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Reducing Poverty Through Climate Action

A Strategy for Global Development Leaders

By Molly Elgin-Cossart, Cathleen Kelly, and Abigail Jones

May 2014

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Introduction and summary

Climate change could reverse hard-won development gains and could stop our end poverty efforts completely. We can't end poverty unless we take serious steps to protect our planet.

— World Bank Group President Jim Yong Kim, opening statement at the International Monetary Fund-World Bank 2014 Spring Meetings, April 10, 2014¹

Climate change is already affecting every continent across the globe, and people living in developing countries will fare far worse than most in a warmer world, warns a March report from the U.N. Intergovernmental Panel on Climate Change, or IPCC.² The report—“Climate Change 2014: Impacts, Adaptation, and Vulnerability,” authored by leading scientists from around the world—makes clear that there are many actions that local and national decision makers and the international community can take now to strengthen community resilience and reduce climate change risks and costs. The report also reveals that many actions to fight climate change and prepare for its unavoidable impacts will improve public health, safety, and livelihoods.³ An April IPCC report presents a host of sobering evidence revealing that if countries do not take immediate and ambitious steps to rein in global carbon pollution today, they will face crippling costs to do so in the future.⁴ The report identifies many different options that countries can pursue now to reduce emissions from energy production and use, transportation, and land use, among others; these options also provide energy access, reduce local air pollution, and support sustainable development.⁵

Fortunately, countries around the world have a tremendous opportunity to design a new global development agenda that can rapidly accelerate progress toward tackling two of the world's most pressing challenges—ending poverty and preventing catastrophic climate change. This new development agenda will kick into gear when the Millennium Development Goals, or MDGs—eight voluntary goals agreed to in 2000 by leaders from 191 countries—expire in 2015. Once agreed upon, the post-2015 goals will serve as a road map through 2030 for countries, local governments, development institutions, and the private sector to stamp

out poverty and support sustainable development. Where countries previously stopped short of fully integrating environmental concerns into the MDGs, they now have the chance to craft new voluntary development goals that do just that. As the new IPCC analyses expose, letting this opportunity pass by risks unraveling decades of progress against poverty, hunger, and economic insecurity. It will also leave future generations more vulnerable to extreme weather events that flatten communities and critical infrastructure, cause food insecurity, give rise to pollution-related illnesses, and disrupt livelihoods.

In this report, we assess poverty and climate change and identify opportunities to jointly tackle these challenges. To end poverty in ways that support low-carbon, resilient, and sustainable economic growth, we recommend that countries adopt the following ambitious yet achievable targets to measure progress against the new global development goals once they are enacted in 2016, through their expected expiration date in 2030.

Potential goal: Ensure sustainable agriculture, food security, and good nutrition

Recommended targets:

- Reduce global postharvest and supply-chain food loss and waste, including bycatch in commercial fisheries, by 50 percent.
- Eliminate the practice of overfishing in ocean and freshwater fisheries, rebuild overfished populations to sustainable levels, and end all illegal and unreported fishing.
- Increase water efficiency in agriculture by 25 percent.⁶

Potential goal: Support sustainable and resilient economic growth, employment, and infrastructure

Recommended target:

- Build community resilience and reduce deaths and economic losses from natural hazards by 50 percent, while improving the accuracy and lead times of forecasts and warnings by 50 percent.⁷

Potential goal: Secure sustainable energy

Recommended targets:

- Ensure universal access to modern energy services.
- Double the global rate of improvement in energy efficiency.
- Double the share of renewable energy in the global mix.
- Phase out inefficient fossil-fuel subsidies that encourage wasteful consumption and production.

Potential goal: Ensure healthy ecosystems and biodiversity

Recommended targets:

- Ensure that no natural forest is lost.
- Guarantee secure tenure and rights, including customary rights, to land and other assets for men and women.
- Reduce loss of coastal wetlands by 50 percent, set aside 15 percent of the world's oceans as marine-protected areas, and eliminate fisheries subsidies that contribute to overfishing and overcapacity.
- Ensure that at least 20 percent of the world's terrestrial lands and inland waters are equitably managed and conserved.

