystems in which poor people find themselves**. This will often be small-scale farming, forests or fishing, but also urban, tourism and waste management—prioritising the scarcest resource on which all livelihoods depend, often energy, water or productive land. Or a focus on syndromes facing poor groups, such as migration and failed states. Or

opportunities for poor people to engage in technologies rather than natural resource commodities: technologies come down in price and rise in performance, whereas commodities remain static. Simple 'catalogues' of proven approaches in given sectors and ecosystems could inspire and empower poor groups.

¦ **Embrace the informal economy, and find ways to effectively formalise it**, so that the enterprises and livelihoods of poor people can access and contribute to sustainable solutions —such as ways to organise waste-pickers to produce low-cost, high-efficiency, job-creating urban environmental services; ways to organise artisanal miners to achieve synergies with neighbouring land use in mutual investment, rather than to create pollution; engaging women to accelerate cutting the number of hungry people globally by 100–150 million (DFID, 2015).

¦ **Engage poor stakeholders and the many stakeholders of environmental management in ethical debates**. Ethical interests are proving powerful drivers of rethinking the society-nature relationship, spurred by observations of the genuine linked problems of poverty-environmental hazards. Pope Francis' encyclical 'On care for our common home' was driven by observations of the impacts of climate change on the poor, and it puts poor groups and future generations at the centre of both needs and solutions.

¦ **Make the right to a safe and healthy environment stronger and universal** through a concerted effort over the next 15 years. This would codify the way in which this right interacts with the wide array of other existing environmental, social, economic, cultural and political rights. In short, there is a need to explore a universal right to sustainable development, building on the intergovernmental consensus represented by the voluntary SDGs.

ACTION 2
Integrated institutions: developing integrated, inclusive and transformative institutions—including for collective action on multiple systemic risks and opportunities

Poverty, environment and climate problems affect many livelihoods and many sectors, and their solutions need more than one kind of organisation to act. We now need more and better bridges between the individual organisations involved, and especially bridges that work for poor groups. We need to pull this together deliberately

and systemically— integrated institutions with rules, knowledge bases, and norms that bring about a better balance of sustainability, growth and equity.

Two decades of environment and climate mainstreaming work have generated enough experience to tell us how to go about restructuring institutions; at least in theory. Three things might spur this on in practice. First, the need to generate national SDG plans in every country, beginning in 2016. Second, the need to make decisions on particular major issues that will shape the future of poor people and the environment, such as how to handle new fossil fuel finds and where to focus climate change adaptation. Third, the new and large potentials of information and communication technology and 'big data' to handle multi-factorial decisions, to magnify citizen engagement in generating and using data, and new landscape/spatial modelling to give a clearer idea of the consequences of option choice — all increasingly in real time.

If work to date has focused on integrated assessments, plans and projects, the new agenda will be to agree integrated governance frameworks and institutional capacities. This is an ambitious aim — unsurprisingly, since poverty, environment and climate problems are the result of deep structural failures. While the institutional transformation that needs to be made may seem daunting, much can be done in smaller steps. The sequencing and priorities need to be sorted out at national level, perhaps in the form of a poverty, environment and climate institutional change roadmap.

Processes for SDG implementation need to think as much about institutions as projects, local institutions as much as national government, elites as much as poor people, exclusion as much as inclusion, brown as much as green. There would be much to gain from a multi-country approach to assessing the kinds of institutions needed for 'getting to zero':

¦ **Ownership and harmonisation: ensuring SDG implementation and other integrated agendas such as inclusive green growth and Nationally Determined Contributions are 'owned'** by developing countries and effectively harmonised to avoid confusion and multiple competing frameworks. This ownership and harmonisation can happen by integrating the SDGs and Nationally Determined Contribution goals around a strong national and local planning process linked to the budget process.

¦ **Learning: opening up platforms for learning and systemic innovation** – financial, juridical, organisational and mental space is needed for the kind of adaptive strategy required. PEP is one such space, but all these spaces now need to engage with new players, for instance in the BRICS — Brazil, Russia, India, China and South Africa — and business.

¦ **Localisation: ensuring effective decentralisation and devolution** in local government and landscape-level institutions, as these are best able to handle local poverty, environment and climate trade-offs and find synergies; with additional locally-available financing to drive this change and sustain the gains.

