

OurPlanet

United Nations Environment Programme

September 2017



The Global Environment Facility

Delivering solutions for a sustainable future

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Doris Leuthard
Global challenges

Jeff Fortenberry
Sheldon Whitehouse
Maximizing value

Hailemariam
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Global action is needed

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Defining moment

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Anne Hidalgo
Greening cities

OurPlanet

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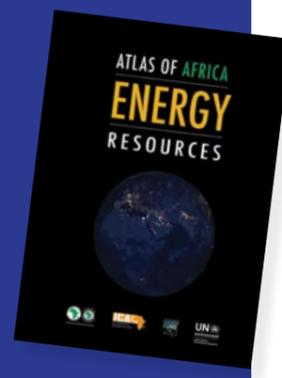


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In this issue of Our Planet, government leaders, policymakers and experts explore the work of the Global Environment Facility and how the partnership is working to drive progress on the world's most pressing environmental challenges.



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Erik Solheim
*Executive Director,
UN Environment*

More than just a financial mechanism or a partnership agreement, the Global Environment Facility sits at the very heart of global action to protect and restore our environment. This edition of *Our Planet* looks at the work of the Facility, which for more than a quarter century has driven catalytic change, enabling progress on the world's most pressing environmental challenges.

Established on the eve of the 1992 Rio Earth Summit by UN Environment, the United Nations Development Programme and the World Bank, the Facility has provided over \$17 billion in grants and mobilized an additional \$88 billion in financing for thousands of projects around the world. It is now an international partnership of 183 countries, uniting international institutions, civil society and the private sector.

The Facility is the foundation stone of much of the current global action, supporting multilateral environmental agreements to make a real difference to people's lives, and enabling direct action on the greatest threats to our shared future – from global warming to hazardous waste to land and water degradation. It is a pillar of the new Minamata Convention on mercury, the Stockholm Convention on

Persistent Organic Pollutants and the Convention for Biological Diversity – not to mention the United Nations Framework Convention on Climate Change and the Convention to Combat Desertification. Through platforms like UN Environment's Regional Seas Programme it unites countries to protect and restore the ecosystems they share and depend upon, underlining the power of joint action to preserve the global commons.

As the Facility's work enters a new phase under its seventh replenishment cycle, this edition underscores the real change that has been delivered, as well as the importance of a robust replenishment that will see new priorities put to work as we move forward together.

From helping more than 160 countries to tackle the challenges of climate change, to managing harmful chemicals, cutting emissions, preserving forests and protecting biodiversity, the Facility continues to be a core part of our work at UN Environment, as it does at all its partner agencies. Together with these partners, we stand ready to expand this work to overcome the challenges we share at this critical juncture for our planet. ▲



Achim Steiner
*Administrator, United
Nations Development
Programme*

Across the world, the Global Environment Facility's investments have transformed markets, strengthened the resilience of vulnerable communities, improved ocean governance, advanced the sustainable management of chemicals and addressed the key drivers of environmental degradation.

The Facility plays a critical role in disrupting the systems that drive biodiversity loss by tackling key market, governance, policy and implementation failures, using new technologies, platforms, and public-private partnerships.

For example, through sustained investment and partnership with the shipping industry, we are leaving a remarkable legacy with a new global convention to reduce the risk of transfer of harmful aquatic organisms in ships' ballast water, creating an entirely new treatment industry valued at over \$35 billion.

The Facility has also been instrumental in advancing sustainable energy – promoting innovation and supporting governments to catalyze the private sector finance needed to achieve clean, affordable and reliable energy.

These results have been achieved largely due to the strong partnerships the Facility has forged – with UN agencies, development banks, governments, civil society, and the private sector.

It is critical that we build on this track record, aiming for greater impact and transformational change. We need integrated solutions: the challenge of protecting our forests, for example, is not only a conservation issue. It is a climate change issue, an energy issue, a livelihoods issue, a governance issue, and a gender issue.

The 2030 Agenda for Sustainable Development offers an unprecedented opportunity, and the Global Environment Facility is well suited to this task. As a founding member of the Facility, the United Nations Development Programme remains strongly committed to the partnership. We believe that the complex environmental, social and economic challenges of the 21st Century can only be solved together – through the integrated, systemic approaches proposed for the Global Environment Facility's seventh replenishment phase, and by leveraging the comparative advantages of all Facility partners. ▲



Kristalina Georgieva
*Chief Executive
Officer, World Bank*

Together with the Global Environment Facility, we have pioneered integrated programming to promote conservation of natural resources, reverse the effects of ecosystem degradation, catalyze low-carbon development and manage chemicals and pollution. We have leveraged development finance for the benefit of the global environment, as part of our goals of ending extreme poverty and boosting shared prosperity.

The impact of World Bank-Global Environment Facility investments is tangible. We have worked with the government of Brazil and several key partners to create the world's largest tropical forest conservation program, supporting the conservation and sustainable use of more than 52 million hectares – around 15 per cent of Brazil's Amazonian landscape. We have pursued transformational investments in international waters topping \$6 billion and initiated long-term programs in river basins across Africa. In the African Sahel, a region highly vulnerable to climate change and home to 135 million people, we are implementing a \$1.1 billion investment programme across 12 countries, empowering communities to sustainably manage land and water resources. And in China, a long-running program led

by the International Finance Corporation has helped Chinese banks build profitable clean energy lending portfolios that will avoid over 22 million tons of greenhouse gas emissions – equivalent to two years of China's total emissions. The Facility's resources have helped us innovate, take risks, and put in place policy, regulatory and legal frameworks that drive economic development and generate global environmental benefits.

The Facility will play a key role in achieving the Sustainable Development Goals, and the current replenishment is an important opportunity to implement a financing framework that not only leverages our balance sheets, but also mobilizes much-needed private sector investment. As a proven partnership, capable of delivering innovation for scalable solutions, the Global Environment Facility is irreplaceable. ▲

Naoko Ishii

Defining moment

Despite grave threats, development in harmony with the planet is within grasp.



Naoko Ishii

*Chief Executive Officer
and Chairperson, Global
Environment Facility*

We stand at a defining moment for the future of the planet and human well-being. Our global commons – the land, seas and atmosphere we share, and the ecosystems they host – are under severe threat from ever more powerful human activities.

Several planetary boundaries, within which human society has become established and thrives, have already been transgressed as we have taken the global commons for granted. On this trajectory, the threat – not just to the environment but to global aspirations for economic growth, prosperity, jobs and security – risks escalating out of control.

Business as usual will guarantee disaster. Incremental change will not suffice to avoid it: the challenge is just too great for that. The only solution is transformational, systems change.

To get on the right path to a better, safer future, we need to work together on common and systemic solutions, and to address the drivers of environmental degradation.

Three global megatrends will lead to further major degradation of the global environment under a business as usual scenario: a growing population, which will exceed nine billion by 2050; a rapidly rising global middle class resulting in a tectonic shift in consumption and diet patterns; and rapid urbanization which is expected to add one billion new residents to the world's cities.

To “de-couple” the impact of these megatrends, we must fundamentally transform our key economic systems. We need to change the systems that support how we live, how we eat, how we move and how we produce and consume. In other words, four revolutionary shifts in social and economic life are needed: transforming cities, re-thinking food and agriculture, decarbonizing energy systems, and investing in the circular economy.

With its unique mandate across multiple multilateral environmental agreements – and its financing, holistic approach and wide network of partners – the Global Environment Facility is particularly well placed to help catalyze the required transformation.

Established on the eve of the 1992 Rio Earth Summit, the Facility was set up to help tackle our planet's most pressing environmental problems.

Its strong, diverse, and expanding network of partners includes 183 governments, together with civil society organizations, academia and private companies, as well as its implementing and executing agencies.

Since its inception, it has accumulated a vast body of experience and knowledge. It has a key role in bringing together multiple stakeholders and in catalyzing the private sector to form sustainable partnerships. And it has also always been ready to innovate.

But the uncomfortable truth is that we, like the rest of the international community, are failing to reverse the sharp downward trend in the global environment. We have won battles, but the war is still being lost. There have been many good initiatives, but the Facility's projects, too often fragmented and isolated, have come up short in shifting the needle in the right direction, let alone in bringing about transformational change.



We are switching our focus to address the underlying drivers of environmental degradation – rather than merely its effects.

It's increasingly clear that the Facility cannot afford to stand still. In the face of the scale and the urgency of the threats facing the planet, the emerging global momentum for change, and the evolving global financial landscape, the Facility needs to seize opportunities to make a bigger difference.

It is high time for the Facility to change and – with the full support of its Council – it is doing so. Three years ago, the Council agreed on the GEF2020, the organization's first-ever long term strategy, which we are now implementing. We are switching the focus of our operations to address the underlying negative drivers of environmental degradation – rather than merely its effects – and to support innovative and scalable activities that cost-effectively deliver the highest impacts.

We have a golden opportunity ahead of us. We are currently in the middle of discussions on the seventh replenishment of the Facility's Trust Fund. Participants will assess what works and what does not, and what strategy we should embrace at this critical moment. It's a chance to raise our own ambition.

The emerging overall programming architecture of the Trust Fund is aimed at advancing the 2020 vision by addressing the drivers of environmental degradation and contributing to systems change in key areas that impact our mission.

It is increasingly evident that it is simply not possible to address a particular environmental issue in isolation, as if inhabited its own silo. Instead we need to address complex challenges in an integrated manner.

Some of the Facility's recent activities have provided clear evidence of the need to go deeper into the fundamental causes of environmental degradation. If we are to protect biodiversity, for instance, we should invest not only in protected areas but also make integrated investments in reforming land use and food systems, the major drivers of biodiversity loss. This in turn will meet the goals of multiple conventions and deliver more global environmental benefits, with greater impacts.

We all want to live on a healthy planet, and enjoy the beauty of nature. The world is responding to the threats we face, but not fast enough. With the Sustainable Development Goals and the Paris Climate Agreement, the world's nations have provided momentum and direction that must be seized. And multi-stakeholder sustainability platforms have proliferated, reflecting a growing recognition from business of both the risks and the economic opportunities that exist.

But, important as this all is, it is only a start. Much more is needed, and it must happen fast: we are at a tipping point, for good or ill, for the world's environment and prosperity.

The replenishment of the Trust Fund should be more about looking forward than back. And, grave though the current threats may be, future development in harmony with the planet is within our grasp.

We need to act swiftly, and at scale, to realize it – and that is just what the Facility intends to do. ▲

Doris Leuthard

Global challenges

More needs to be done to keep our planet liveable for future generations.



Doris Leuthard

President of the Swiss Confederation and Head of the Federal Department of the Environment, Transport, Energy and Communications

Since the Global Environment Facility was established more than 25 years ago, the global dimension of environmental challenges has become increasingly evident. Scientists tell us that our 'planetary boundaries', the biophysical processes that determine the stability and resilience of the Earth, are being pushed to their limit or overstepped, with high risks of severely jeopardizing the very base that has allowed our societies to thrive over the past 10,000 years. Especially in developing countries, environmental degradation is imperiling, if not sweeping away, development achievements.

Corporations have become more aware of the global dimension of the environment too, since they are increasingly feeling the consequences of the changing environment in their bottom lines. For example, insurance companies are facing higher costs due to more frequent and bigger climate-related disasters, while interruptions of global supply chains due to droughts or flooding are causing systemic repercussions on industrial production.

It was certainly a sagacious and foresighted decision back in 1991 to establish the Facility as the financial mechanism of the Rio Conventions, and later to add the Stockholm Convention on Persistent Organic Pollutants and the Minamata Convention. This bundling is a strength of the

Facility, as it encourages synergies, considering that many environmental challenges are interrelated and that, therefore, the most effective ways to address them are often through cross-sectoral approaches. This is evident in Central Asia, where climate change, water scarcity, land degradation, and pressure on biodiversity are all influencing each other.



Photo: © GEF



Photo: © UN Photo / Marco Dormino

Strength, flexibility and resilience will be needed to contribute to preserving the very foundation of life

Despite the increased awareness of these challenges – and actions by states, cities, civil society, companies and international organizations to address them – greater efforts are urgently needed to keep our planet in balance and livable for future generations. Smarter and cleaner technologies and better regulations will help improve the ways we live and do business, so that we can protect the environment and address the needs of human development. Such a change in society and in the economy, of course, requires long-term commitments, clear political signals, and trillions in investments.

Although its own funds have been increasing over the years – and hopefully the seventh replenishment will again be robust – the Facility has to be very selective in its engagements. While keeping in mind its *raison d'être* – to support the implementation of the obligations stemming from the Multilateral Environmental Agreements – it may be time for the Facility to consider subtle changes to its ways of doing business regarding, among other things: (1) the instruments used, especially in the light of the changes in economic strength of many countries, which makes the old distinction between developed and developing countries questionable; (2) engagement with the private sector given the growing responsibility for environmental matters assigned to and assumed by it; (3) the increased complexity of the international environmental finance landscape; and (4) strategic alignment and coordination

with other sources of climate finance, including domestic sources, in country-level planning.

Moreover, the Facility should strive to distinguish its engagement and financing from that of others. This may imply linking more resources to advisory services, technical assistance, and capacity building. In view of more impactful projects and programs, and more effective long-term planning by client countries, greater flexibility and fungibility of resources within country allocations should be considered. Regarding tracking and reporting its activities and reflecting guidance by the Conference of the Parties of the Conventions, the Facility may want to go beyond how much money is going towards the different focal areas, and concentrate on the outcomes achieved.

With the necessary adjustments to the Facility's modalities of delivery, the "Global Environment Facility family", (i.e., the Council, Secretariat, agencies, client countries, civil society organizations and the private sector), will be well positioned to continue to play a pivotal role for the global environment in the years to come.

We have a saying that "sticks in a bundle are unbreakable". Strength, flexibility and resilience will be needed to contribute to preserving the very foundation of life, while fostering a transition to a thriving, clean economy, and an equitable society. ▲

Hailemariam Dessalegn Global action is needed

*Without global coordination and regulation,
common resources risk degradation.*



**Hailemariam
Dessalegn**

*Prime Minister of the
Federal Democratic
Republic of Ethiopia*

There is no doubt that science is increasingly expanding our knowledge of the problem of environmental degradation (including our role in it) and the extent to which it affects our ability to continually improve our living conditions.

Responses have varied in intensity and scope. They started as largely local and national responses dealing with specific environmental problems. Now our knowledge of how much of our environment (and hence its problems, causes, effects and solutions) functions as one complex system has increased. The international system has responded to deal with the global dimensions of environmental degradation. The recent coming together of the family of nations, in record number and pace, to adopt, sign and ratify the Paris Agreement is indeed encouraging. It helps to remind us why addressing environmental degradation requires global actions.