Potential goal: Ensure healthy lives

Recommended target:

- Reduce the incidence of morbidity and mortality from indoor and outdoor air pollution by 50 percent.⁸

We urge countries to include these targets in the new global development agenda to drive actions to fight poverty, reduce climate change risks, and ensure sustainable development.

Environmental destruction is risky business for everyone

The health and livelihoods of people around the globe are intertwined with our natural environment and a stable global climate. From the air we breathe; to the land we cultivate and graze; to the water we drink and use for agriculture and energy; to the oceans that provide vast quantities of food; to the forests that offer building materials, food, and other life-sustaining resources, a healthy environment and climate system is essential to our well-being, prosperity, and economic growth. For this reason, the negative consequences of climate change and the devastating toll it takes on our natural environment and communities affect everyone. Droughts and other extreme weather events linked to climate change increase the risk of death and injury, exact large financial costs, and threaten the world's food supply. Decreasing crop yields, water scarcity, and coastal flooding threaten jobs, infrastructure, and communities both large and small. In the United States alone, the total cost of the most severe weather events between 2011 and 2013 was \$208 billion in damage and more than 1,000 lives.⁹

Yet for nearly 1 billion people living below the extreme poverty line globally—meaning they subsist on less than \$1.25 per day¹⁰—the stakes are even higher.¹¹ Environmental damage and climate change disproportionately hurt the poor, who are most dependent upon these resources for their sustenance and livelihoods. According to the Intergovernmental Panel on Climate Change's fifth assessment report, climate change is very likely to have a negative effect on the yields of major cereal crops across Africa. By 2050, wheat yields are expected to decline by 35 percent across sub-Saharan Africa. Fisheries, which are an important food source, will also be adversely affected: Climate change could result in a 50 percent decline in fisheries-related employment and a total annual loss of \$311 million to West African economies by 2050. Around the world, sea-level rise will disproportionately affect the world's poor, as approximately 14 percent of the developing world's population resides in coastal areas. And infectious diseases, such as malaria, will spread.¹² In short, the poorest developing countries—and the large proportion of the world's poor that lives within their borders—are most vulnerable to the threat of climate change—but did the least to cause it.

Now is the time to act on poverty and climate

If crafted right, a set of voluntary post-2015 goals with measurable targets can both help end poverty and ensure that future generations have access to life-sustaining resources and a healthy environment. These goals and targets can also complement and reinforce a strong global climate agreement.

To do so, we recommend that countries include in the new global development goals specific targets that alleviate poverty and support economic growth in ways that strengthen climate resilience and reduce heat-trapping emissions.

Being resilient means that individuals and households are able to bounce back in the wake of all kinds of shocks, whether these are sudden illnesses, extreme weather events, or political instability. To be resilient to the effects of climate change requires looking across sectors—from agriculture to fishing, forestry, and energy production—and at global and national infrastructure systems, including transportation and energy, stormwater and drinking water management, and communications systems, to understand where communities and urban areas are most vulnerable. It means weighing the potential contributions of natural defenses, such as coastal wetlands and shallow-water reef ecosystems, in addition to simply relying on traditional, built infrastructure. Considering all these factors will allow countries and communities to identify the most cost-effective strategies to manage climate change risks.¹³

Reducing heat-trapping emissions between now and 2030 while stimulating growth and poverty alleviation requires universal action—or action in both developing and industrialized countries—in a range of sectors, including electricity generation, industrial processes, residential heating and cooking, transportation, and land use and forestry.¹⁴

Well-designed community resilience and climate protection targets offer a measurable way to both eliminate poverty and safeguard the environment. The targets we recommend below aim to do this, and they reinforce other ongoing international processes to tackle these two global challenges.

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Post-2015 goals and targets: What are they, and how should they be crafted?

While closely related, goals, targets, and indicators each serve a distinct purpose, described in the table below. Once crafted and agreed to by countries, they will form the backbone of the post-2015 development agenda through 2030 and provide a blueprint for ambitious, measurable, and achievable actions around the globe to end poverty and develop economies in a sustainable manner.