¦ **Research: encouraging and investing in interdisciplinary science** that builds an evidence base on critical poverty, environment and climate issues, establishing these issues in the realm of objective truths rather than variable sentiments. This could be evidence on the circumstances under which environmental services can offer a route out of poverty, as opposed to safety nets or even poverty traps, and improving understanding of systemic risks.

¦ **Public goods: looking at the many potentials of combining social and environmental protection strategies** and how they have been realised in practice. Given the proximity of poor groups with ecosystems needing better management, payments for ecosystem services and job creation through environmental restoration can have win-win potentials (Porras *et al.*, 2016).

¦ **Policy instruments: developing and embedding across-the-board instruments in the machinery of government, business and civil society**. In short, People's training and jobs now need to change. This will mean exploring a 'common set' of planning, financial, fiscal, monitoring and accounting instruments and standards. Ultimately, all organisations should be able to plan and report to common or aligned poverty, environment and climate standards, with some elements common across many disciplines.

In short, the challenge is to help countries' institutions to mature as shown in Table 4: from Level 1, where organisations work separately in silos; to Level 2, where there are mutual safeguards between environment and development activity; to Level 3, aiming for synergies permissible within current rules and conditions; to Level 4, systemic transformation of enabling conditions for sustainability and equity. A baseline could be useful in each country: governments, localities and sectors need to know what stage they have reached in institutional integration.

TABLE 4 **Institutional levels/stages in linking poverty, environment and climate**

1. Separate	Environment and poverty are totally separate policy 'silos'	
	Planning and action is unlinked or antagonistic	
	Few countries are still at this stage	
2. Safeguards	Environment activities identify and manage bad social impacts, and *vice versa*	
	There is no real joint poverty, environment and climate agenda	
	Most developing countries are here	
3. Synergies	There are some poverty, environment and climate win-wins, where economies can grow and produce jobs from environmental assets and low-carbon approaches	
	Achievement is limited by current governance and finance	
	A growing number of developing countries are here	
4. Joint sustainability and equity	Governance and financial institutions, rules and metrics are fundamentally transformed to remove structural poverty, environment and climate problems	
	New and widespread synergies become possible	
	A few countries are experimenting here; it is essential for achieving the SDGs	

Source: Based on Raworth *et al.* (2014)

ACTION 3
Inclusive finance and business: reforming private and public investment—to better engage with the people and environments marginalised by current policy

The 2015 agreements, and proposals for massive new investments in energy, transport and urban infrastructure across the world, have real potential to make progress on poverty, environment and climate issues but, to achieve scale, require the financial rules to be changed. The rules must recognise stakeholders and not just shareholders; long-term outcomes and not just share prices. There is a need to engage those who will be powerful players, but may not yet have been drivers of the poverty, environment and climate issues. Finance mechanisms will need to be more accessible, integrated, and supportive of innovation, prioritising investment quality as well as quantity. A greater sense of both urgency and possibility is needed if this is to happen. A strategy for countries and for international organisations might include:

¦ **Increase sustainable revenue flows from natural resources investment**: minerals, land, forests, and fisheries are much more important to low-income countries than to rich countries, a dependency which has increased with recent commodity price booms and become a vulnerability with price instability. It is vital that these revenues are used in ways that benefit the poor through revenue-sharing schemes, while paying for the ongoing costs of sustainably managing the natural resource base for future revenue streams. Foreign direct investment in natural resources must be properly managed in terms of investment preparedness, approval and monitoring and enforcement to create jobs, provide revenues and not undermine the resource base (UNDP and UNEP, 2011).

¦ **Attract new financial players:** just as the 2015 agreements need to be rolled out, western aid has become less significant. New (BRICS) financial institutions, such as the Asia Infrastructure Investment Bank are becoming more powerful, while the necessary poverty, environment and climate safeguards and procedures for win-wins are still emerging. The 2015 agreements provide lots of scope to engage the new financial and commercial players, especially those that might help in creating new environmental asset classes (different forms of carbon, biodiversity and other environmental service assets). But new players need to see that it is in their long-term interest, the incentives are right, and the technology is available or in sight. Good communications and business cases are needed.

