UNDP AND CLIMATE CHANGE

Scaling Up Climate Action to Achieve the Sustainable Development Goals





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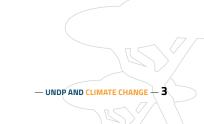
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FOREWORD

The world has entered a new era of action on sustainable development. The Paris Climate Change Agreement, the Sustainable Development Goals, the Addis Ababa Action Agenda on Financing for Development and the Sendai Framework on Disaster Risk Reduction have launched a new, global effort to transform the way the world does business.

What is clear through the 2030 Agenda is that sustainable development and tackling climate change go hand-in-hand. We will not keep people from going hungry without protecting our food systems; we will not be able to ensure we have sustainable cities and communities without protecting them from storms or floods; and we cannot ensure children are healthy without addressing the changes in vector-borne diseases due to changing temperatures. The list goes on.

In the end, action on climate change is necessary for sustainable development.

UNDP has decades of experience supporting countries to take action on climate change. With our partners, we have helped people and communities in over 140 countries to mitigate emissions and adapt to climate impacts. Throughout our experience we have learned that climate change actions must be inclusive, gender-responsive, and prioritize the poorest and most vulnerable. The Paris Agreement has laid out the path for the world to work together and it is now our responsibility to take those steps and achieve those ambitions. We must now work with all members of society to take bold and ambitious action.

In 2015, UNDP released its first infographic report that presented the breadth and depth of our support on climate change over the past two

decades. That report emphasized successes and noted the opportunities that climate action presents for countries as they transition their economies towards zero-carbon and climate-resilient sustainable development.

This year, as countries begin to take concrete action to deliver on their national climate goals, we are pleased to release an updated report of UNDP's climate change work. New, in this report, is a special focus on the linkages between climate change and sustainable development. Specifically, the report highlights the importance of climate action in delivering on the SDGs and provides examples of UNDP's on-going work on the ground towards this end. The report also presents UNDP's commitment to scale-up climate change action in order to deliver on the ambitious agenda that countries agreed to in 2015.

As we look to this new era, UNDP will continue to draw upon its extensive experience, partnerships and expertise to help countries transform their towards development that is zero-carbon, climate-resilient and sustainable. We will continue to work hand-in-hand with countries to ensure a sustainable and prosperous future for all.

Magdy Martinez-Soliman
Assistant Secretary-General

Director of the Bureau for Policy and Programme Support
United Nations Development Programme



Achieving sustainable development is only possible with climate action

Climate change is a cross-cutting development issue that affects every aspect of sustainable development and the entire 2030 Agenda

Scaling up climate action is essential for achievement of the Sustainable Development Goals



Building on decades of experience UNDP has a key role to play



STRENGTHENING CAPACITIES OF THE MOST VULNERABLE

UNDP has a track record of supporting countries that are among the world's most vulnerable to climate change, including all the

48 Least Developed Countries (LDCs) and

39 Small Island Developing States (SIDS). Central to UNDP's work is inclusiveness and equity, with particular emphasis on ensuring those most at risk and who have the potential to be agents of change – including women, girls and youth – have a voice and are able to participate in climate action.



BROKERING ACCESS TO CLIMATE FINANCE

UNDP has assisted over

140 countries

to access more than

US\$2.8 billion

in climate finance since 2008. Significant success in climate finance is based on UNDP's extensive partnerships with the Global Environment Facility, Adaptation Fund, Green Climate Fund, multilateral funds, bilateral partners and the private sector.



SUPPORTING THE IMPLEMENTATION OF CLIMATE TARGETS

UNDP is a leading partner to

43 countries

in developing their

Intended Nationally Determined Contributions (INDCs).

Now, UNDP is assisting these countries in converting these commitments into concrete actions, linking them to their national development priorities and the SDGs.



BRIDGING CLIMATE AND DEVELOPMENT

The only way to deliver long-term sustainability is to ensure that development is zero-carbon and risk-informed. As a UN development agency offering a deep familiarity with national and local contexts and development priorities and challenges, UNDP is well-positioned to support countries to integrate climate concerns into development.