TABLE 1
Global development goals, targets, and indicators

	Tier	Definition	Form	Scope
Goal	1	A goal offers an ambitious and aspirational commitment to address a single challenge (for example, improve maternal health).	Generally qualitative	Global
Target	2	A target offers a specific, measurable, and time-bound outcome that directly contributes to the achievement of a goal (for example, reducing the maternal mortality ratio by three-quarters).	Quantitative and measurable	Global or national; may be aggregated to assess global progress
Indicator	3	An indicator provides a metric used to measure progress toward a target; it is generally based on available or established data (for example, the proportion of births attended by skilled health personnel).	Quantitative and measurable	Global or national; may be aggregated to assess national or global progress

Source: Modified from Sonya Suter, "Goals, Targets and Indicators: Definitions and key concepts for the post-2015 development agenda" (Independent Research Forum, 2014), available at http://www.irf2015.org/sites/default/files/publications/Retreat%20%232_Background_Paper_2_and_3_GTI_and_Criteria.pdf.

Setting clear and ambitious goals is essential to tackle the world's most pressing sustainable development challenges. But setting targets to underlie the goals is equally important to deliver real, measurable, and timely sustainable development outcomes. Because targets are quantitative in nature, technical expertise is especially useful. We therefore focus our analysis and recommendations at the target level.

To bring about real change on these interrelated issues, we believe that post-2015 targets should place poverty alleviation at their core and also meet the criteria outlined below.

Ambitious

Ambitious targets go beyond business as usual. Any climate-related target included in the post-2015 development agenda should focus on sectors that are either likely to be a major source of climate pollution through 2030 or on sectors in which actions to build climate resilience will generate cost savings over the same time frame. Key sources of heat-trapping pollution between now and 2030 include the sectors of electricity generation, industrial processes, residential heating and cooking, transportation, and land use and forestry.

Achievable

Targets should be ambitious, but they should not be so far outside the realm of possibility that they discourage or inhibit action. We therefore propose quantitative targets where a boost from concerted, international action could achieve significant and achievable progress by 2030. Targets were chosen in sectors that currently have some degree of momentum behind them—in the form of G20 and G8 action, including fossil-fuel subsidies and short-lived climate pollutants; major public-private partnerships, such as Sustainable Energy for All and the Climate and Clean Air Coalition; or international consensus or a formal treaty on, for example, biodiversity and disaster risk reduction. Our recommended targets can leverage these points of consensus and move toward greater development and climate gains.

Acceptably measurable

The proposed targets draw on data that are broadly acceptable to U.N. member states and that are currently collected or would require minimal additional technical and political effort to collect.

Easily communicated

To be easily understood by all constituents—from the public and private sectors to civil society and individuals across the globe—a target needs to be clear, focused, and free of sector-specific jargon.

Harmonized

In sectors where international agreements are currently in force, we propose targets that either reinforce the codified target or go beyond it if the time period falls short of the post-2015 development agenda's 2030 time horizon. For instance, the Aichi Biodiversity Targets under the Convention on Biological Diversity cover the period from 2011 to 2020. Consequently, we propose targets that build on progress secured through this process through 2030 where relevant.

Impact across multiple sectors

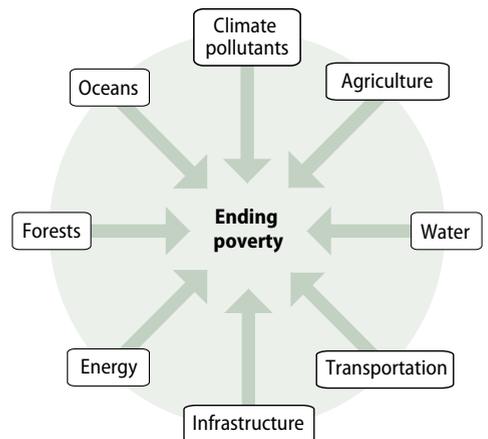
As the post-2015 development agenda is first and foremost about poverty alleviation, we identify targets that would make the greatest contribution to community resilience and climate protection and also advance progress in at least two traditional development sectors. The diagram below conveys how we considered the links between ending poverty, climate change, and key sectors when developing each target.