¦ **Improve poor women and men's financial agency:** while big new investors are important, local groups of poor local groups of poor women and men also need to be recognised as investors — contributing their land, labour and/or savings into combined poverty, environment and climate solutions for livelihoods and public goods. Reforms are also needed to channel funds to the local level, combined with better information on the capabilities of locally available assets, so that efficiencies and sustainability can be achieved, local assets mobilised, local people empowered, and informal economy formalised in pro-poor ways.

SDG 13: Take urgent action to combat climate change and its impacts

Plenary discussions, Bangkok climate change talks; Thailand

¦ **Encourage innovation, technology screening and development, and pro-poor budgeting to ensure that poor people and Least Developed Countries benefit from economic development:** private sector-led innovations in health, agriculture, energy and communication are growing and could help to solve poverty, environment and climate challenges. Shifts towards circular or closed-loop economic models, could stimulate local economies and mobilise environmental and social assets in support of resilient growth. National and local budget processes, from budget preparation, to budget approval, to budget execution, to budget oversight need to integrate pro-poor environment, natural resources and climate issues (UNDP and UNEP, forthcoming).

ACTION 4
New messages and metrics: improving and aligning poverty, environment and climate messages, narratives and metrics – to inspire widespread understanding of poverty, environment and climate issues, and to galvanise and measure progress

A positive poverty-environment-climate narrative is now needed. One based on enduring prosperity, and perhaps on joint human and ecosystem wellbeing, could have increasing political traction as extreme poverty declines but as climate change and ecosystem degradation impacts worsen. New players — BRICS banks, locally controlled development funds, and domestic markets — as well as the aid and UN initiatives that have led poverty, environment and climate work to date, need a clear and coherent set of poverty, environment and climate planning and performance standards.

Cross-disciplinary and multi-country work is needed — beyond developing countries, so that the endeavour and the resulting message are as universal as possible. It should include:

¦ **Communication strategies** that can successfully influence good poverty, environment and climate decisions (such as the judicious use of economic information, but also ethical arguments, people-centred stories of change, 'wellbeing' measures, and ways to 'brand' poverty, environment and climate).

¦ **Information gaps** in meeting the poverty, environment and climate decision-making needs of different types of organisations and country (such as distributional information on the impacts of resource pricing, financial mechanism access and uptake, taxation and subsidies, and business models — and of 'green' technologies and infrastructure that promise a potentially high poverty reduction impact). It is time to agree the main research questions.

¦ **A conceptual framework that best expresses poverty, environment and climate links** that is scientifically credible, robust to diverse biophysical, social and economic realities, policy-influential, and can be used in the whole policy cycle from assessment to debate, modelling, planning, and accounting. Two reviews would help to generate it:

ı A review of existing frameworks and what countries are proposing for SDGs (especially how they handle the nine poverty, environment and climate outcomes noted in Table 2)

ı A review of how the Millennium Ecosystem Assessment's ecosystem service-wellbeing framework has been adopted and adapted by different disciplines – from economists to statisticians to natural scientists.

¦ **Rolling out the System of Environmental Economic Accounts.** This has recently been agreed internationally, led by the UN Statistical Division, with the Wealth Accounting and Valuation of Ecosystems (WAVES) initiative spearheaded by the World Bank providing support to countries for implementation. But more is needed to generate the necessary physical and economic data for the system, and to create demand among policymakers and the general public to use it to inform decision making and transparency.

TABLE 5 **Different emphases on the action agenda to reach different zero goals**

	Zero poverty	**Zero net greenhouse gas emissions**	**Zero net natural asset loss**
Empowerment increased	✓		
Institutions integrated	✓	✓	✓
Inclusive finance and business	✓	✓	✓
New messages and metrics			✓

SDG 14: Conserve and sustainably use the oceans, seas and marine resources

River Fishing; Kiniero, Guinea

Today's 'data revolution' offers many opportunities to be harnessed. Information and communication technology and 'big data' can help us to build a picture about how poverty and environment relate in specific cases, and what difference interventions are making. This will help to progress from crude trade-offs between poverty, environment and climate to better distributional results, correlations and integration. Technology such as mobile phones can help poor people be powerful data producers and receivers. They can connect global to very local, service providers to service demanders, and thus enhance learning and accountability.