OPERATING AN EXTENSIVE ORGANIZATIONAL INFRASTRUCTURE

A network of nearly170 Country Offices, Regional Hubs, and Policy Centres work with UNDP Headquarters to help countries develop policies, programmes and approaches to tackle climate change and undertake sustainable development. Advice and support ensures appropriate and contextualized action at both national and local levels.



BUILDING AND MAINTAINING PARTNERSHIPS AND INNOVATION

UNDP works with an extensive network of partners from the UN system, development banks, civil society and the private sector, bringing together the best expertise to support countries in meeting their development aspirations. Through partnership, joint implementation and innovation, UNDP is able to work with partners to find new ways to combat climate change and its impacts.

8 — UNDP AND CLIMATE CHANGE —

UNDP's climate change portfolio – A global overview

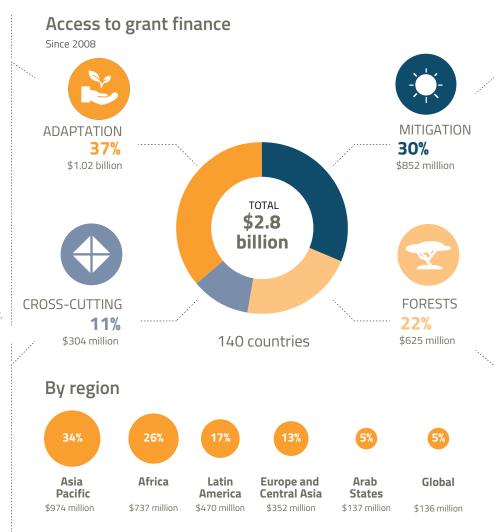
Since 2008, UNDP has supported more than 140 countries to access more than \$2.8 billion in grant finance to develop and implement climate change initiatives.

Adaptation 250+ PROJECTS AND PROGRAMMES IN 110+ COUNTRIES

- Resilient livelihoods, agriculture and food security;
- Climate-resilient integrated water resources and coastal management;
- Supporting integrated climate change strategies such as National Adaptation Programmes of Action (NAPAs) and National Adaptation Plans (NAPs);
- Climate risk management, early warning systems and climate information;
- Community- and ecosystem-based adaptation;
- Climate-resilient infrastructure and energy.

Cross-cutting 150+ PROJECTS AND PROGRAMMES IN 90+ COUNTRIES

- Climate finance, including readiness to access the Green Climate Fund (GCF);
- Nationally Determined Contributions (NDCs) and National Communications reports to the UNFCCC;
- Gender, youth and indigenous people;
- Institutional and policy development;
- Governance and legislation.



UNDP remains the largest service provider in the UN system with more than 800 active climate change projects and programmes in more than 140 countries² to reduce greenhouse gas emissions and increase resilience to the impacts of climate change.

Mitigation

280+ PROJECTS AND PROGRAMMES IN 110+ COUNTRIES

- Access to clean and affordable energy;
- Energy efficiency and renewable energy;
- Nationally Appropriate Mitigation
 Actions (NAMAs), Low-Emission
 Development Strategies and Plans (LEDS),
 Biennial Update Reports to the UNFCCC
 (BURs) and carbon finance;
- Sustainable transport and infrastructures;
- Inventories of hydrofluorocarbon (HFC) consumption and demonstration of climate-friendly alternative technologies.

Forests

130+ PROJECTS AND PROGRAMMES IN 70+ COUNTRIES

- Reducing Emissions from Deforestation and Forest Degradation (REDD+);
- Sustainable forest management;
- Protected area management linked to forest cover and forest management;
- Biodiversity mainstreaming inforestry and other relevant production systems.

Results and impacts³





More than 26 million people directly benefiting from climate-resilient livelihoods and climate risk management measures.



Nearly 21 million people having improved access to reliable climate information and early warning systems.



1,650 km of coastline protected and serving as buffer zones for coastal communities against natural hazards.



35 countries

with enforceable laws or regulations to address disaster and climate risks, and with gender-responsive disaster risk reduction and adaptation plans in place.



45 countries

developing and strengthening early warning systems, including 189 new end-to-end early warning systems established in 26 countries.



102 countries

scaling up climate-resilient livelihoods and climate risk management measures.



60 countries adopting sustainable agriculture and livestock practices.



42 countries

countries supported on NAP development and implementation processes.



14 Pacific Island nations supported for the development policies, strategies and

policies, strategies and regulatory instruments for climate change adaptation.