Based on these criteria, we recommend that countries use the following targets to help guide poverty alleviation and sustainable development between 2015 and 2030. In some cases, we have suggested specific numerical targets that we believe the global community can meet together, such as our recommended targets for reducing food waste and doubling renewable energy. In other cases, we have left the numerical target blank for each country to define based on their own national circumstances, such as our suggested targets for increasing water efficiency in agriculture.

Potential goal: Ensure sustainable agriculture, food security, and good nutrition

Eliminating hunger is a prerequisite to improving human well-being—particularly in a world that will see a massive increase in demand for food as the population soars to more than 8 billion people by 2030.¹⁶ Yet a recent IPCC report cites evidence that drought and other climate change effects will diminish agricultural yields by as much as 2 percent per decade beginning around 2030. Additionally, the agriculture sector now contributes about 11 percent of total

Maximizing the benefits of end-poverty efforts



global greenhouse gas emissions, further accelerating climate changes that will continue to undermine future agricultural productivity. The targets we recommend below aim to increase the efficiency of food production and consumption while also increasing the food supply, saving producers and consumers money, increasing smallholder farmer revenues, reducing carbon pollution, and protecting the natural resources needed to feed a growing global population.

Recommended targets:

- **Reduce global postharvest and supply-chain food loss and waste, including bycatch in commercial fisheries, by 50 percent.** One-third of food produced is lost or wasted.¹⁷ Loss and waste occurs at all stages of the food cycle, from production, to handling and storage, to processing, distribution, and consumption. Reducing the global rate of loss by 50 percent would close the gap between food available today and that needed to feed the world's population in 2030. Reducing bycatch—the fish and other species unintentionally caught and discarded or harmed during the process of fishing—can alleviate overfishing, preserve ecosystems, and ensure availability of future catches. Reducing food waste would diminish excess strain on water, land, and climate. In the United States, close to 40 percent of food produced for human consumption is wasted.¹⁸ The economic impact of this is enormous, with costs estimated to run at least \$43 billion per year.¹⁹ The environmental impact is no less significant, as millions of gallons of water are wasted and excess carbon is emitted, accelerating climate change.
- **Eliminate the practice of overfishing in ocean and freshwater fisheries, rebuild overfished populations to sustainable levels, and end all illegal and unreported fishing.** Today, 90 percent of the seafood consumed in the United States is imported, which means it is either harvested or processed overseas.²⁰ According to a study published in the journal *Marine Policy*, 20 percent to 32 percent of that seafood is harvested illegally or otherwise goes unreported.²¹ This so-called pirate fishing leads to rapid species depletion and penalizes fishermen who are operating within the regulatory structures intended to ensure sustainability of the world's seafood supply. Requiring fishing boats to carry tracking devices—such as those currently required for international shipping vessels—and increasing enforcement at international ports could eliminate this practice by preventing illegally caught fish from finding their way to market.

- **Increase water efficiency in agriculture by 25 percent.**²² Predictable freshwater supplies are a basic need for each and every person and, therefore, are a priority for every country. However, many countries face serious water-scarcity risks.²³ Agriculture is responsible for approximately 70 percent of the world's freshwater withdrawals²⁴ and up to 85 percent of its freshwater consumption.²⁵ Reducing the water intensity of agriculture would help reduce water scarcity, which is projected to increase over the coming decades and threaten food security. In fact, many crop-generating regions already face significant stress on water resources, with near-term demand outstripping the supply. The recent droughts and associated declines in crop production in parts of Australia, East Africa, Russia, and the United States are cases in point.

These suggested targets would deliver tangible benefits that cut across several key sectors and areas relevant to the post-2015 development agenda, including food security, livelihoods, climate change, water, oceans, and deforestation.