Global environmental actions are needed for a number of reasons. First, humanity uses certain vital resources in common. The ozone layer and the atmosphere are cases in point. In particular, the atmosphere – with its limited capacity to safely absorb greenhouse gases – is a resource that we use in common. Without global coordination and regulation, common resources risk degradation. Our climate is changing. Temperature is rising. Rainfall patterns are becoming erratic and unpredictable. Extreme weather events are becoming more frequent and severe.

We in Ethiopia are feeling the brunt of a changing climate. It is true that with climate change, we do not all lose at the same time. Some of us lose first. But this should not fool us into losing our grip of the problem. In the end, we all will lose. Ignorance may be bliss but it is not an excuse. It is prudent to err on the side of caution. There is no fundamental ignorance about climate change and other forms of environmental degradation. However, acquisition of knowledge is not certain to result in appropriate responses. There ought to be effective and fair global coordination and regulation mechanisms.

Second, with respect to environmental degradation that can be locally situated and felt, there are causes that lie beyond administrative and political borders. Globalization both exacerbates and alleviates environmental degradation. Global actions will be required for fair and effective tackling of such problems even if they have nothing to do with common resources. A related aspect is that many environmental actions, though taken locally, have transnational or global co-benefits, requiring global mechanisms for incentivizing them.

Third, certain types of solutions for environmental degradation require or benefit from global mechanisms of coordination, collaboration and regulation. Rapid development and dissemination of green technologies and channeling the flow of investment into low emission economic sectors and activities require such mechanisms. International mechanisms that facilitate exchange of knowledge and skills with respect to best techniques and policies are much needed.

Fourth, the earth – taken as a single complex system – requires that in many cases we should all move together. It is not a race. It is an endeavor to collectively avoid pitfalls and



*It is true that with climate change, we do not all lose at the
same time. Some of us lose first.*

aim for a better future. We are not yet there until we are all there. In this regard, therefore, global actions that embody this spirit of solidarity, mutual aid, universal contribution and responsibility are highly needed.

In my view, the last two points emphasize the two most important types of global environmental actions: channeling investment and providing support. Our success in tackling, for example, climate change, requires fundamentally altering flow of investment into green and climate resilient areas, technologies and activities. The extent to which investment flows globally means that responses affecting this flow should be globally coordinated. In this, coalitions of the willing – in terms of, for example, promoting carbon pricing and the removal of fossil fuel subsidies, and the coordinated announcement of contributions and long-term objectives – are indeed very vital. Taking globally coordinated measures to curb illicit erosion of the capacity of states to deliver on their promises to their citizens is another much-needed global action.

The fourth point, in particular, requires the renewal of commitments and delivery. Otherwise the global system that we have been incrementally building could potentially unravel. Some of us may not have adequate capacity (including finance) to take on, or meet, globally agreed contributions and targets. In such cases, it is of utmost importance that

those who are able to do so support those who are less able. When those who are able are also historically responsible for the problem, the imperative to provide support becomes stronger. It is much stronger still when those who are less able and not historically responsible nevertheless decide to do what they can with their limited resources to deal with environmental degradation.

This is an imperative rooted both in fairness and effectiveness. We should all take effective and fair remedial and corrective actions. Those who have the capacity should effectively and fairly support others. Those who have less capacity now should, as responsible members of the community of nations, work to build it, including through effective and fair use of the international support provided. The Government of the Federal Democratic Republic of Ethiopia, which I have the great honor of leading, is guided by these considerations in dealing not only with environmental degradation but also other global challenges. In this regard, I pledge the support of my government to international institutions such as the Global Environment Facility and Green Climate Fund which play important roles in channeling and managing environmental financing.

I am most grateful for the opportunity to share my views on issues of global environmental actions and financing. Thanks indeed. ▲

Tshering Tobgay

Time to act

The world needs innovative thinking and collective action.



Tshering Tobgay
Prime Minister
of Bhutan

The Earth Summit in Rio de Janeiro, Brazil, in 1992 was an historic moment for our planet, producing the United Nations Framework Convention on Climate Change and the Convention on Biological Diversity in addition to the Rio Declaration. Bhutan, under the far-sighted leadership of our monarchs, was one of the early countries to welcome and support both agreements to help tackle the world's most pressing environmental problems. In the same year, the Bhutan Trust Fund for Environmental Conservation was established with contributions from the Global Environment Facility, World Wildlife Fund, Norway, Switzerland, Denmark, Finland, the Netherlands and the Royal Government of Bhutan. It was the world's first environmental trust fund.

Over the years, the Facility – established on the eve of the Earth Summit – has grown in support and outreach from a \$1 billion programme to the investment of over \$17 billion. The number of implementing agencies has increased from three (the World Bank, United Nations Development Programme and UN Environment) to eighteen. Many developing countries, particularly small and vulnerable ones, have benefited immensely from these investments and are very grateful to the Facility's donor community.

Requirements for public consultation and inclusion of social and environment safeguards in the design of projects are among the Facility's most important policies. The best

interventions were introduced and traditional practices were recorded in the process of dialogue and discussions. During these participatory processes, millions of citizens – including local leaders and community members – were educated. What small and vulnerable countries require is technical expertise and capital resources to implement timely local actions. It is good to recall the sixth principle of the Rio Declaration: "The special situation and needs of developing countries (particularly the least developed and those most environmentally vulnerable) shall be given special priority. International actions in the field of environment and development should also address the interests and needs of all countries."

In 2002, the Global Environment Facility Assembly took a bold decision to include land degradation – covered by another Rio Convention, the UN Convention to Combat Desertification – as yet another focal area for support. This was warmly welcomed by developing countries affected by land degradation/desertification, and those whose economies were driven largely by the agriculture sector. Land degradation, one of the main causes of concern in many developing countries, has direct linkages to the management of local biodiversity conservation, and measures to mitigate, and adapt to, climate change. More than 70 per cent of arable land is under dryland farming in Bhutan. Every season, the farming community loses many tons of soils from poor land management upstream leading to an increased sediment loads downstream.

Lessons from implementing Global Environment Facility-funded projects in Bhutan suggests that it is indeed possible to formulate projects and organize meetings jointly for the three Rio sister conventions since the target groups are farming communities and relevant sectors, and the conventions' proposed interventions converge at the local ecosystem level. Perhaps this could be a way forward to delivering outputs of the conventions efficiently, effectively and sustainably.



The need for more support and funds for the Facility and the communities is greater than ever before if we are to translate these global aspirations and plans into local actions.

In the past 25 years, the Facility has been supporting developing countries to meet convention obligations through enabling activities. Local capacity has been developed to understand the project concepts and the components of policies and strategies of the Facility and its implementing agencies. Field observations and studies also indicate that – if local environmental issues like water and air pollution, riverbank protection work, erosion of soil and biodiversity are not addressed quickly – problems only multiply by the next season.

Small and vulnerable countries are most affected by such environmental degradation and also have poor resilience. Thus, they need capital resources urgently and sufficiently. Therefore, it could be timely to examine the current 18-month project cycle and explore the possibility of bringing it down to one year. Similarly, we should examine if it is worthwhile to look at the Facility's System for Transparent Allocation of Resources given the rapidly changing economic scenario of developing countries. Records show, for example, that bilateral donors have either withdrawn or are withdrawing support from small and vulnerable countries whose economies depend on natural resources, while local environmental degradation is being compounded. Likewise, the future of the Least Developed Countries Fund and the Special Climate Change Fund looks uncertain and bleak under current consultations and debates on financing environment actions. In the past, many Least Developed Countries, highly vulnerable to impacts of climate change, took advantage of these funds administered by the Facility. In Bhutan, for example, the water level of one of the most dangerous glacial lakes in the Eastern Himalayas was lowered by five metres with funds from the Least Developed Countries Fund.

One key instrument in delivering timely action is good coordination and communications among institutions involved globally and locally. Past experiences has

shown that delays in submitting convention reports and project proposals are caused by poor coordination and communications among institutions appointed by the host country. It is time to revisit these institutions to experiment, innovate and change.

The Facility has supported over 790 projects for mitigating climate change – contributing to reducing greenhouse gas emissions by 2.7 billion tons – and reduced the vulnerability of more than 15 million people in 130 countries through adaptation measures. This is a great achievement but this is not enough! The global concentration of carbon dioxide in the atmosphere has surpassed 400 parts per million, when the safe level is 350 parts per million. The last time levels of carbon dioxide were this high, humans did not exist. We will also need 60-70 per cent more food by 2050, while air pollution kills 1.7 million children under the age of five every year.

We have experienced the hottest year ever in 2016, a stark reminder that the world is still not on track to limit carbon dioxide emissions and thus raising the big question of whether we can deliver the intent of the Paris Agreement. Yes, we can and we must with our collective effort – for there is no other way!

Collectively, we have endorsed the Paris Agreement to help keep the global rise in temperature below 2°C, and aim to limit it to 1.5°C, above pre-industrial levels. We are also pursuing the Sustainable Development agenda of 2030 with its 17 Sustainable Development Goals all aimed at leaving no one behind. The parties to the conventions prepared and submitted Nationally Determined Contributions, and Strategic Action Plans to tackle drivers of environment degradations. The need for more support and funds for the Facility and the communities is greater than ever before if we are to translate these global aspirations and plans into local actions. It's time to act. ▲

The Global Environment Facility at Work

Oyster openings

How a vision for change and support from the Global Environment Facility is turning the tide for some of The Gambia's most marginalized women.

Photo: CC BY doevos

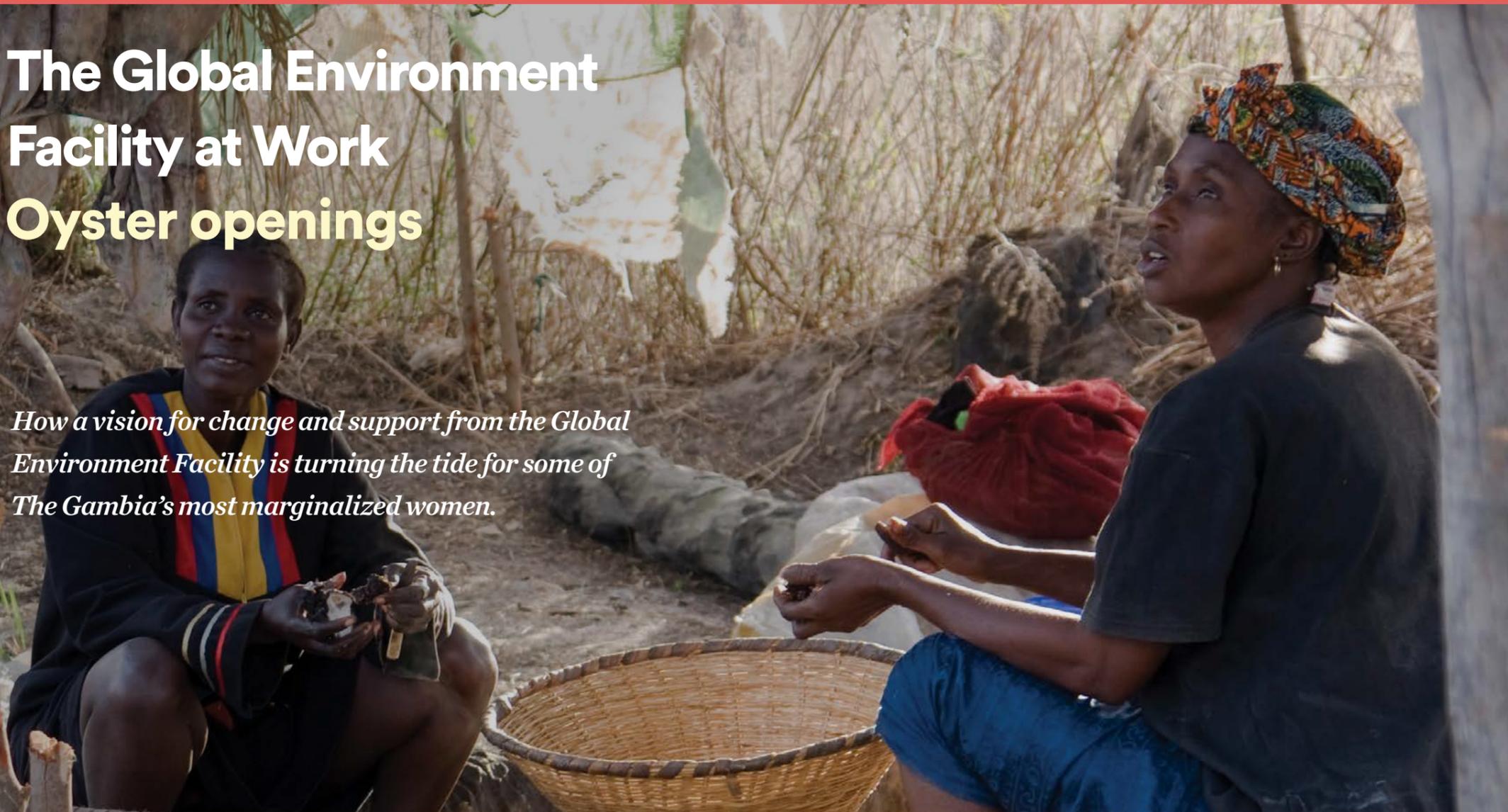


Photo: TRY Oyster Women's Association



Photo: TRY Oyster Women's Association

Life can be hard in The Gambia – and even harder for the women who harvest oysters, a local delicacy and key source of protein, in the West African country's swamps and wetlands.

It's back-breaking work, venturing out in small canoes to harvest oysters from amongst the mangrove roots using machetes and other rudimentary tools – at the mercy of clouds of mosquitoes, crocodiles and the razor-sharp edges of the oyster beds themselves.

Poor and typically illiterate, these women are often the only breadwinners for their families, selling their catch by the roadside for a meagre return, marginalised by their position and their poverty.

But the will for change and the backing of the Global Environment Facility's Small Grants Programme, implemented by the United Nations Development Programme,

is turning the tide for one group of Gambian women.

"I pulled up one day to buy some oysters from a roadside seller. I asked her how things were going and she started telling me her story. Soon other oyster sellers gathered around and began to chime in with their own experiences," TRY Oyster Women's Association founder Fatou Janha says. "From this meeting, I took away one simple message: women were ready for a change." Starting with a group of 40 women from one community and \$14,000 from the Small Grants Programme, TRY has now grown to include 600 oyster harvesters from all over the country.