While the three targets of 'getting to zero' are intimately linked, and a holistic approach is needed to the four proposed action areas above, there will be certain emphases in the action agenda. However, integrated institutions and reformed finance will be central to all three goals, as shown above in Table 5.

But how do we know if we are making progress in getting to zero? Box 2 illustrates a series of milestones that can be tracked to measure progress.

BOX 2 How do we know if we are getting to zero?

At a **country level**, a set of milestones might be made for each activity selected for empowerment, integrated institutions, reformed finance and metrics. Drawing on the analysis of desirable poverty/environment/climate outcomes at the end of Table 1, important milestones to look for in most countries will include:

Empowerment:
- Greater involvement of poor/marginalised groups and informal economy actors in SDG consultations and planning, and higher visibility of their spokespeople
- More active roles in implementing action plans
- The rights, powers and representation of marginalised groups improve as sustainable development work progresses to 2030
- Decent jobs are created and poor groups' entrepreneurship is supported

Institutions:
- Streamlining of the machinery of government involved in assessing and planning 'zero' poverty, environment and climate targets
- Better linking of diverse institutions and networks relevant to poverty, environment and climate, e.g. PEP, Green Economy Coalition, Poverty-Environment Initiative, Global Green Growth Institute
- Increasing emphasis on local institutions to deliver zero poverty, environment and climate and assess progress
- Institutions improve poor groups' access to justice, decision-making, information, and benefits

Finance:
- Mechanisms currently available to poor groups, such as rural banks, begin to offer new financial products that help address poor groups' climate and environment needs, risks and potentials
- Finance players shape sustainable development-focused finance mechanisms that support zero poverty/environment/climate and are not biased against poor groups
- Development finance, climate finance, humanitarian finance and environmental finance work better together to address poor people's needs in more integrated, demand-driven ways

Metrics:
- The notion of 'zero' poverty, zero net greenhouse emissions and zero net natural asset loss is built into targets and monitoring systems
- Much greater attention is given to distributional issues, so that it becomes clearer which groups of people/regions are winners and losers
- Popular media starts to talk about the 'measures that matter' and not only gross domestic product or US$ per person
- Government and business start to account for poverty, environment and carbon routinely, more coherently, and in more integrated ways

Conclusions: next steps on 'getting to zero'