Over 12,900,000

hectares of forests protected and about 1,746,360 hectares of degraded forestlands restored t hrough more than 2,700 community-based forest management initiatives⁴.



44 countries

adopting sustainable forest management practices .



18 countries

supported to prepare national REDD+ strategies and action plans.



5 countries

supported to enact new legislation to advance REDD+ action.



Over 30 countries

developing national and/or subnational approaches to REDD+ safeguards.



29 countries

strengthening women's participation in decision making on REDD+.



5 countries

supported to establish multi-stakeholder platforms for deforestationfree commodities.



Over \$6 million in

small grants disbursed to indigenous and forest communities in six countries through the Community-Based REDD+ initiative⁵.



15 countries

promoting dialogues among governments and indigenous and civil society stakeholders, resulting in breakthroughs in trust and collaboration on REDD±.





Over **2.5 million** people achieving better access to clean and affordable energy in 45 countries.



5.6 million people benefiting from sustainable energy solutions and/or improved energy efficiency.



522.7 million tons of CO2 emissions avoided as a result of sustainable energy support.



65 countries assisted with improved access to clean and affordable energy.



30 countries reducing CO2 emissions through scaling up renewable energy solutions.



32 countries reducing CO2 emissions by improving energy efficiency.



11 countries

implementing sustainable and alternative transportation practices.



109 countries

supported to eliminate 66,000 tons per annum of ozone-depleting substances while simultaneously reducing 4.93 billion tons of CO2-equivalent greenhouse gas (GHG) emissions under activities to implement the Montreal Protocol.



9 countries supported to carry out hydrofluorocarbon inventories with demonstration of alternatives to replace HFC in four countries.









43 countries

supported in the preparation of Intended Nationally Determined Contributions (INDCs).



48 countries with strengthened systems in place to access, deliver, monitor, report on and verify use of climate finance.



76 countries

implementing comprehensive measures (plans, strategies, policies, programmes and budgets) towards low-emission and climate-resilient development.

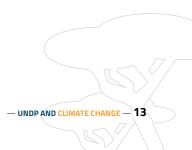


8 countries

(Armenia, Ecuador, Malawi, the Maldives, Pakistan, Sri Lanka, Tuvalu and Viet Nam) supported to access funding totaling \$238 million from the GCF to scale up adaptation and mitigation measures.



More than **80 percent** of ongoing climate change programmes contribute to gender equality and women's empowerment, including over 30 percent with gender equality as a significant objective and/ or output.



UNDP supports ambitious action

in all regions

Grant finance mobilized since 2008 In \$ millions

- Adaptation
- Mitigation
- Forests
- Cross-cutting

HIGHLIGHTS OF SUPPORT IN

Latin America and the Caribbean

Strengthened capacities for climate change negotiators from Latin America and the Caribbean.

13 countries supported to prepare their INDCs.

9 countries supported to develop national and sectoral Low-Emission Development Strategies.

6 countries supported in conducting their national greenhouse has (GHG) inventories.

UNDP supported the development of 24 NAMAs in 9 countries in the region.

6 countries supported to conduct Climate Public **Expenditure** and Institutional Reviews (CPEIR) and a regional methodology developed.

11 countries supported to develop **REDD+ strategies** and institutional capacity.

Africa

42 African countries received climate finance training on GCF procedures, project development and leveraging public and private finance for

12 African countries provided with technical and financial support to **develop**

GCF proposals.

Support provided to the development of the Africa Adaptation Initiative (AAI).

Africa.

30 African countries supported to prepare their INDCs.

Support provided for two

African Regional Climate

in partnership with host

and Zimbabwe), African

governments (Kenya

(FAO).

Outlook Forums conducted

Development Bank and Food

and Agriculture Organization

Arab States

26%

Arab Climate Resilience Initiative to address climate risks to SDG achievement, as a root cause of social vulnerability and insecurity.

5%

Africa

\$737

in more than

50 countries

Technical assistance to three least developed countries in the Horn of Africa for resilience to climate risks to food and water security.

Arab Future Energy Index

report to assess and rank 22 Arab countries on progress towards low-carbon pathways.

4 national centres of **excellence** in oil-exporting Gulf Countries on low-carbon solutions and reducing carbon footprints.