"Our organization has one simple goal. We want to improve both the natural resources we depend on and the social and economic conditions of our members – and through self-empowerment rather than aid or charity," Fatou says.

A \$14,000 grant may be a small investment in the context of international development, but as TRY has shown, at the grassroots level it has the potential to make a life-changing difference to communities' well-being, their environment and their long-term futures.

With those limited resources we were able to start a journey and make many meaningful changes.

"With those limited resources we were able to start a journey and make many meaningful changes," Fatou says.

The Association has so far helped to re-orient government policy by lobbying for, and ultimately securing, official and exclusive rights to manage and sell the products of the fishery they harvest in the Ramsar wetlands. For the first time, this is allowing The Gambia's oyster harvesters to make their own decisions about how to best safeguard their environment and their future. The Association has improved the physical environment and now has formal ecosystem management plans in place that involve replanting the mangroves every year and protecting them from further degradation. But the changes don't stop there, through supply-chain development, a microfinance programme and financial training, TRY is building the foundations for its members' long-term financial security. Meanwhile, providing access to health-related information and services for

Association members is securing their ability to keep profiting into the future.

"We transformed our local micro-economy by increasing the price of oysters to a level that enables the harvesters to earn a decent living," Fatou says. "The price is now fair and sustainable and our women understand the economic power of cooperation. We have revolutionized the way they manage their money; for the first time, the women have access to a bank account where they can deposit their earnings. And we have completely changed the way women manage their health by arranging for them to attend regular health clinics, because – without healthy people, you cannot have a healthy environment." ▲

The TRY Oyster Women's Association was awarded the United Nations Development Programme's Equator Prize in recognition of outstanding community efforts to reduce poverty through the conservation and sustainable use of biodiversity in 2012.

About the Global Environment Facility Small Grants Programme:

Established in 1992, the Global Environment Facility Small Grants Programme provides financial and technical support to projects that conserve and restore the environment while enhancing people's well-being and livelihoods. Administered by the United Nations Development Programme, the Small Grants Programme aims to demonstrate the power of a community-based approach in addressing local and global environmental and sustainable development challenges and has so far provided grants to over 20,500 civil society projects.

Learn more at www.sgp.undp.org

Anne Hidalgo

Greening cities

The great cities of the world are stepping up to meet the challenge of climate change.



Anne Hidalgo

*Mayor of Paris
and Chair of the C40
Cities Climate
Leadership Group*

Climate change is the greatest threat facing our planet. The leaders of the world's great cities recognize that fact and are taking urgent action. But mayors need strong allies to deliver the transformations needed to create sustainable, green cities of the future. There is no greater partner for our campaign to save the planet than the Global Environment Facility.

C40 is a network of the world's megacities committed to addressing climate change. Recent research by the C40 Cities Climate Leadership Group, Deadline 2020, makes clear the urgency of the climate crisis. The scale of the challenge is formidable. Emissions from the 91 C40 cities need to have peaked by 2020 and average per capita emissions need to almost halve by 2030. There is no time to waste in order to deliver on the ambition of the Paris Agreement, to keep global temperature rise to below 1.5° Celsius above pre-industrial levels, and therefore avoid catastrophic climate change.

Fortunately, the great cities of the world are stepping up to the challenge. In Paris, we have committed to cut our emissions 75 per cent by 2050. Like every city, Paris faces the challenge of toxic air pollution. The same vehicle emissions that contribute to thousands of premature deaths each year are also accelerating climate change. We have pedestrianized the right bank of the river Seine, creating a wonderful new space for Parisians and those who love Paris, to enjoy.

We have also banned the most polluting vehicles and committed with Mexico City and Madrid to ban diesel vehicles, which cause the most damage to public health, from entering the city altogether by 2025.

Cities around the world are taking similar steps. Within hours of the United States' announcement that the country would withdraw from the Paris Agreement, the mayors of hundreds of US cities committed to "adopt, honor and uphold Paris Climate Agreement goals." Chinese cities are seeing fleets of electric buses and cars roll out onto their streets at an incredible pace. Since Clover Moore became



Photo: CC BY/NC/ND Prolo Rosa



Photo: Peter Hershey

The planet cannot afford for the rising cities of Asia and Africa to become sprawling and dominated by cars.

Lord Mayor of Sydney, she has helped cut the city's emissions by 19 per cent, whilst also growing its economy by 37 per cent.

Achieving the ambition of the Paris Agreement will require \$375 billion in investment focused on low carbon infrastructure in C40 cities up to 2020. These investments will transform and improve entire economies by creating jobs, bolstering infrastructure, improving public health and making cities more livable. As a byproduct, they will also help secure our planet for future generations.

That is why the work of the Global Environment Facility is so vital. To date they have invested in more than 1,000 climate mitigation projects, in addition to at least \$1.3 billion of investments to help communities in the developing world adapt to climate change.

The Facility also recognizes the unique role that cities have to play. Deadline 2020 revealed the importance of making sure that cities in the Global South get onto a low carbon development path consistent with the Paris Agreement. Rapidly growing cities in low and middle income countries need to learn from – and avoid – the mistakes of European and North American cities. The planet cannot afford for the

rising cities of Asia and Africa to become sprawling and dominated by cars.

Houston and Barcelona both have populations of around two million people but Barcelona fits into one tenth of the area of the Texan city. As a result, emissions from Houston are several times greater than from Barcelona.

C40 works with cities around the globe to share ideas and accelerate the shift to sustainable development. By the end of 2020 every one of C40's 91 member cities will have a climate action plan in place that will allow them to deliver on their part of the Paris Agreement goals.

The Facility is also working towards the same vital objective. The Sustainable Cities programme promotes integrating environmental sustainability into planning and management initiatives. Investing \$1.5 billion over five years, it is helping to create smart and sustainable cities of the future.

It is impossible to talk about the success of the Facility without reflecting on the inspiring leadership of Naoko Ishii. Since becoming Chair of the C40 network, I have made it a key priority to promote and celebrate the leadership of women in climate action, because I have seen first-hand the impact that powerful and committed women such as Naoko have achieved. As C40 begins to support the next generation of women leaders in climate, through the Women4Climate initiative, the success of the Facility will be a powerful case study.

The next three years will be crucial in determining the future of our planet. With the support of the Facility, cities are leading the way towards a sustainable, equitable and prosperous future. ▲

Jeff Fortenberry Sheldon Whitehouse Maximizing value

Responsible management of natural resources is the basis for economic development and quality of life.



Jeff Fortenberry

Member of the United States House of Representatives Co-Chair, United States Congressional International Conservation Caucus



Sheldon Whitehouse

United States Senator Co-Chair, United States Congressional International Conservation Caucus

Many may think us an unlikely pair – a conservative Republican Representative from Nebraska, in the heartland of America, and a progressive Democratic Senator from Rhode Island, the Ocean State. However, we have come together as Co-Chairs in the United States Congressional International Conservation Caucus because we share a conviction that good natural resource management is fundamental to building a strong economy, bolstering national security, and protecting public health.

Responsible management of natural resources underpins economic opportunity and quality of life for all communities. The loss of natural resources can lead to poverty, hunger, and compromised health and security. Conservation and development must go hand in hand so that nations may benefit from their natural wealth, while preserving it for future generations. This is not only true in the developing world: international conservation also bolsters America's economy, improves our national security, and helps meet our growing need for natural resources. America's interests stretch worldwide and across all sectors: these interests can only be protected by active international leadership and investment in conservation. Through our work as the International Conservation Caucus Co-Chairs, we have come to know the Global Environment Facility as a valuable mechanism for American investment in international conservation.

The Facility is a partnership of 183 countries working together with institutions, civil society organizations, and the private sector to address issues of international conservation. Dollars invested in it are immediately leveraged 4:1 by other major donor nations and are ultimately leveraged as much as 34:1 by other sources (institutions, other nations, partner businesses, and non-governmental organizations). The vast majority of its funding is used directly by programmes on the ground. The Facility is developing agriculture, fisheries, and forestry programmes that benefit people as well as wild animals and places. Its programmes are stabilizing economies around the globe and focus on a range of issues that directly affect the United States, including sustainable development, resource scarcity, and food security. These programmes consequently secure American supply chains and help to ensure a level playing field for American businesses by promoting sustainably produced, responsibly sourced, and certified products.

Three key areas of its work are preventing deforestation, combating the illegal wildlife trade, and protecting our marine resources.

Forests are home to two-thirds of the world's animal species. They are the "lungs of the Earth," providing us with the air we need to breathe and the water on which we all depend. Most deforestation of tropical forests is linked to commercial agriculture, specifically the production of palm, soy, timber, and cattle. The Facility is securing and tracking commitments from major corporations to reduce or eliminate deforestation in their supply chains. It is also assisting small farmers to improve their practices. Working through global public-private partnerships, the Facility is helping to protect millions of hectares of forests.

Wildlife crime is not only a threat to iconic species, but also to the livelihoods of millions of people who depend on



Photo: Jake Sloop

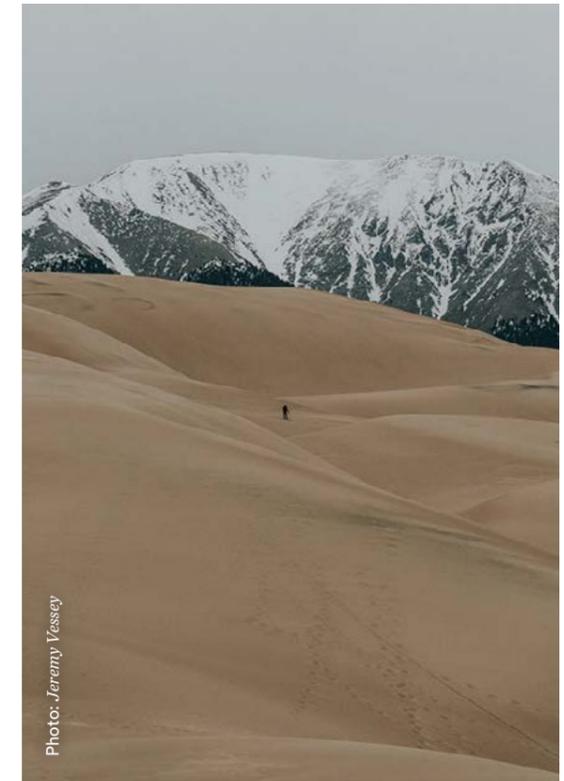


Photo: Jeremy Vessey

healthy ecosystems. It funds organized criminal networks and leads to instability and armed conflict. The Facility is tackling this challenge through a range of projects and public-private partnerships targeting demand and focusing on illegal trafficking throughout the supply chain.

Protecting the world's shared ocean resources requires nations and the private sector to work together. For more than two decades, the Facility has been committed to improving international ocean management, including working with countries to develop regional frameworks to protect fisheries and other marine resources. It has

allocated more than \$1.15 billion in grants to transboundary marine projects, leveraged by \$7.7 billion from other funders, resulting in the creation of 4.1 million square kilometres of marine protected areas.

It is the job of Congress to take a hard look at the federal budget and maximize the value of our expenditures. By investing in the Facility and its partners, we are investing taxpayer dollars where the greatest amount of work is needed – and being done. We hope to see this outstanding work continue, and the return on investment continue to grow. ▲

Forests are home to **two thirds** of the world's animal species



Photo: CC BY-NC, Tomas Munita, CIFOR

The Global Environment Facility is securing and tracking commitments from major corporations to reduce or eliminate deforestation in their supply chains.

The Conventions

No one country can meet global environmental challenges alone. International conventions are the backbone of coordinated global action on the environment. The Global Environment Facility serves as the financial mechanism for five conventions, providing the framework for united progress towards global sustainability.

GEF-7: Replenishing the Global Environment Facility

The Global Environment Facility's ability to enable action on our planet's most pressing environmental problems relies on the funding it receives from its donor countries to support international environmental conventions and agreements. These financial contributions are replenished every four years – with the seventh replenishment cycle (GEF-7) currently under negotiation and commencing in July, 2018.



Replenishment cycles (in billion dollars)

Convention on Biological Diversity

GEF-7 will cover the last stretch of the global Strategic Plan for Biodiversity 2011-2020 and the first years of a successor framework. It is thus coming at a critical point in time and a strong replenishment is necessary in order to maximize efforts for achieving the global biodiversity targets (Aichi Targets) by 2020. A significant GEF replenishment for biodiversity will also provide a strong political signal and lay solid financial groundwork for a comprehensive and impactful successor agreement post-2020 and its enhanced national implementation.



Cristiana Paşca Palmer

Executive Secretary,
Convention on Biological
Diversity



United Nations Framework Convention on Climate Change

Faster, greater climate action after Paris is now essential to keep the global temperature rise as close to 1.5 degrees as possible, which is why I look forward to a strong replenishment of the Global Environment Facility so it can continue its innovative approaches to support developing countries in implementing their national climate plans. This includes identifying and supporting the many cross-cutting links between action on climate and sustainability through the Sustainable Development Goals and other multilateral environmental agreements. Continued strong funding for the Facility remains most important to support all the core goals of the Climate Change Convention and the Paris Agreement.



Patricia Espinosa

Executive Secretary,
United Nations
Framework Convention on
Climate Change



United Nations Convention to Combat Desertification

Currently, 110 countries are setting their targets to achieve land degradation neutrality. These targets are transformative to actual projects that change the fundamental relationship with the land and people's lives for the better. GEF-7 can make a tremendous impact in this change process. We also must keep in mind that investing in land degradation neutrality means accelerating the achievement of other Sustainable Development Goals and serving as an integrator of other Global Environment Facility focal areas.



Monique Barbut

Executive Secretary,
United Nations
Convention to Combat
Desertification



Stockholm Convention on Persistent Organic Pollutants

The Global Environment Facility plays a key role in the implementation of the Stockholm Convention.

In 2017, the effectiveness evaluation of the Convention concluded that there are clear declines in legacy Persistent Organic Pollutants in the environment. This impact has been achieved in large part thanks to GEF-funded projects. However, the effectiveness evaluation also highlighted increasing global levels of newly listed pollutants over the past decade, underscoring the fact that much work remains to be done to reach our goals. A strong replenishment of the Persistent Organic Pollutants portfolio is therefore vital to addressing the remaining legacy pollutants, as well as newly listed pollutants.



Rolph Payet

Executive Secretary,
Basel, Rotterdam and
Stockholm Conventions



Minamata Convention on Mercury

Throughout the negotiations for the Minamata Convention on Mercury, the Global Environment Facility has walked hand-in-hand with all players as an active partner to meet the Convention goals – from providing resources for urgent early demonstration projects, to capacity building to meet the Convention obligations, initial assessments, and national action plans. This Convention is interwoven with sustainable development needs. With the entry into force of the Convention and the first Conference of Parties in September 2017, countries are counting on a strong replenishment to the Facility to enable them to implement their obligations to protect human health and the environment from the adverse and serious effects of mercury.