Potential goal: Support sustainable and resilient economic growth, employment, and infrastructure

Resilient, reliable, and sustainable infrastructure—including roads, railways, bridges, ports, power plants, water-treatment facilities, and the protection and restoration of coastal wetlands—is vital to commercial activity, economic growth, and quality of life in communities and urban areas around the globe. Sustainable, resilient infrastructure is safer and less expensive over the long term than poorly designed and constructed infrastructure that contributes to illness, costly traffic congestion, and pollution, or which cannot withstand increased incidence of extreme weather and other climate change impacts. According to the U.N. Office for Disaster Risk Reduction and the World Meteorological Organization, “The risk of losing wealth in weather-related disasters is now outstripping the rate at which the wealth itself is being created.”²⁶

Recommended target:

- **Build community resilience and reduce deaths and economic losses from natural hazards by 50 percent, while improving the accuracy and lead times of forecasts and warnings by 50 percent.**²⁷ Between 2000 and 2012, natural hazards caused an estimated \$1.7 trillion in damages, killed 1.2 million people, displaced thousands, and affected 2.9 billion people globally. In 2008 alone, 20 million

people were displaced by natural disasters. For the first time in history, between 2010 and 2012, the world experienced three consecutive years where annual economic losses from disasters exceeded \$100 billion.²⁸ In addition, an estimated 325 million of the global poor could be exposed to weather disasters by 2030.²⁹

After a disaster hits, increasing community resilience and limiting human displacement means rethinking infrastructure and land-use practices to reduce future extreme weather risks, rather than simply rebuilding what was there previously. It also means improving stormwater and sewer management; building resilient drinking water and sanitation facilities; increasing access to insurance for households, farmers, and small businesses; and restoring and protecting natural areas along coastlines, such as wetlands and mangroves, to reduce flood risks from sea-level rise and more extreme storms.

To meet the above target, all nations will need to improve their infrastructure designs and planning and develop a national disaster risk reduction and resilience plan by 2020.³⁰ Fortunately, these investments will save both money and lives. The U.N. Development Programme estimates that every dollar invested in disaster risk reduction saves \$7 in disaster response and recovery.³¹ Recent analyses by the World Bank and others suggest that the benefits of investing in disaster risk management—including avoided and reduced economic losses—outweigh the costs of such investments by roughly four times.³²

This recommended target would provide substantial benefits that cut across several key sectors and areas relevant to the post-2015 development agenda, including health, economic growth, oceans, water, energy, transportation, cities and human settlements, peaceful societies, and climate change.

Potential goal: Secure sustainable energy

Achieving universal access to reliable, affordable, convenient, and safe energy is critical to sustain economic growth and improve the livelihoods and well-being of the world's poor. Energy is crucial to combat poverty and foster stronger, more inclusive growth—and yet is also a source of pollution, waste, and rising carbon emissions. To meet the energy needs of economies worldwide while limiting greenhouse gas emissions, targets should encourage innovation and the dissemination of solutions. They should build on U.N. Secretary-General Ban Ki-moon's Sustainable Energy for All initiative, which focuses on access, energy efficiency and renewable energy, and the G20 commitment to eliminate inefficient fossil-fuel subsidies while preserving targeted support for the poorest people.

Recommended targets:

- **Ensure universal access to modern energy services.** 1.3 billion people worldwide lack electricity, while 2.6 billion rely on solid fuels for cooking and heating.³³ Providing clean electricity and access to modern cooking facilities can dramatically improve health, access to education, and economic growth while reducing pollution.
- **Double the global rate of improvement in energy efficiency.** Improved efficiency bolsters economic growth while reducing or offsetting growth in energy demand. This goal could apply to developing and developed countries alike.
- **Double the share of renewable energy in the global mix.** Transitioning to clean sources of energy that do not threaten the climate is essential to global development. It means encouraging advanced economies to make the switch and helping developing and emerging economies bypass polluting energy sources.
- **Phase out inefficient fossil-fuel subsidies that encourage wasteful consumption and production.** Less than 10 percent of global fossil-fuel subsidies benefit the poorest 20 percent of the population, while the International Monetary Fund has found that phasing out global fossil-fuel subsidies would achieve roughly half of the reductions in greenhouse gas emissions needed to avoid unacceptable risks of dangerous climate change.³⁴

These suggested targets would deliver tangible benefits that cut across several key sectors and areas relevant to the post-2015 development agenda, including livelihoods, infrastructure, health, education, gender, climate change, water, and deforestation.