An active strategy is needed at many levels to mainstream the 'getting to zero' call to action on poverty, environment and climate
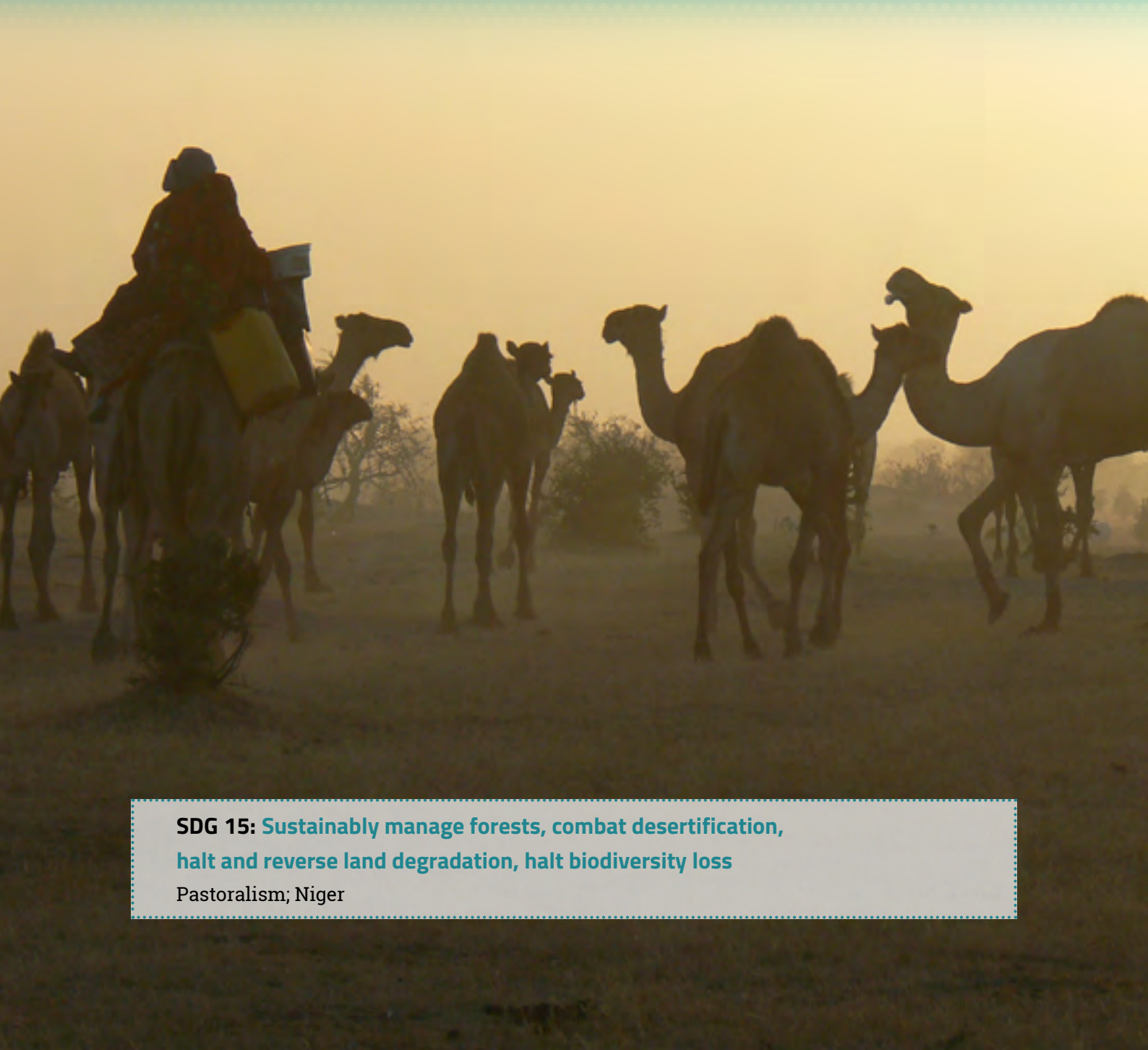
SDG 15: Sustainably manage forests, combat desertification, halt and reverse land degradation, halt biodiversity loss

Pastoralism; Niger

SDG 16: Promote just, peaceful and inclusive societies

UN Multidimensional Integrated Stabilization Mission in Mali Formed Police Unit officers from Rwanda speak to the population as they patrol the streets of Gao, North of Mali

The new 'getting to zero' call to action on poverty, environment and climate priorities will need an **active** strategy to ensure it is implemented. First, because 'getting to zero' is a **political** agenda and not only a technocratic one: it directly addresses structural barriers and vested interests. It will need to look at the economic, financial and ethical implications of different options and the winners and losers. Second, because it currently lacks a clear single **owner**, nationally and internationally. Thirdly, it will need to engage stakeholders in a constructive way, but particularly those with a mandate for integration, such as those leading on the SDGs or green economy.

The Poverty-Environment Partnership is well-placed to shape such a strategy, as was discussed at PEP's 21st meeting in Bangladesh in May 2016. Since the proposed 'getting to zero' reforms are ambitious, the following six catalytic activities are proposed to help jump-start progress on the 'getting to zero' call to action.

Readiness assessment in support of implementing SDGs

Too many countries may start SDG implementation in the same way as they approach any development plan — as a largely technocratic exercise with limited links to budgets, and with too little attention to the broader political aspects, such as engaging with the public and the private sector. A focus on the integration of poverty, environment and climate SDGs into budgets and political aspects of readiness is important if countries are to shape real-world transformative plans. A readiness diagnostic could be developed, based on this 'getting to zero' call to action. Its use would generate a picture of the poverty, environment and climate drivers in politics, the market and civil society for SDG implementation, establish where progress has been made; identify which institutions and actions have contributed to progress and their strengths and weaknesses; clarify the poverty, environment and climate priorities which now need to be addressed; and identify both the political space and the barriers to further progress. While having a focus on

the national level, such assessments would also look for local and business drivers of change and seek an independent, critical perspective with civil society and private sector input. The next steps could involve alignment of environmental and climate policies, programmes and projects with the SDGs.