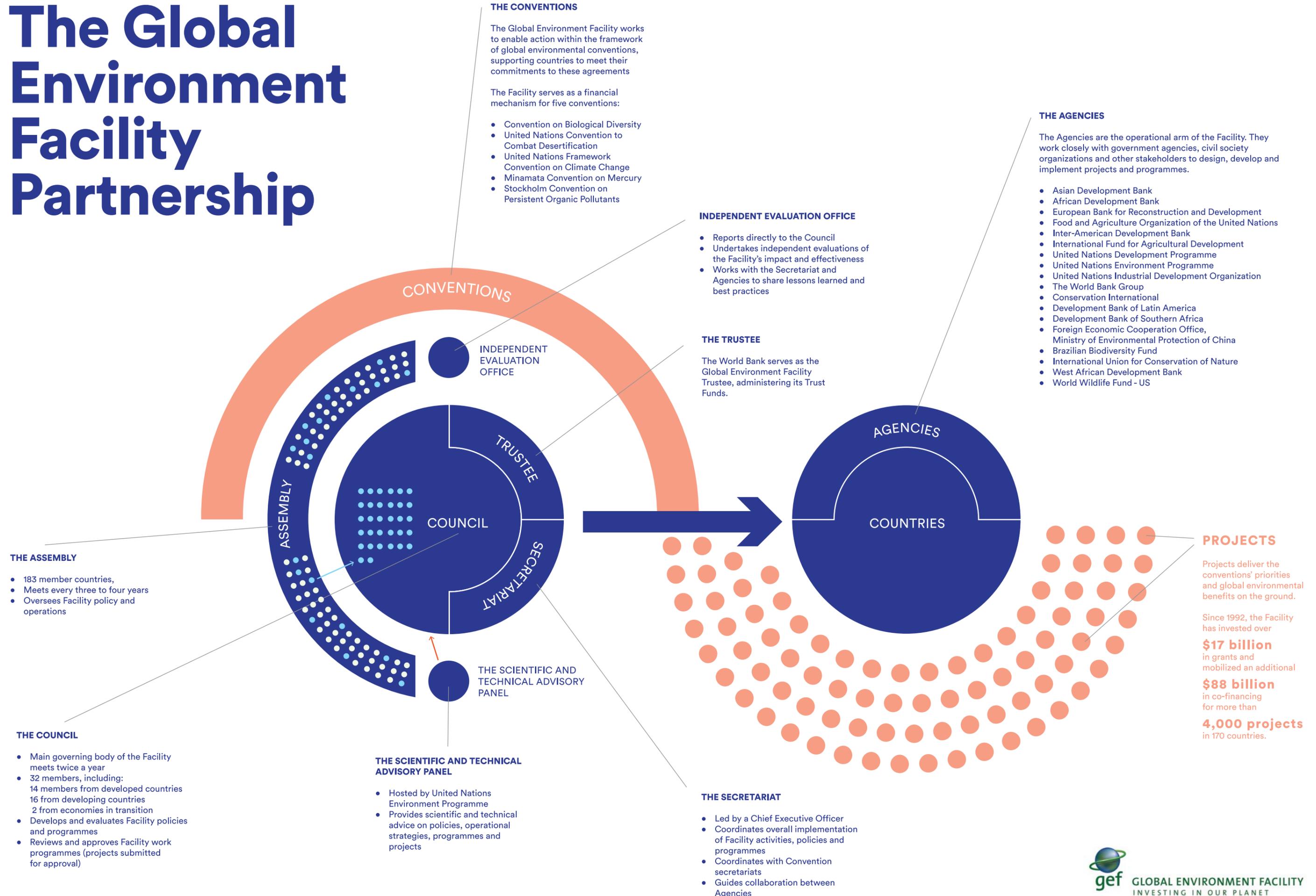


Jacob Duer

Principal Coordinator,
Interim Secretariat of the
Minamata Convention
on Mercury



The Global Environment Facility Partnership



THE CONVENTIONS

The Global Environment Facility works to enable action within the framework of global environmental conventions, supporting countries to meet their commitments to these agreements

The Facility serves as a financial mechanism for five conventions:

- Convention on Biological Diversity
- United Nations Convention to Combat Desertification
- United Nations Framework Convention on Climate Change
- Minamata Convention on Mercury
- Stockholm Convention on Persistent Organic Pollutants

INDEPENDENT EVALUATION OFFICE

- Reports directly to the Council
- Undertakes independent evaluations of the Facility's impact and effectiveness
- Works with the Secretariat and Agencies to share lessons learned and best practices

THE TRUSTEE

The World Bank serves as the Global Environment Facility Trustee, administering its Trust Funds.

THE AGENCIES

The Agencies are the operational arm of the Facility. They work closely with government agencies, civil society organizations and other stakeholders to design, develop and implement projects and programmes.

- Asian Development Bank
- African Development Bank
- European Bank for Reconstruction and Development
- Food and Agriculture Organization of the United Nations
- Inter-American Development Bank
- International Fund for Agricultural Development
- United Nations Development Programme
- United Nations Environment Programme
- United Nations Industrial Development Organization
- The World Bank Group
- Conservation International
- Development Bank of Latin America
- Development Bank of Southern Africa
- Foreign Economic Cooperation Office, Ministry of Environmental Protection of China
- Brazilian Biodiversity Fund
- International Union for Conservation of Nature
- West African Development Bank
- World Wildlife Fund - US

THE ASSEMBLY

- 183 member countries,
- Meets every three to four years
- Oversees Facility policy and operations

THE COUNCIL

- Main governing body of the Facility meets twice a year
- 32 members, including:
 - 14 members from developed countries
 - 16 from developing countries
 - 2 from economies in transition
- Develops and evaluates Facility policies and programmes
- Reviews and approves Facility work programmes (projects submitted for approval)

THE SCIENTIFIC AND TECHNICAL ADVISORY PANEL

- Hosted by United Nations Environment Programme
- Provides scientific and technical advice on policies, operational strategies, programmes and projects

THE SECRETARIAT

- Led by a Chief Executive Officer
- Coordinates overall implementation of Facility activities, policies and programmes
- Coordinates with Convention secretariats
- Guides collaboration between Agencies

PROJECTS

Projects deliver the conventions' priorities and global environmental benefits on the ground.

Since 1992, the Facility has invested over

\$17 billion in grants and mobilized an additional

\$88 billion in co-financing for more than

4,000 projects in 170 countries.

Mark Malloch Brown Stretching for growth

Business, government and civil society must work together in radically new ways.



Mark Malloch Brown

Chair, the Business and Sustainable Development Commission

As stretch targets for the world, the Sustainable Development Goals offer a game plan for harmonizing the demands of a fast-growing human population with a dwindling finite natural resource base. Business, government and civil society need to work together in radically new ways to meet them.

The Global Environment Facility is a model for how organizations can come together to mobilize expertise, share knowledge and pool resources to achieve these 17 Global Goals. Though goals 13 (climate action), 14 (life below water) and 15 (life on land) most clearly call for addressing environmental challenges, none can be achieved without securing the health of our water, land and air, and the future abundance of natural resources. Meanwhile, number 17 – Partnerships for the Goals – captures the essential collaboration required across sectors and borders, which is at the heart of the way the Facility operates.

Backed by the core membership of major multilateral agencies – including United Nations agencies and regional multilateral development banks – and working closely with industry, local government and civil society, the Facility collaborates to develop policies, fund initiatives, and advance programme planning, implementation and monitoring to achieve environmental objectives. As a former head of United Nations Development Programme, one of the three original Facility partners, I saw first-hand

the extraordinary investments of the Facility's small grants programme from the Atlas Mountains of Morocco to Kirstenbosch, the botanical gardens at the foot of Cape Town's Table Mountain. In the latter, precious biodiversity was protected, and in the Atlas Mountains, precious water distribution systems built.

Diverse partnerships drive the Facility's 2020 strategy, which takes on food security in sub-Saharan Africa, achieving sustainable cities, and protecting forests along commodity supply chains. The founding principles of protecting natural diversity, and managing the impact of human settlement on it, remain constant.

The Business Commission shares the Facility's commitment to partnerships for the Global Goals. Paul Polman, Chief Executive Officer of Unilever, and I created the



Photo: Chor Solutifera / World Bank



Photo: © Aman Brangava

Living within our global means is not about rationing ourselves... rather it is an opportunity for new business models that find new growth.

commission in 2016 with this ethos, because we believe that business is the key to accelerating the transition to an inclusive and sustainable world. It recruited 37 leaders from business, financial institutions, civil society and academia to inspire companies to seize the opportunities presented by the Global Goals. These, our research shows, could be worth \$12 trillion across four key economic areas by 2030. But business must work in lock step with government and civil society to achieve them and so unlock this economic windfall.

Private sector partnerships are critical to securing environmental sustainability, and thus, for saving lives and livelihoods. The Facility's work with the shipping industry to curtail the little-known threat of the spread of alien species through ballast water is a good example of its innovative approach. Invasive species released when ballast water is discharged cause \$100 billion per year in economic damage, particularly in communities that depend on the oceans for their livelihoods. A programme funded by the Facility engages experts across the public and private sectors, bringing together technology providers, researchers, and policymakers with industry leaders to devise and implement science-backed solutions.

The Business Commission also mobilizes multiple stakeholders to achieve a sustainable food system. A key recommendation from its flagship report, Better Business, Better World, is that companies should work together to

develop sectoral roadmaps, charting the way toward achieving the Global Goals by 2030. The Food and Land Use Economy initiative brings together more than 30 stakeholders representing academia, government, civil society, business, and finance to protect and regenerate the planet's resources, provide the world's population with nutritious food, and offer 500 million smallholder farmers and their families a decent and reliable standard of living by 2050. The commission is co-leading the initiative along with the Sustainable Development Solutions Network, the International Institute for Applied Systems Analysis, the EAT Foundation, the World Business Council on Sustainable Development, and the New Climate Economy.

This is a two-year initiative that will close its doors in January 2018. We believe we have made our point: living within our global means is not about rationing ourselves or curbing private sector growth – rather it is an opportunity for new business models that find new growth through smart resource and environmental husbandry.

Since its founding in 1992, the Facility has supported more than 3,300 protected areas covering 860 million hectares, and 790 climate change mitigation projects, contributing to a reduction of 2.7 billion tons of greenhouse gas emissions, among other notable achievements. With 13 years to go until 2030, there is still much work to be done. The Global Goals need the Global Environment Facility as a vital partner that will help us get there. ▲

Johan Rockström

Managing the global commons

Our worldview, goals and rules need to change in the new, less certain, epoch of the Anthropocene.



Johan Rockström
Executive Director,
Stockholm Resilience
Centre

Here's a prediction: planetary intelligence could emerge on Earth by 2050. "Hold on," you might say, "that has emerged already, right? Homo Sapiens." No. What we have is a technologically advanced civilization. There is a subtle difference.

Astrobiologist David Grinspoon argues in his book, "Earth in Human Hands", that planetary intelligence emerges when a species develops the knowledge and power to control a planet's biosphere. At the moment we are conducting a reckless experiment on Earth's one. The rate of change of its life support system has been accelerating out of control for over four decades. Industrialized societies have pushed it into a new geological epoch, the Anthropocene. This is an unprecedented moment in the 4.5-billion year history of our planet and certainly not conducive to the long-term survival of a global civilization. Not intelligent, to put it mildly.

For planetary intelligence to emerge on Earth within three decades we need to change our worldview, our goals and our rules. In significant ways, our worldview has not changed much since mitochondrial Eve first stepped out on the high plains of the Rift Valley 200,000 years back. We perceive Earth as an infinite resource with endless horizons. The solution to any pollution has largely been dilution, pushing problems downwind or downstream. The solution to scarcity? Search beyond the horizon. We still see ourselves as a small world on a large planet. Until 1950, this view was

reasonable. Earth was so resilient and abundant it could take anything we threw at it. Not any longer.

In the 1950s we entered what has become known as the Great Acceleration. Economic growth, which has brought billions out of poverty and improved the well-being of many more, has exploded exponentially, colliding with Earth's natural systems, the atmosphere, oceans, ice sheets, waterways and life itself – our global commons. Our civilization emerged during an 11,000-year window of remarkable stability – a "Goldilocks" era, known to geologists as the Holocene. Now that we have left it, the Anthropocene provides an altogether less certain world.

Science provides overwhelming evidence that our modern world depends on a stable Holocene-like state. From the ice sheets to the rainforests, all major parts of the Earth system work together, just like the organs in a human body. We depend on the biosphere with all its ecosystems, animals and plants. We depend on a stable climate system, functioning cycles of nitrogen and phosphorus, water and carbon. The high seas, the atmosphere, the big ice sheets of the Arctic and Antarctica, and the stratosphere – traditionally seen as the Earth's global commons – are now under suffocating pressure. Yet we all depend on them for our wellbeing.

Recently my colleagues and I produced a report for the Global Environment Facility that concluded that, in the Anthropocene, we must redefine the global commons. In these new circumstances we can now define them as a resilient and stable planet. That is every child's birthright, and our common heritage; but it is now at risk. The Anthropocene and the new global commons represent a new worldview – a paradigm shift – as fundamental as Darwin's theory of evolution or Copernicus's heliocentricity.

The second change we need to make relates to our goals. One goal dominates all discourses in society: economic growth.



Photo: © NASA Johnson

For planetary intelligence to emerge on Earth within three decades we need to change our worldview, our goals and our rules.

It is not questioned, yet it comes at a high cost. People are not happier. It is not improving the lives of those living in the wealthiest countries. It is driving unrest and division. And it is driving Earth towards dangerous tipping points.

The Sustainable Development Goals are the first serious attempt to reset the goals of the system. They are universal, applying to all nations, and thus redefine development as truly global in scope. They form, for the first time, a global roadmap for equitable prosperity for all on a healthy planet: World2.0. But they remain embedded in ministries dealing with development aid. This has to change, and quickly. They must become universal goals for all domains in society, including finance to industry. And we have reason for optimism, since business is acting. The Global Goals are already shaping decisions made by major companies like Unilever.

Finally, the rules of the system – the shape of the economic playing field – need to change. We desperately need an effective global system of governance. New rules are beginning to emerge. In 2009, my colleagues and I published the planetary boundaries framework identifying nine that ensure Holocene-like stability. In 2015, we assessed that industrialized societies had pushed Earth beyond four of the boundaries – relating to climate, biodiversity, land use and fertilizer use. That year, 193 nations committed to the Paris Agreement to keep global temperatures within 2°C of pre-industrial levels, as recommended by the scientific community. Perhaps these developments will contribute to the proto-rules of a new economic system.