Potential goal: Ensure healthy ecosystems and biodiversity

Forest resources directly contribute to 11 percent of global greenhouse gas emissions that drive climate change³⁵ and the livelihoods of some 90 percent of the world's 1.2 billion people living in extreme poverty;³⁶ between 500 million and 1 billion smallholder farmers across the developing world grow trees for timber production or manage remnant forests for subsistence and income, and 60 million indigenous people are wholly dependent on forests.³⁷ However, of the 48 least-developed countries, 35 reported forest-cover loss between 2005 and 2010.³⁸ To ensure that vulnerable populations derive the most from forest resources in both the short and long terms, targets should focus on the conserva-

tion of natural forests and the legal recognition of customary land rights. A transformative suite of land and forest targets would also stimulate global demand for sustainable products and procurement.

Recommended targets:

- **Ensure that no natural forest is lost.** Nearly 2 billion people worldwide depend on forests for their livelihoods, and forests are home to 300 million indigenous people.³⁹ Forty-six percent of the world's terrestrial carbon is also held in forests.⁴⁰ Forests help provide fresh water and prevent erosion.
- **Guarantee secure tenure and rights, including customary rights, to land and other assets for men and women.** Land and other productive resources are a source of food, shelter, income, and identity for many people, especially the world's poor. They provide a safety net that reduces household vulnerability. Women are especially vulnerable to insecurity of tenure.⁴¹ For example, in many cultures, women do not have basic rights or are marginalized and not able to stand up for rights that are supposedly guaranteed, especially if they are widows. Secure tenure improves levels of investment, access to credit, and land management, all of which are necessary for climate mitigation.⁴² Land-tenure systems can be formal or informal, statutory or customary, permanent or temporary.⁴³ The effects of climate change affect all types of tenure, and secure tenure can help ensure that the rights and needs of the most vulnerable are a part of planning, mitigation, and disaster response.
- **Reduce loss of coastal wetlands by 50 percent, set aside 15 percent of the world's oceans as marine-protected areas, and eliminate fisheries subsidies that contribute to overfishing and overcapacity.** Coastal wetlands provide a panoply of services to ecosystems and human communities alike. These include mitigating storm surges and absorbing floodwaters, filtering pollution from waterways, providing nursery habitat for fish and shellfish species, and sequestering remarkable quantities of carbon. Their restoration also makes economic sense as well. The Center for American Progress and Oxfam America recently analyzed three coastal restoration sites in the United States and found that each dollar invested in these projects created \$15 in net economic benefits.⁴⁴ While sea-level rise is one driver of erosion and loss of coastal wetlands, development and other human use represents a far greater cause,⁴⁵ and half of the world's wetlands were lost over the course of the 20th century.⁴⁶ Cutting this rate of loss by 50 percent is achievable given the role of human activity in destroying wetlands ecosystems, and it would lead to reductions in economic losses, as well as reductions in the loss of human life, in vulnerable coastal regions.

As of 2010, protected areas covered around 13 percent of the world's land area but only about 2 percent of total ocean area, which covers 71 percent of the Earth's surface.⁴⁷ As the world population increases, countries will inevitably look more toward the ocean for food, energy, minerals, transportation, and other services. Consequently, countries should identify and set aside areas of the high seas and individual nations' exclusive economic zones—particularly fragile and vital resources such as seamounts and shallow- and deep-water corals—to ensure these resources are not irreparably harmed by industrial activity. In 2010, countries met in Aichi Prefecture, Japan, and adopted the U.N. Convention on Biological Diversity, or CBD, Strategic Plan for Biodiversity 2011–2020. The plan includes the Aichi Biodiversity Targets—20 ambitious targets to protect biodiversity in ways that benefit people—including one to set aside 10 percent of coastal and marine space as protected areas by 2020.⁴⁸ Increasing this target to set aside 15 percent of the world's oceans as marine-protected areas by 2030 is a logical next step.