Poverty, environment and climate mainstreaming for the SDGs

It is timely to synthesise experience with mainstreaming poverty, environment and climate into economic decision-making in different countries to explore how activities for poverty, environment and climate have been effectively integrated. This could lead to guidance on 'measurement of successful mainstreaming/integration' offering a framework to measure integration of SDGs in budgeting and planning processes. A common framework would support accountability of government for SDG implementation and enable cross-country learning and benchmarking. It could be combined with capacity building, through for example tailor-made programmes for poverty, environment and climate mainstreaming at central and local level.

Integrated institutions and capacity for the SDGs

It is important to identify and encourage the kinds of institution that can achieve getting to zero at the country level. Guidance and country level diagnostics could be developed with input from developing countries' governments, civil society groups and networks, and private sector and would enhance legitimacy, different perspectives and peer exchange. Key government institutions to focus on would include ways to effectively engage central and powerful ministries such as ministries of finance and planning with integration and/or inclusion mandates, as well as mechanisms that effectively incorporate poverty, environment and climate priorities into sectoral ministries such as energy, transport, water and agriculture.

A whole of society approach: engaging civil society and business for the SDGs

The whole of government approach for SDGs needs to be expanded to a whole of society approach to implementation and networking for the SDGs. A more systemic engagement with civil society and especially small business for 'getting to zero' is needed for the SDGs to meet the scaling-up challenge. Growth paths in low and middle-income (and even many high-income) countries have not been inclusive, particularly for rural areas and populations. Investments should reach local economies where resources are scarcest and where there are big risks to the SDGs not being achieved. While much has been discussed regarding the potential of micro and small and medium-scale enterprises (MSMEs) to deliver the integrated solutions needed to help achieve the SDGs, this has not yet been a focus of support and action. More attention could be given to small-scale primary, secondary or tertiary sector enterprises — in agriculture or nature-based processing, manufacturing or services. A key concern is the barriers to and slow pace of scaling up MSME business models, and the sustainability and robustness of the MSME sector in the face of ecosystem decline and climate change. A first step could be to undertake analytic work followed by country diagnostics on the potential of the MSME sector to deliver poverty, environment and climate solutions, the barriers to and drivers for scaling up, and a framework for action.

Finance to tackle linked poverty, environment and climate issues

This includes several areas of analysis and country-level support to strengthen links between poverty, environment and climate objectives, including analysis and advocacy on defining climate finance, delivering finance to the local level, linking environmental accounting with poverty, and environmental fiscal reform.

- Definition of climate finance: there is a need for internationally agreed guidance to define climate finance and where appropriate distinguish climate from development finance; with more concessional finance needed for Least Developed Countries (Steele, 2015).
- Guidance on providing local-level finance: this would demonstrate how to get international development and climate finance down to the local level. Local and household levels need to receive some money from outside, but external finance is not reaching the local level. So there is a need to explore how local governments and local non-governmental organisations can access finance through intermediaries and other channels (Steele *et al.*, 2015).
- Environmental accounting and links to poverty: United Nations guidelines have been agreed to evaluate public finances to incorporate environmental value, known as the System of Environmental Economic Accounts. The World Bank's Wealth Accounting for Valuation of Ecosystem Services (WAVES) project is supporting the system's implementation, but needs to be expanded to address poverty issues more effectively.
- Environmental fiscal reform initiative: environmental fiscal reforms have taken place when taxation and subsidy policies incorporate environment and climate actions into fiscal system, often linked to public financial management reforms. There is a need for a joint initiative to increase take up in country by sharing ideas and experiences from countries in the context of the Addis Ababa emphasis on domestic resource mobilisation.

Knowledge into practice and communications

How to provide knowledge in a way that is useful for practitioners and to keep poverty, environment and climate change at the top of SDG implementation? Approaches to consider include supporting practitioners to capture both experiential and theoretical knowledge in these fields; and creating feedback loops on successes and failures to guide good practice. This would require improving the accessibility of relevant websites, including http://www.povertyenvironment.net/ and could also consider outreach strategies through massive open online courses, and social media to further engage people.

The Poverty-Environment Partnership members and like-minded organisations are well positioned to supporting the above catalytic activities to accelerate progress in tackling linked poverty, environment and climate issues.

In 2016, the Poverty-Environment Partnership will be developing its strategy for collaboration with poor women and men and developing countries, helping to fully achieve the SDGs through the 'triple zero' call to action.

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