These rules urgently need to be translated into meaningful science-based targets for governments, cities, consumers and producers. We need a consortium of scientists,

funders, businesses and policymakers to develop them, so as to shape this new playing field.

Thus, worldviews, goals and rules are shifting. But progress often appears lethargic. Given the scale of transformation required, pessimism is forgivable. But it is ungrounded. In the last three years, the growth of global carbon dioxide emissions appears to have stalled. The ozone hole is recovering faster than expected. And we have reached "Peak Child". Population is now growing not because of increased births but due to greater longevity.

The narrative is changing. "Sustainability" has moved from being a marginalized moral question of how much we are willing to sacrifice to "save" nature, to the entry point for innovation, modernity, health and success. We will not primarily leave fossil-fuels behind to avoid climate collapse, but because clean energy technologies are more socially and economically attractive.

The challenge is for the pace of transformation to accelerate. Our recent assessment shows that we need to halve global greenhouse gas emissions every decade. We need economic growth that stores carbon not emits it, enhances biodiversity not reduces it, and purifies soils and waters not pollutes them. In short, we need a biosphere-positive economy.

Such a transformation is not only feasible, but desirable. Colleagues recently calculated, for example, that moving to a healthy low-meat or vegetarian diet could prevent deforestation (and so biodiversity loss), reduce emissions significantly and improve the health of 9 billion people.

If we take the biosphere positive pathway, then the signs are good that we'll find intelligent life on Earth by 2050. ▲

Peter Bakker

Bridging the gaps

Collaboration is the key to the success, and scale, of sustainability.



Peter Bakker

President, World Business Council for Sustainable Development

In the last two years something incredibly positive has happened. The often-criticised United Nations has given the world the biggest gift: the Sustainable Development Goals. The Global Goals have moved the conversation about sustainability from “why?” to “how?”. The facts are incontrovertible – we must act, now – and the Goals lay out the agenda. Working out how to find solutions for the sustainability challenges of energy, cities, food systems, waste, water and mobility is now on everyone’s agenda.

The mission of moving to a shared vision of a world where more than a billion people are all living well and within the boundaries of the planet by 2050 is now widely accepted. Business, government and civil society share a strong will and understand the urgency.

The bigger question then, is: Why we are not moving faster toward transformation?

The answer comes down to complexity and the need to collaborate. Systems transformation involves multiple stakeholders operating from different vantage points across different cultures and different geographies. To unlock the necessary transformation, we need to collaborate – to bring different stakeholders together to work on these common challenges.

Working across systems is not trivial. It takes leadership, humility and a willingness to embrace other viewpoints

in order for governments, business, and civil society to work together.

This intersection of ambition and partnership was strongly evident at the 2015 climate summit. The resulting Paris Agreement succeeded because the science was clear and countries, cities, civil society, and business came together with a shared vision, shared ambition and commitment to an action plan.

At the World Business Council for Sustainable Development, we work with the most forward-thinking companies and their Chief Executive Officers to develop solutions to global sustainability challenges.

It takes leadership, humility and a willingness to embrace other viewpoints in order for governments, business, and civil society to work together.



I am encouraged to find that I no longer need to explain the rationale for taking action when I speak with companies around the world. However, I do have to present the right incentives to demonstrate that collaboration with other businesses – sometimes competitors – will bring coherent and transformative changes. And it must all make economic sense.

The Business and Sustainable Development Commission was launched in Davos in 2016 to map the economic prize that could be available to business if the Global Goals are achieved. Its flagship report this year, Better Business, Better World, drew upon the expertise of the global private sector and civil society leaders to investigate, articulate and amplify the business case for sustainable development and points to market opportunities of at least \$12 trillion a year that could be unlocked by 2030.

So there is a clear business case. However, while we can collectively work on business solutions, their worthiness and implementation depends on two additional key pillars: science and policy.

Business needs clear and indisputable science-based targets. These are in place for climate, under the 20°C goal. But in other fields, such as food, there is no common scientific voice that speaks to issues as broad as malnutrition, obesity, waste, land degradation, and aspiration. Great progress, however, is being made by the EAT Lancet Commission in assessing whether transformation of the global food system in order to deliver healthy and sustainable diets to feed a growing world population is possible. The results will be presented in The Lancet in next year.

As for policy, governments set the frameworks in which business operates. Bringing countries together to unlock transformation is a daunting challenge. Yet governments around the world tirelessly unite in platforms such as the

Global Environment Facility to understand, prioritize, and fund transformation.

Policymakers increasingly acknowledge the need to engage with business to speed up the process. Close to 100 per cent of the food we eat, for example, is produced, processed, or distributed by the private sector. Business therefore needs to be both at the heart of developing sustainability solutions for food, and at the table to help create national and international policy action plans.

We must now bridge the gap between our communities. We share the same vision and we want the same outcome.

Just as the Facility is bringing together the governments of the world around the issues of the global commons and the environment, the Council is convening the leading companies in the world around the same agenda. As a chief executive officer-led organization of over 200 businesses working together to accelerate the transition to a sustainable world, the Council and our forward-thinking members are committed, and ready to lead the change.

None of this would be possible without the valuable insight, endorsement, and contribution of our partners from civil society, academia, governments, and philanthropy, who act catalytically in reaching transformative action.

This spring, the Facility invited the Council and some of our member companies to be at the table for the first of four meetings with donor governments as part of their replenishment process. This gave each party the opportunity to understand better how we can succeed collectively, while independently focusing on our stakeholders and agendas.

This bold initiative opened a door to a bridge over the gap. Now, as leaders, we need to be courageous and start crossing it, so we may meet in the middle and build solutions together. ▲

Over the past two years, we have trained, mentored, and funded teams of innovators from over 13 countries working on early-stage designs to address big sustainability issues

The Global Environment Facility at Work

Grandma's secret

How growing and selling medicinal plants has transformed women's lives in Mauritius.

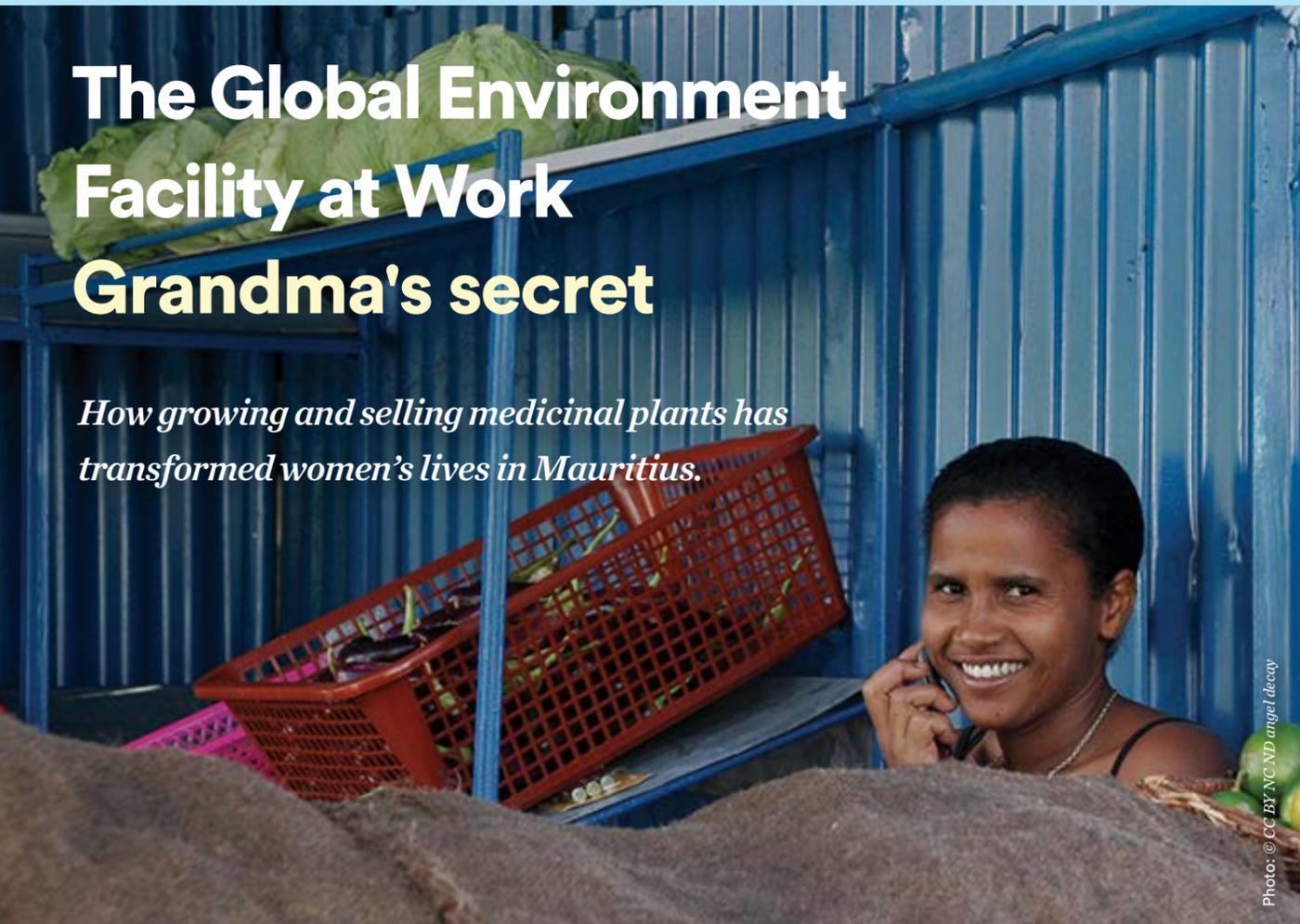


Photo: © CC BY-NC-ND ungel decay

The textile industry has long been an important employer in Mauritius. It is hard work, with many women combining domestic responsibilities with long days in the factories just to feed their families. So when factories began to close in the 1990s, many found themselves struggling to survive.

“Life became very hard,” Anooradah Poorun, a former textile worker says. “Children could not go to school. Women suffered domestic violence: some were forced into prostitution.”

In an effort to ensure the struggles of Mauritian families wouldn't rob a new generation of education, Anooradah founded the Association Pour l'Education des Enfants Defavorises, a free pre-primary school in Chemin Grenier in the country's south, in 1997.

But while the school was able to offer an education to its students, poverty remained a grim reality for their families. “Our childrens' mothers were still jobless, staying at home, suffering from domestic violence and having babies almost every year,” Anooradah says. “So in 2006, after meeting with 20 mothers, we decided to use their traditional knowledge

about conservation and cultivating medicinal plants to conserve biodiversity and improve their livelihoods.”

With support from the Global Environment Facility's Small Grants Programme (implemented by the United Nations Development Programme), which also helped the women to gain co-financing from the British High Commission, the women launched an entirely new enterprise – Secret Grand-Mère (Grandma's Secret), the first copyrighted Mauritian brand of local medicinal and herbal teas.

Focusing on building on the unrecognised expertise many women already had, the group worked to revive knowledge of medicinal plants in their community. They set up a small nursery on the school's roof and women received training in plant cultivation and managing the nursery, alongside picking and dehydration techniques, packaging and marketing.

“Mothers would come in the early morning to water the plants, and after school hours to dehydrate the leaves and pack teas,” Anooradah says.



With their first dehydrator in the school's small kitchen, soon the group was selling their tea at fairs and by word of mouth. Orders swiftly increased, and in 2011 the women got their first international contract, exporting to a company in China. But growth brought its own challenges.

“Orders increased but our production unit consumed a lot of electricity,” Anooradah says. “So, in 2015, we moved the rooftop nursery, built a proper unit on the first floor and approached the Small Grants Programme a second time to support us to install solar panels.”

With 72 square meters of solar photovoltaic panels in place, producing 14,360 kilowatt hours of electricity per year (the equivalent of 50 trees saved), the women were not only able to slash their costs – but to make a profit.

“We save on bills and sell around \$450 of electricity to the grid every month, which helps provide food to vulnerable children at our centre,” Anooradah says. As demand grew, the women set up a “Buy Back Leaves” system, cooperating with an additional 45 women from all around Mauritius, who buy the company's seedlings, cultivate them, and then sell them back to Secret Grand-Mère for processing. They have also helped to restore respect for the powers of the island's traditional medicine, with more than 5,000 families now keeping medicinal plant corners of at least one square metre in their gardens.

From a route out of poverty for a small group of women, with the dedication of its members and the support of the Small Grants Programme, Secret Grand-Mère has become much, much more.

“Our mothers are respected by their husbands and the greater community and contribute to local economic development,” Anooradah says. “Their self-confidence and quality of life has improved significantly.”

About the Global Environment Facility Small Grants Programme:

Established in 1992, the Global Environment Facility Small Grants Programme provides financial and technical support to projects that conserve and restore the environment while enhancing people's well-being and livelihoods. Administered by the United Nations Development Programme, the Small Grants Programme aims to demonstrate the power of a community-based approach in addressing local and global environmental and sustainable development challenges and has so far provided grants to over 20,500 civil society projects.

Learn more at www.sgp.undp.org

“Our mothers are respected by their husbands and the greater community and contribute to local economic development,” Anooradah says. “Their self-confidence and quality of life has improved significantly: they have even learned how to give interviews to the media.”

“Twelve of our members were victims of domestic violence and eight were always looking for government subsistence allowances, but through the capacity building and gender violence support included in the project, they understood their rights. They

now have more respect in their families, can voice their concerns and share financial responsibilities. They do not need the government allowance and can stand on their own feet.” ▲

Secret Grand-Mère won the Enterprise Mauritius Emerging Exporters Gold Award in 2013. Anooradah Poorun has received the Green Africa Award in the category of African Women for Change (2013), as well as the Pride of India Leadership Award (2011) from the Government of India for her leadership role in social work.

Kathy Calvin

Only connect

Sustainable development depends on linking people and the planet.



Kathy Calvin
President and Chief
Executive Officer,
United Nations
Foundation

Sustainable development is thirty years old. It was born in 1987 with the release of the “Our Common Future” report, which declared: “Sustainable development is development that meets the needs of the present without compromising the ability of future generations to meet their own needs.”

There has been some progress since that time, but millions of children still become ill from dirty air and dirty water, tens of millions of people are displaced by disasters, and climate change threatens to undo the gains we have made against poverty. It’s clear there is more work to do.