Lastly, there is mounting evidence and international support for the need to re-evaluate and adapt fishing practices to protect fragile ecosystems; in 2005, the World Trade Organization launched negotiations to clarify rules for fisheries subsidies that contribute to overfishing and overcapacity. Approximately 60 percent of the \$27 billion spent on fisheries subsidies globally in 2003 went to unsustainable capacity-enhancing activities, leading to overfishing of already limited fishing stocks.⁴⁹

- **Ensure that at least 20 percent of the world's terrestrial lands and inland waters are equitably managed and conserved.** The Aichi Biodiversity Targets aim to conserve at least 17 percent of the world's terrestrial and inland waters by 2020.⁵⁰ Conserving lands bring real economic and other benefits to local communities and economies by, for example, creating jobs and income from forest products and tourism and providing fresh water. Despite these and other benefits, between 1990 and 2010, the world saw barely a 4 percent increase in the amount of lands and inland waters conserved, bringing the total conserved area from about 9 percent of all terrestrial and inland waters to just under 13 percent.⁵¹

These suggested targets would deliver tangible benefits that cut across several key sectors and areas relevant to the post-2015 development agenda, including food security, livelihoods, gender, water, oceans, and climate change.

Potential goal: Ensure healthy lives

Health is another area where the benefits of climate change and development solutions align. Energy sources that produce less pollution—in homes or on roads across the world—would have enormous health and human implications, in addition to lowering greenhouse gas emissions. According to the World Health Organization, more than 3 billion people continue to use open fires and simple stoves to burn biomass—wood, animal dung, and crop waste—and coal daily in their homes, and more than 4 million premature deaths are from illnesses attributable to household pollution.⁵² To ensure healthy lives while minimizing climate pollution and withstanding the adverse effects of a warmer world, targets should focus on reducing indoor and outdoor air pollution.

Recommended target:

- **Reduce the incidence of morbidity and mortality from indoor and outdoor air pollution by 50 percent.**⁵³ More than half of the world's population still relies on biomass fuel and coal for energy,⁵⁴ which generate greenhouse gases that warm the atmosphere even more than carbon and which take a painful toll on individuals' well-being. Four thousand people die each day from indoor air pollution—a greater loss than from malaria.⁵⁵ Moreover, the time-consuming burden of collecting fuel sources falls overwhelmingly on women and girls, limiting their ability to seek an education, secure stable incomes, or participate in other productive activities.⁵⁶ Diesel-powered and heavy-duty vehicles on the road generate outdoor air pollutants that pose a large threat to human health worldwide.⁵⁷ In fact, transportation is the largest source of air pollution in the United States, causing respiratory problems and increasing the incidence of cancer and other long-term diseases.⁵⁸

These suggested targets would deliver tangible benefits that cut across several key sectors and areas relevant to the post-2015 development agenda, including livelihoods, education, gender, cities, and climate change.

Conclusion

There are real opportunities available today to improve human health, livelihoods, and social and economic well-being while managing the risks of climate change.⁵⁹ It is within our reach to build a better world in which this and future generations will see an end to poverty and enjoy a healthy environment with all of its life-sustaining resources. It is possible for global leaders to address environmental and poverty challenges together by developing and implementing complementary solutions and actionable targets that accelerate both poverty eradication and sustainable environmental management.

Our recommended targets above to support sustainable agriculture and food security, economic growth and infrastructure, sustainable energy, ecosystems, and healthy lives are ambitious yet achievable. If adopted by countries as part of the post-2015 development agenda, these targets would help drive investments and sensible actions by local and national governments, multilateral development banks and other international organizations, and the private sector to end poverty and build a more resilient and sustainable future for generations to come.

About the authors

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