The good news is that the international community took a giant step in the right direction in 2015 by adopting the Sustainable Development Goals and the Paris Agreement on climate change. Creating a thriving planet where every person can live with dignity lies at the heart of both agreements.

Importantly, the Global Goals recognize that the well-being of people and of the planet are connected. We cannot reach our goal of a world without poverty and injustice unless we integrate environmental sustainability into our development framework. The Global Goals do this. Environmental protection figures prominently among them – including clean water and sanitation (Goal 6), affordable and clean energy (Goal 7), life below water (Goal 14), life on land (Goal 15), and, of course, climate change (Goal 13).

This focus on environmental sustainability is welcome. Frankly, it is long overdue. It may matter politically to countries setting budgets, policy, or legislative priorities, whether an issue is framed as an environmental or development effort – but it doesn’t matter substantively.

Promoting sustainable transport, for example, serves both the development and environmental agendas across the Goals. Private and public investment will seek returns regardless of whether investments are driven by a country’s national climate plan or by its ambition for the Goals. Moreover, the SDGs are purposefully integrated: progress to meet one target will help us to reach others as well.



Photo: © CC BY Francisco Anzola



Photo: © CC BY NC ND Alison Kweasel / World Bank

Thirty years after “Our Common Future” we must not miss the opportunity provided by the Global Goals to connect our environmental and development work.

As the body tasked with supporting five United Nations environmental conventions, the Global Environment Facility, under the leadership of Naoko Ishii, will play a key role in linking sustainability and development, and supporting implementation of the Global Goals.

For more than two decades, the Facility has tackled complex, interdependent issues in an integrated way. It has: brought together a network of United Nations agencies, investment banks, national governments, civil society groups, and other partners to work on environmental issues; provided strategic financial investments to projects that support a healthier world; supported multi-stakeholder alliances to preserve threatened ecosystems and to promote clean energy, green cities, and food security; and helped lay the foundation of a more prosperous, climate-resilient world. Integrated planning is set to become even more central in the Facility’s next replenishment.

As countries consider implementing multilateral environmental agreements, they must also think about how their plans will help meet the Goals. Many of the agreements covered by the Facility have developed action programmes that

connect their specific environmental mandate (biodiversity, climate, desertification, etc.) to sustainable development, thus strengthening the link between them and the Global Goals.

The Facility is already mobilizing action toward achieving the Goals. Examples include supporting global and regional multilateral agreements that deal with international waters or transboundary water systems, as well as helping countries move to a low-emission development path and increase their resilience and adaptation to the adverse impacts of climate change.

Possibly less obviously, the Facility is also engaged in non-environmental goals, like Goal 2 on eradicating hunger. It supports countries’ efforts to prevent land degradation through sustainable management and to safeguard the natural resources that underpin food and nutrition security.

United Nations member states have the primary responsibility for delivering on the Goals, but the United Nations and institutions like the Facility will be critical to providing support for truly integrated sustainable development, including assisting countries with cohesive planning, avoiding duplication, and maximizing the effectiveness of their investments. United Nations Secretary-General António Guterres has made integrated sustainable development a key priority, including through strengthening the United Nations Development System.

Thirty years after “Our Common Future,” we must not miss the opportunity provided by the Global Goals to connect our environmental and development work, so that we can reach a world in which people and the planet thrive. Strong global support for institutions like the Facility will help make that happen. ▲

Rosina M. Bierbaum

Elements of change

Six good practices are needed in tackling complex environmental change.



Rosina M. Bierbaum

Dean Emerita and Professor, School of Environment and Sustainability, University of Michigan, United States and Chair, Scientific and Technical Advisory Panel of the Global Environment Facility

The Global Environment Facility was created to protect the global commons, and funds projects to address climate change, biodiversity loss, land degradation, sustainable forestry, international waters, and chemicals in more than 170 countries. Since 1991, it has provided \$17.6 billion in grants and mobilized an additional \$88.6 billion in financing for more than 4,453 projects.

The ecosystems, biomes, and processes that regulate the stability and resilience of the Earth system are under severe pressure. The science indicates that several planetary boundaries have been breached, including loss of biodiversity, and land use and climate change. As the Facility approaches its quadrennial replenishment in June 2018, it is timely to reflect on how understanding of tackling environmental problems has shifted, and what factors make for successful outcomes. We clearly need transformational change, and at scale, to make a dent in burgeoning global environmental problems.

Four of the top five risks in the Global Economic Forum's Global Risks Report 2017 are environmental. There is increasing recognition that a deteriorating global environment poses significant threats to the prospects for future economic growth and development. Nor will we succeed in delivering the Sustainable Development Goals in the absence of a stable and healthy Earth system.

The notion has long gone that environmental problems can be dealt with singly in silos. Simply setting up protected areas to reduce biodiversity loss will not succeed when much of biodiversity is found in areas under production, both in agriculture and in the seas. Further, as climate changes, shifting species' ideal ranges, ecosystems within protected areas will be dramatically altered. Protected areas are important, of course, but they are only part of the answer. We therefore need innovative ways of integrating development and protecting biodiversity. And we also need to ensure that we do not inadvertently make things worse, for example, by expanding agriculture in ways that deplete soils, use water unwisely, harm pollinators and bring deforestation. Otherwise efforts to increase food production will eventually prove self-limiting.

The Facility is pioneering three new Integrated Approach Pilots addressing the major drivers of environmental degradation. In "Fostering Sustainability and Resilience for Food Security in Sub-Saharan Africa", it is pursuing agricultural transformation and intensification which is both sustainable and resilient through integrated management of the natural resources – land, water, soils, trees, and genetic resources – that underpin the security of food and nutrition. "Taking Deforestation out of Commodity Supply Chains" is tackling the expansion of commodity production for beef, soy and palm oil, which accounts for about 70 per cent of deforestation globally. It is introducing integrated supply chains which embed sustainability principles and better practices, while supporting conservation and protection of forests. "Sustainable Cities" is implementing sustainable urban planning and management initiatives to deal with urban population growth and expansion as a driver of environmental degradation.

The Scientific and Technical Advisory Panel – an independent group of scientists advising the Facility, which I chair – has been considering elements of good practice in tackling complex environmental challenges through integrated projects and programmes. We propose six



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We clearly need transformational change, and at scale, to make a dent in burgeoning global environmental problems.

key elements, based on our review of the literature and Facility's experience:

1. Applying systems thinking, i.e. addressing inter-connected environmental, social, economic, and governance challenges across sectors with an eye towards resilience and transformational change.
2. Exemplary stakeholder engagement, including with local communities – not just government officials – from the inception and design of a project through to its completion. This is crucial for identifying diverse needs and managing trade-offs.
3. A clear rationale and theory of change to tackle the drivers of environmental degradation through assessing assumptions and outlining causal pathways – and having a 'Plan B', should desired outcomes not materialize.
4. Explicit plans and funding for good quality knowledge management including: sustainable databases, which endure beyond the project's completion; simple, useful and usable common indicators; face-to-face consultations; and building the capacity of stakeholders. This is essential for developing 'lessons learned', and for scaling up.
5. Monitoring, evaluating, and learning from projects and programs – applying what is learnt during their

implementation and adaptive management that can serve to inform future investments.

6. High quality management of programmes, preferably by a small team driving integration across related projects and ensuring that the previous five elements are incorporated.

The Facility's three Pilots collectively address the outcomes of the 2012 Rio +20 summit on: food security, nutrition and sustainable agriculture (Goal 2); water and sanitation (Goal 6); sustainable cities and human settlements (Goal 11); climate change (Goal 13); biodiversity, desertification, land degradation, and drought (Goal 15); and sustainable consumption and production (Goal 12). They will also contribute to Goals 1 (No Poverty), 3 (Good Health and Wellbeing), 7 (Affordable and Clean Energy), 8 (Decent Work and Economic Growth), and 9 (Industry, Innovation, and Infrastructure).

The Facility's experience and learning as the Pilots are implemented will provide valuable lessons for countries in developing projects and programmes as they set about delivering their commitments on the Global Goals. These six elements of good practice will, I hope, provide some useful pointers to what makes for successful integrated, systems approaches to complex environmental, social, and economic issues. ▲

Edward Norton

Hope from the hills

A groundbreaking partnership is protecting biodiversity, combatting climate change and increasing the prosperity of indigenous people.



Edward Norton
Actor, film-maker and activist

Kenya's Chyulu Hills host not just rich wildlife and beautiful landscapes but a groundbreaking partnership to conserve biodiversity and combat climate change between its people and the Maasai Wilderness Conservation Trust.

Founded at the turn of the millennium to protect the area's biodiversity by involving the indigenous communities in programmes that bring them transformative economic benefit, the trust has empowered the local Maasai through natural resource management initiatives and partnerships that advance sustainable economic development and conservation. It has succeeded because of its pioneering programming and its long-lasting partnerships with like-minded innovators.

The region's biodiversity is wide-ranging and diverse. Its iconic and critically endangered wildlife includes lions, elephants, giraffe, cheetah, and wild dogs that either live there or use it as a critical migration corridor. Covering over 283,000 acres, the resource-rich project area includes montane cloud forest, grassland savannah, and vital sources of fresh water, servicing populations as far away as Mombasa, Kenya's second largest city.

I am proud to serve as the president of the trust's United States board of directors, and I have encountered first-hand the positive impact of strategic partnerships and exchanges. The trust's main focus has always been engagement with the local Maasai landowners and communities,

who have inhabited the area for centuries: they comprise its most significant, though not only, partnership. Together, we work to overcome the formidable pressures of the industrialized world: poaching, land conversion and degradation, timber harvesting, over-grazing, resource extraction, and charcoal burning, on this threatened, though paradoxically resilient eco-system and on the traditional Maasai culture.

In 2014, initiating a vital relationship, the trust received a two-year grant from the Global Environment Facility Small Grants Programme, administered by the United

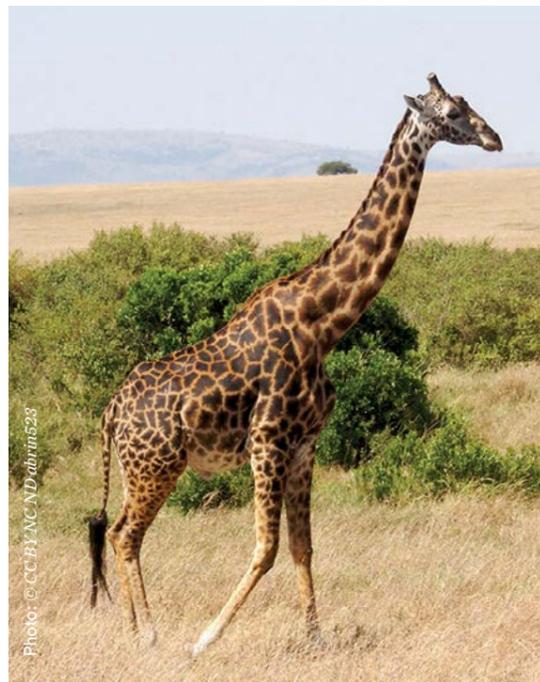


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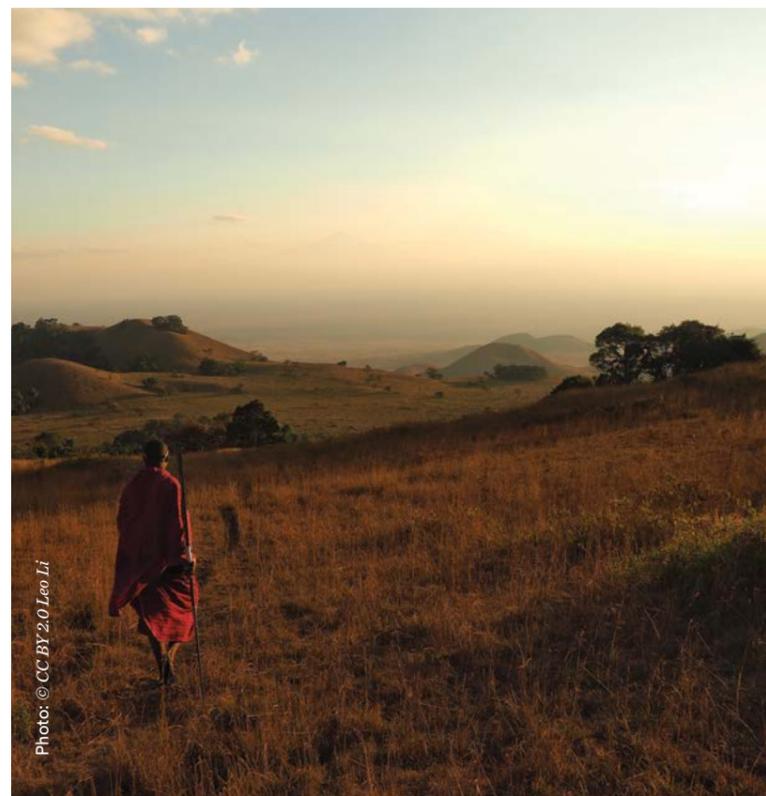


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The trust has empowered the local Maasai through natural resource management initiatives and partnerships that advance sustainable economic development and conservation.

Nations Development Programme. The grant was to help local communities in their efforts to manage their natural resources more effectively – through improving grazing practices, the condition of rangelands, and ecosystem functions – so as to achieve greater livelihood security and improved biodiversity conservation.

The results have been remarkable. The trust and the community have constructed three Wetland Ecological Restoration Catchments to provide water for both wildlife and livestock and to help restore critical wetlands. They have also: built five field cattle crushes for treating and vaccinating local community livestock; trained over 100 community rangers in the use of Spatial Monitoring and Reporting Tool technology, improving data reporting and analysis and boosting the monitoring and protection of the wilderness and wildlife; and developed pilot grazing plans with the community and consultants.

The trust's relationship with the Facility strengthened in 2016, when it was awarded a Facility grant and became a lead implementing partner. Spanning three years – and

including two other partners (Big Life Foundation and African Conservation Centre) – the grant aims to establish biodiversity conservation and sustainable use in productive lands in the Greater Amboseli landscape and to improve the sustainability of protected areas.

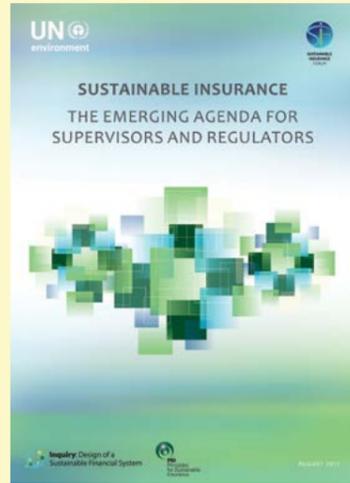
Again the trust has achieved notable results, and aims to accomplish even more. So far, the grant has provided support for community-based workshops and training for a number of initiatives, including: better implementing 'Spatial Monitoring and Reporting Tool' technology; increasing understanding of regulations on establishing conservancies under Kenyan law; developing integrated land-use plans based on first-hand experience; identifying and mapping important wildlife corridors to minimize conflict with people and animals; paying annual management fees to group ranches for conservancies; providing seed support for a Conservancy Trust Fund for land preservation; supporting more community rangers and training community game scouts; developing sustainable tourism products in established conservancies; and establishing sustainable incentives for conservation, including Payment for Ecosystem Services. Among the most effective of these incentives is the Trust's Wildlife Pays project, which compensates herders for livestock lost to predators with funds provided by surcharges levied on tourists at the trust's ecotourism partner, Campi ya Kanzi.

But by far the most anticipated and game-changing initiative to date is the Chyulu Hills REDD+ Carbon Project. Supported by the United Nations Development Programme, UN Environment and the UN Food and Agriculture Organization, REDD+ counters climate change by reducing emissions from forests. It prevents deforestation, degradation, and grassland conversion and helps provide alternative livelihoods for local communities living in and around them. The trust has played a key role in developing the project, which provides carbon credits for sale together with eight local partners. It aims to prevent the emission of the equivalent of an astonishing 28,122,572 tons of carbon dioxide over the 30-year project.

After amassing 600,000 tons of carbon credits per year for the past three years, the trust and Maasai stakeholders will enter the market with close to 2 million credits. Selling these – together with income from some other promising programmes (especially payment for watershed services and a prospective solar program) – will provide long-term, sustainable funding and relief from dependence on philanthropy.

By nearly all measurements, 2017 has been a banner year for the trust and its affiliated community partners. Without the Facility and its now long-standing support, much of our success would be considerably blunted. As United Nations Goodwill Ambassador for Biodiversity, I have encountered many earnest players in the field of conservation. But the trust stands out – from our President and Chairman of the Board Samson Parashina (a 2012 UN Environment Champion of the Earth) to our innovative programmes. The Facility's support is an affirmation of those programmes and the positive direction they are taking, and we are ever grateful for it. ▲

UN Environment Publications



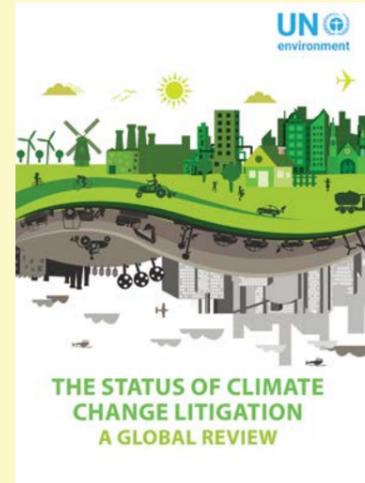
Sustainable Insurance: The Emerging Agenda for Supervisors and Regulators

Key sustainability factors are now recognized as potentially significant for the success, safety and soundness of the insurance sector inspiring reactions by supervisors and regulators. In its role as risk manager, risk carrier and investor, the global insurance sector plays a cornerstone role in the management of sustainability-related risks and opportunities. The risk transfer tools of insurance along with the deployment of its long-term capital base are highly relevant for many of the 17 Sustainable Development Goals and the goals of the Paris Agreement on climate change.



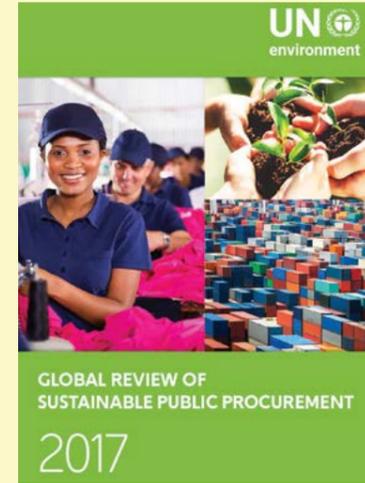
Green Finance Progress Report

This report highlights some of the progress made amongst G20 members and internationally on green finance since June 2016. Progress described is illustrative and non-exhaustive, drawing on voluntary contributions from GFSG members and a broader review of global trends. It provides a useful summary of many of the key developments and the overall progress made to mobilize private capital for green investment.



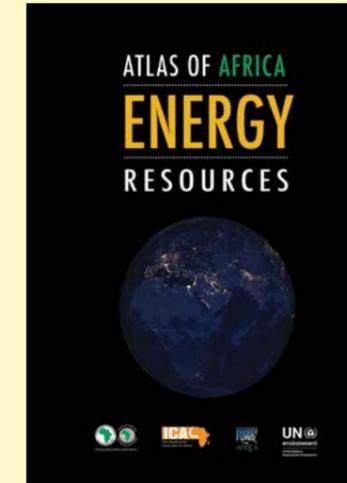
The Status of Climate Change Litigation: a Global Review

This report provides judges, advocates, researchers, and the international community with an of-the-moment survey of global climate change litigation, an overview of litigation trends, and descriptions of key issues that courts must resolve in the course of climate change cases. One purpose of this report is to assist judges in understanding the nature and goals of different types of climate change cases, issues that are common to these cases, and how the particularities of political, legal, and environmental settings factor in to their resolution. Another goal is to contribute to a common language among practitioners around the world working to address climate change through the courts.



2017 Global Review of Sustainable Public Procurement

The 2017 Global Review of Sustainable Public Procurement provides an up-to-date overview of the scale and type of sustainable procurement activities undertaken worldwide in the past three years. It addresses a longstanding need of stakeholders to access reliable and comprehensive information on activities and organizations involved in this critical organizational function.



Atlas of Africa Energy Resources

Through maps, charts and images, this Atlas combines scientifically reliable data sources to provide a complete view of Africa's energy resources, illustrating scale and distribution as well as production and consumption trends. It also focuses on the challenges and opportunities to decision-makers, planners, investors and energy experts tasked with providing Africa's population with access to reliable, affordable and modern energy services



Freshwater Strategy 2017-2021

This report describes UN Environment's five-year Freshwater Strategy from 2017 to 2021. As a living document, it is intended to guide work related to freshwater across UN Environment's divisions, sub-programmes and regional offices, as well as interactions with governments and partners at national, regional and global levels. The Freshwater Strategy supports the implementation of UN Environment's Medium-Term Strategy and Programme of Work adopted by universal United Nations membership through the UN Environment Assembly. Coming at a critical time for freshwater in general, and the implementation of the Sustainable Development Goals in particular, this strategy aims to unlock the potential of integrated collaboration and spur leadership on freshwater issues globally.

All UN Environment publications are available online at:
www.unep.org/publications



Rosa Lemos de Sá

Rescuing rainforests

Sixty million hectares of protected areas have been created in the Amazon, helping to halt the rate of deforestation.



Rosa Lemos de Sá
Chief Executive Officer,
Brazilian Biodiversity
Fund-FUNBIO

Maps of the Brazilian Amazon in 2000 and 2010 show unmistakable signs of dramatic change. Indigenous lands and several categories of protected areas now occupy millions of hectares, forming a consolidated landscape of conservation. But it might not have been so.

A previously predominantly conserved Amazonian forest was vastly altered during the 1980s, devastated by the occupation and development of the territory by Brazil's military government. It saw the Amazon as a "green desert" ready to be exploited. Biodiversity and native peoples were not seen as part of the forest. The intensity of the devastation rose even further in the 1990s – when the country was again a democracy – and would only change significantly at the turn of the century.

The Amazon Region Protected Areas Programme contributed greatly to that shift. The Programme, which started in 2002, has helped to create almost 25 million hectares of new protected areas, and to maintain and manage 35 million hectares of existing ones. The total area of some 60 million hectares is double the size of Germany.

The programme – the world's largest tropical forest conservation initiative – made a substantial contribution to the Brazilian Amazon reaching the Convention on Biological Diversity's target of protecting 10 per cent of each of the

planet's ecological regions. Although it is not the only project to help mitigate deforestation in the region, its results are extremely relevant compared to those of other policies that can be easily altered. These results benefit not just Brazil, but the entire Amazon Basin – and have a positive impact on conserving biodiversity and combating climate change worldwide.

A programme of such proportions was unheard of – even inconceivable – until the Global Environment Facility pledged financial support in 1998. The Facility has been a key contributor to conservation in Brazil, helping to develop and implement environmental policies. It is the driving force behind the Programme, and was the first donor to believe in, and commit itself to it.

The importance of its contribution cannot be stressed enough: independent evaluations have proved that the first 15 years of financial support to the programme translated into measurable improvements in protected area management. Combined with other policies, it has halted the rate of deforestation for over a decade.

The programme's main objective is conserving biodiversity: its 114 protected areas house almost 150 endangered species. But its indirect effect of reducing carbon dioxide emissions is extremely relevant, especially since studies suggest that emissions from deforestation are eight times higher than those from automobiles in Brazil. Thus protecting the forest is the country's most important mechanism for tackling climate change.

Contributions from the Facility and other donors have secured resources for the Programme until 2039, giving it a total life of 37 years. Yet after just 15 years of existence, it has already received global recognition, and is considered



A protected areas programme of such proportions was unheard of – even inconceivable – until the Global Environment Facility pledged financial support.



The Program's 114 protected areas house almost 150 endangered species

transformational by the Facility's Independent Evaluation Office. And it is being replicated in Peru and Colombia, with the Facility's continued support.

It has also inspired the Global Environment Facility-funded Marine Protected Areas Programme, which aims to increase the proportion of Brazilian marine ecosystems under protection from 1.5 per cent to five per cent. I expect this initiative to surpass its present goals, as the original programme did, and hope it will get similar long-term-guaranteed financial support from donors beyond its initial five years.

Such support is essential, especially with the present increased tendency to cut funds for conservation and for climate change mitigation. The strides made by the programme demonstrate the possibilities that open up when government, the scientific community, civil society and the

private sector align their interests. But menacing political shifts put such progress in danger.

We cannot ignore the extreme threat the resulting policies pose to future solutions to world issues. So it is imperative that visionary leaders who support a sustainable future join forces and objectives. International donors should now come together to support the Facility just as they have done for the programme over the last 15 years. Governments must receive the message from them that setbacks are unacceptable – that it is not possible to look ahead while stepping backwards.

Maintaining multilateral agreements is key to safeguarding conservation and the sustainable use of resources. This is the time for countries to pledge their contribution and commitment, showing continued support to biodiversity conservation – and to our future. ▲

Juha I. Uitto

Being accountable

The Global Environment Facility's impact and performance is constantly being formally, but independently, evaluated



Juha I. Uitto

Director, Independent Evaluation Office, Global Environment Facility

The Global Environment Facility is a knowledge-based organization in which evaluation is central to accountability, results and learning. For it to be truly useful, it must respond to changes both in the external landscape in which the Facility operates and in internal *modus operandi*. During the Facility's 7th Replenishment process, the Independent Evaluation Office is completing its sixth Comprehensive Evaluation under the theme 'the Global Environment Facility in the Changing Landscape of Environmental Finance'. All such replenishments have been accompanied by an overall performance study and, as previously, the purpose of the Comprehensive Evaluation is to provide solid evaluative evidence to inform the negotiations, gauging the results and impact of the Facility's work through a wide mix of methodologies. The Office is pioneering state-of-the-art geospatial methods that allow us to measure environmental change over longer periods of time, both before and after project implementation, and to compare project sites with matched control locations.

The preliminary findings of the evaluation confirm the Facility's continued solid performance. Overall, the projects in the focal areas of biodiversity, chemicals and waste, climate change, international waters, and land degradation provide global environmental benefits, while reflecting national priorities and responding to the guidance provided by the Conventions that the Facility serves. They also highlight the long-term nature of environmental

challenges and the need for comprehensive, sustained initiatives to address them. For example, it took 15 years and three successive Global Environment Facility projects to mitigate the water hyacinth infection in Lake Victoria that threatened the livelihoods of millions of mostly poor people in its basin. One lesson was that it was important to extend the scope of the response beyond Kenya, Tanzania and Uganda – the three countries directly bordering the lake – to address the sources of the contamination upstream on the Kagera River in Burundi and Rwanda.

This lesson is reflected in how the Facility has shifted its focus towards addressing the drivers of environmental change and to integrated approaches that cut across its focal areas. A component evaluation revealed that the steadily increasing portfolio of multi-focal area projects has produced opportunities to fulfil both global and national environmental commitments, and to increase multi-sectoral interaction. This more complex approach has, however, led to higher transaction and operating costs in project design and monitoring. While the evaluation found that synergies across focal areas helped projects produce a higher diversity of outcomes, necessary trade-offs – notably between environmental and socio-economic outcomes – needed to be managed.

Regarding synergies, the Independent Evaluation Office piloted a value-for-money analysis of interventions in land degradation and biodiversity, using methodological approaches to identifying causes that had not previously been applied in this context. They included a series of quasi-observational experiments in which project locations were contrasted with similar locations where there had been no intervention, using hybrid econometric propensity score matching and machine-learning techniques. Evidence from this analysis concludes that the projects have had a net-positive global impact beyond their targeted goals on both forest cover and vegetation productivity. It suggests that many beneficial results of Facility projects go



The Comprehensive Evaluation demonstrates that the Global Environment Facility has continued to perform well over its 26-year history and that learning has produced positive trends in performance.

under-reported – such as how projects to reverse land degradation also sequester carbon from the atmosphere. Impacts tend to vary considerably depending on location, so the local context in which programmes are implemented can be assessed for suitability of interventions as early as the planning stage, based on an examination of where projects have historically succeeded or failed.

We also evaluated experiences with programmatic approaches that address broader thematic or geographic areas, and found that projects that belong to programmes tend to perform somewhat better than stand-alone projects, but that this trend reversed as programmes became more complex. It is too early to assess the results of the integrated approach pilots (focusing on sustainable cities, taking deforestation out of agricultural commodity chains, and food security in Africa) established during the current Facility funding period, but analysis of their development and quality at the outset confirmed the importance of investing in coordination, knowledge management,

monitoring and evaluation to counteract the challenges of increased complexity.

Overall, the Comprehensive Evaluation demonstrates that the Global Environment Facility has continued to perform well over its 26-year history and that learning has produced positive trends in performance. There are still challenges to be addressed, especially in taking project-level successes to a larger scale. Partnering with the private sector is also important and requires concerted effort. Evidence suggests that addressing national legal and regulatory frameworks is often a necessary, if not sufficient, condition for the success of a project and the sustainability of its benefits.

Our research also identified important conditions for contributing to truly transformational change. The lessons suggest that, to achieve this, interventions should have ambitious objectives, aiming to trigger and support fundamental change in addressing market distortions or systemic bottlenecks that are root causes of environmental issues of global concern. They should also establish an explicit mechanism to scale up and expand the activities they have supported.

The Global Environment Facility remains highly relevant in today's world, where global environmental trends continue to deteriorate. It has a unique niche in areas such as conserving biodiversity, managing international waters, halting land degradation and managing chemicals and waste – areas where no, or few, other multilateral actors are present. In contrast, multilateral funds for combating climate change have proliferated, so the Facility needs to think through its role so as to focus on its own comparative advantages and the ways in which these advantages complement the work of other actors. I hope that the Comprehensive Evaluation will help identify pathways for even more effective contributions by the Global Environment Facility to our common environment. ▲

Lucy Mulenkei Partnering with peoples

Increasing engagement with indigenous peoples is essential in addressing environmental issues.



Lucy Mulenkei

*Chair, Global Environment
Facility Indigenous Peoples
Advisory Group*

Indigenous people are disproportionately represented among the destitute; they constitute approximately five per cent of the world's population, but make up 15 per cent of the world's poor. The majority of them have historically faced social exclusion and marginalisation. Their levels of access to adequate health and education services are well below national averages. And they are especially vulnerable to the consequences of environmental degradation.

Yet they have much to offer the world. For centuries they have lived a life that they believe is God-given. It is a life full of resources that need to be protected, a life with structures that ensure ownership of a cultural heritage. They also are holders of valuable traditional knowledge which can make an important contribution to sustainable environmental, social and economic policymaking. Environmental destruction and the disappearance of species are very significant for their livelihoods. Climate change and other natural disasters can be blamed, but they also see development as one of the key drivers of destruction.

They have long engaged with partners, especially those focusing on the environment and human rights. The Global Environment Facility – which has opened its doors to working with indigenous peoples – has been an important one, funding three conventions that directly impact on them: the Convention on Biological Diversity, the United Nations Framework Convention on Climate

Change, and the United Nations Convention to Combat Desertification. The Facility's objective of ensuring sustainable use of biodiversity in particular resonates with those who have been managing their indigenous territories for generations.

There have been challenges to indigenous peoples' engagement with the Facility, mostly due to their lack of institutional capacity to develop, manage and monitor projects according to its requirements. The Facility has made efforts, and has continuing initiatives, to increase their involvement in its operations. These include establishing the Indigenous Peoples Advisory Group and developing its policy of engaging with them, in consultation with indigenous organizations.

The Group continues to engage with different stakeholders involved in the Facility's work, for instance in the Global Environment Facility Civil Society Organization Network and working groups concerned with gender, stakeholder engagement and access to information. This helps indigenous peoples to continue contributing on different policy issues. Indigenous participation in Global Environment Facility Council meetings and other key processes, such as Extended Constituency Workshops, helps to enhance the Facility's regional work and to keep indigenous peoples' issues visible and well understood.

The Facility's Small Grants Programme, implemented by the United Nations Development Programme, has directly provided more than 15 per cent of its projects to indigenous peoples and is implementing dedicated financing for them under the Indigenous Peoples and Communities Conserved Areas and Territories programme in partnership with the German government. More recently, four global fellows from Africa, Latin America and Asia with



Photo: UN Photo/Marak Gatten

Indigenous peoples' economies have long sustained their livelihoods and should not be sidelined or threatened



Photo: UN Photo/Marthe Perret

expertise in biodiversity conservation and climate change were selected through its Indigenous People's Fellowship Initiative. The fellowships aim to develop a higher capacity in select representatives to take leadership roles in critical management and advocacy work on global environmental and sustainable development concerns. And the selection of several national fellows is under way to enhance leadership skills on global environmental issues.

The Group and the Facility's secretariat are working on more funding commitments to help increase financing arrangements and expand the number of projects improving indigenous peoples' capacity to participate in projects and processes. They also plan to improve measuring, monitoring and evaluation, while strengthening indigenous peoples' understanding of the Facility so that they can engage with it better and take initiatives to address environmental issues. They emphasise respect for indigenous peoples and for their members' dignity, human rights, and cultural uniqueness – and stress that project activities should be carried out openly and transparently, with full documentation, making available an indigenous peoples focal point and the conflict resolution commissioner whenever possible.

Indigenous peoples' economies have long sustained their livelihoods and should not be sidelined or threatened by national development strategies closely tied to private sector investments and extractive industries. States should involve women and indigenous peoples in leadership and decision-making processes and take the opportunity to strengthen their right to participate in implementing and monitoring the post-2015 agenda. We need to explore their alternative economic models and ask what they may have to offer to a more equitable and sustainable global economy. ▲

The Global Environment Facility at Work

Livestock for life

How holistic pastoralism has established a national benchmark in Panama

Photo: CC BY Giancarlo Montenegro



Photo: CC BY © Fundación CoMunidad/Alberto Pascaud

About the Global Environment Facility Small Grants Programme:

Established in 1992, the Global Environment Facility Small Grants Programme provides financial and technical support to projects that conserve and restore the environment while enhancing people's well-being and livelihoods. Administered by the United Nations Development Programme, the Small Grants Programme aims to demonstrate the power of a community-based approach in addressing local and global environmental and sustainable development challenges and has so far provided grants to over 20,500 civil society projects.

Learn more at www.sgp.undp.org

We have shown how livestock can be compatible with environmental conservation in a region where the biggest problem is lack of water and deforestation.

Esperanza Solís is a mother, grandmother and farmer - she is also one of Panama's true environmental champions. As secretary of the May 1st Farmer's Settlement, she has turned her dedication to improving the life of her community into a nationally-renowned example of sustainable agriculture, proving that livestock farming and conservation can thrive side by side.

Esperanza shared her story with Our Planet:

"As a child, I worked on my parents' estate. We had a piece of land where we cultivated everything: rice, beans, corn, yucca, plantain, tomato, chili peppers and various

fruits. While other girls painted their nails, I carried rice with a cart.

In turn, I have taught my children to work and to take care of the environment, because these values are learned first in the family. I start my days at 5.30 a.m. and review the activities of the day and actions to be taken by the the May 1st Settlement - 13 partner organizations dedicated to agriculture and livestock. I have belonged to May 1st since 1983: it's where I learned most of what I know and where I can collaborate with other national organizations.

Through the settlement, we implemented a project supported by the Global Environment

Facility's Small Grants Programme to pilot the first silvopastoral project in the area. We shared sustainable livestock models, planted twelve hectares with species of native trees, established a protein bank that had good results with the cattle, and constructed an organic vegetable garden. We also improved the infrastructure for producing honey and panela (unrefined whole cane sugar), and have successfully empowered the community to adopt sustainable practices.

Through a second Small Grants Programme project, we worked to reduce water contamination from chemicals, established a communal organic nursery and orchard and created water banks - examples of

efficient water use that we use to train our members in sustainable practices.

Now, the project serves as an example for more than 70 organizations from all over the country. We have shown how livestock can be compatible with environmental conservation in a region where the biggest problem is lack of water and deforestation. Little by little we have managed to involve the community, who work hard to protect their natural resources.

The project has become a national benchmark and has contributed to the development of Panama's 2015-2050 Water Security Plan. The organization has

become a representative of the peasant population and participated in developing the National REDD+ Strategy. We also are part of the Small Grants Programme REDD+ Technical Committee and are responsible for analyzing and making recommendations on REDD+ pilot projects for community-based organizations in Panama through the 'Forests of Life' programme.

As a community, we have learned to collaborate and take better care of the environment. We show that things can be done if there is a will." ▲



Environmental Champion

Inna Modja

Mali's one-woman musical sensation swaps the stage for the screen to champion the greening of Africa.

Inna Modja is promoting the building of a wall across a continent, one that is designed to provide hope and bring people together. The Malian singer is starring in a documentary on the 8,000-kilometre Great Green Wall of trees and vegetation now being established across the width of Africa to combat desertification and restore land. She calls it a “world wonder” and says it has “great symbolism” that “extends far beyond the African continent”.

In a way it is personal. Though born and raised in Bamako, Modja comes from a family of nomads from the north of the country and so, she tells ‘Our Planet’, “was confronted by the challenges of desertification at a very young age. Growing up, I always felt a strong need to do something meaningful that could help make a change for my community.”

She was a hyperactive and free-spirited child – her name means “Inna is a pest” – and her love of music also comes from her earliest years (“You can’t grow up in Mali without music” she says). She started performing in her teens, thanks to the help of a neighbour, the legendary Salif Keita, who introduced her to the Rail Band of Bamako. She tried various sounds, finally settling on Malian Blues and hip hop, and released her first album in 2009.

She has been described as producing “some of today’s most gorgeous political music” and says: “I used my platform as a musician to bring awareness to issues and try to inspire my audiences to help make a change in their communities and around the world.”

She campaigns on female genital mutilation – she herself suffered it, without her parents’ knowledge, when she and her four sisters were kidnapped by relatives – and lack of access to clean water; being without it herself, at one stage, was what first got her interested in development issues as a teenager.

When she first heard about the Great Green Wall, which is partially funded by the Global Environment Facility, she was “completely awestruck by its epic scale, and truly inspired by the fact that the project is African-led, involving countries working together in an unprecedented mass collaborative effort”.

“Healthy land is the foundation of healthy societies,” Inna says. “When land is degraded, so is the future of the society that depends on it. This is more true in the Sahel than anywhere, since 80 per cent of its people live in rural areas and rely on natural resources for their everyday survival.

“Sometimes, as a global community, we forget just how precious healthy land is for our food security, for our economic prosperity and for our health and well-being. And when you think that, over the last 60 years, between 40 and 60 per cent of armed conflicts in Africa have been linked to natural resources, then you start to realise just why restoring land is also so vital for the peace and security of this continent. Besides, desertification and migration are very connected issues.”

She adds that she hopes that the documentary – which is backed by the United Nations Convention to Combat Desertification, with the Oscar nominated Brazilian filmmaker Fernando Meirelles, as Executive Producer – “can simultaneously draw global attention to the urgent challenges of this region – desertification, climate change, migration – and inspire people across the world to believe in the possibility of change by showing the force and beauty of the culture, the music and the people.”

“The message is: if people here, in one of the world’s most impoverished regions, living on the frontline of climate change, can fight back to protect precious natural resources, so can we all – and we must.”▲

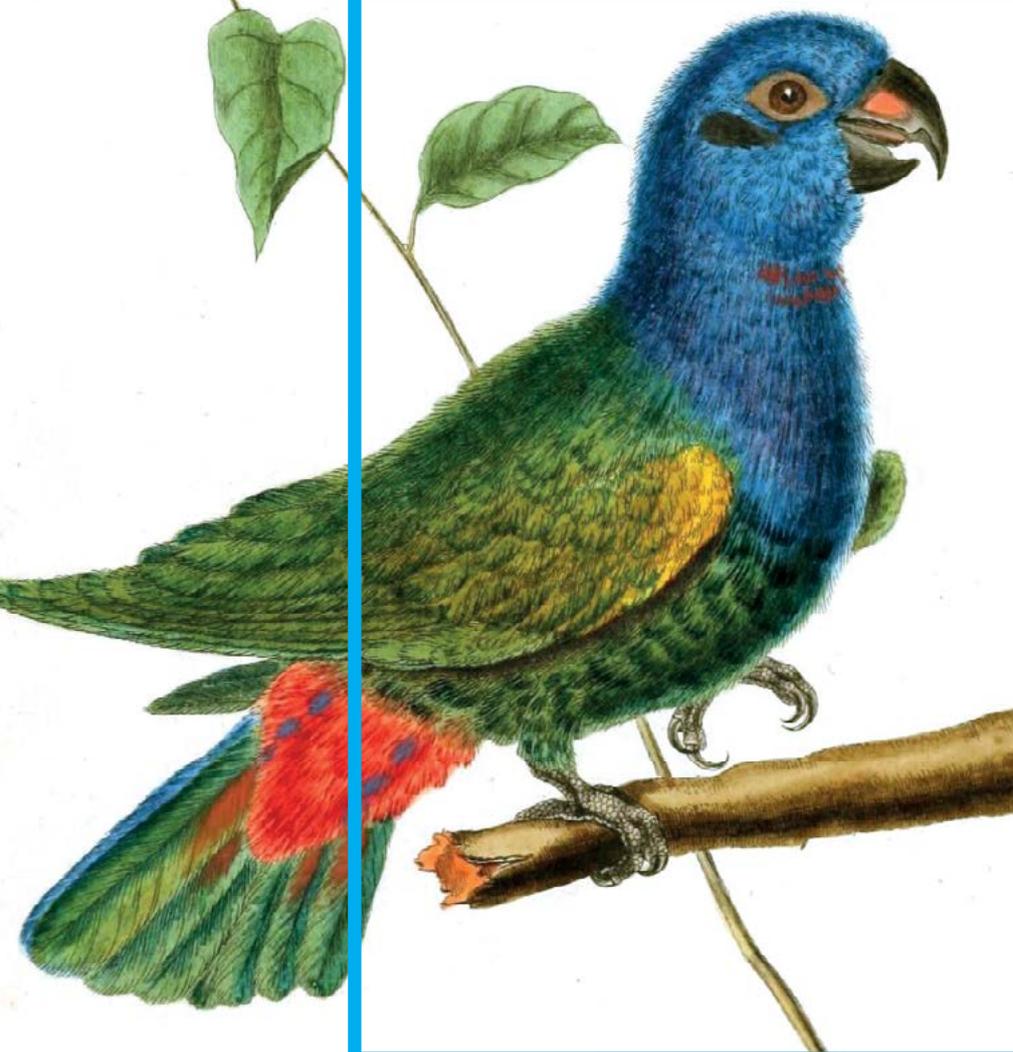
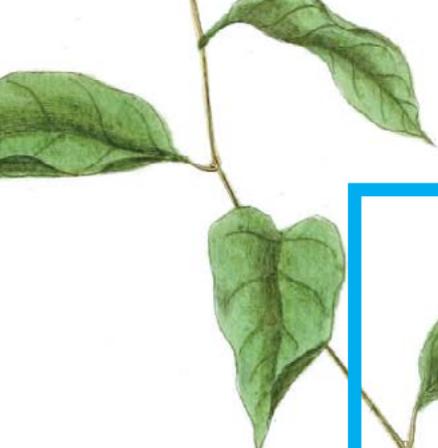
Healthy land is the foundation of healthy societies. When land is degraded, so is the future of the society that depends on it.



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