51%

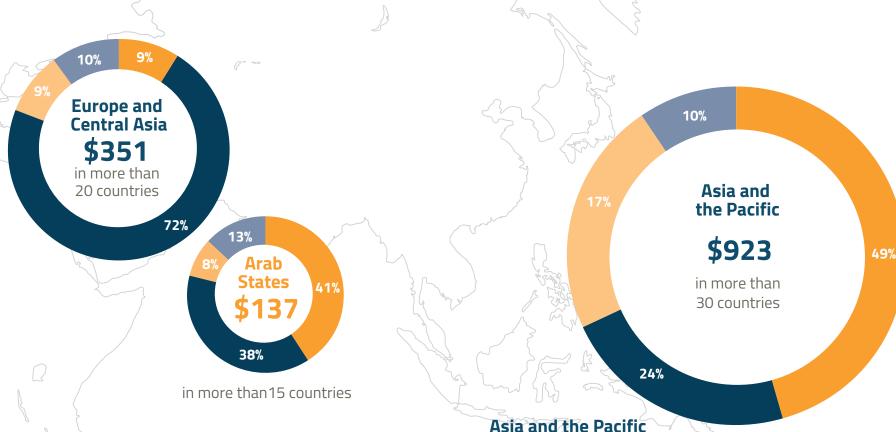
Support to five countries

affected by the migrant crisis, to expand access to **solar** solutions for communities displaced by conflict.

Transboundary agreements

among four water-sharing countries to address sustainable use of resources in an era of climate disruption.





Europe and Central Asia

Data analysis technical consultations, advice and support delivered to 16 countries to facilitate inter-agency negotiations and decision making on UNFCCC agenda before and after the Paris Climate Change Conference (COP21).

Supported development of low-carbon and climate-resilient strategies in Albania, Bosnia and Herzegovina, Kyrgyzstan, Moldova and Turkmenistan.

9 countries supported in the development of NAMAs and NAPs. **5 countries** supported to prepare their INDCs.

Supported establishment of National **Designated Authorities** for accessing the GCF.

Supported resource mobilization and crowdfunding campaigns for energy efficiency and renewable energy projects in Kyrgyzstan and Tajikistan.

Integrated climate and disaster risk management demonstrated in five Central Asian countries and Armenia.

14 LDCs supported on **NAPs in** intergovernmental climate change **negotiation**, six countries (three LDCs) on related institutional and technical capacities and four LDCs on NAPs in the agriculture sector.

7 countries supported with GCF proposal **preparation:** four proposals approved and three under review, with approval expected by the end of 2016.

3 countries supported in the **development** of NAMAs to achieve voluntary GHGs emission target.

8 countries supported to conduct **Climate Public Expenditure and Institutional** Review (CPEIR).

11 countries supported with capacity-building training through Economics of Climate Change Adaptation (ECCA) programme.

10 Pacific Island countries supported to promote renewable energy through the Pacific Islands Greenhouse Gas Abatement through Renewable Energy Project (PIGGAREP).

Supported Indonesia and Myanmar through United for Efficiency (U4E) programme for market transformation to energy efficient products.

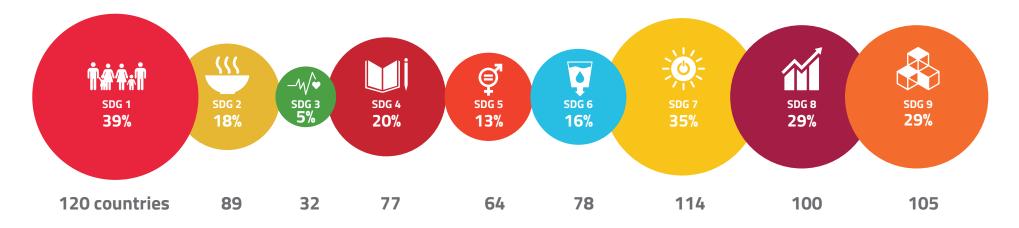
Supported four countries in South Asia in women's empowerment and energy access through the South Asian Association for Regional Cooperation (SAARC) Development Fund.

UNDP's climate change portfolio

already contributes to the achievement of the SDGs Global distribution

Active projects and programmes per SDGs

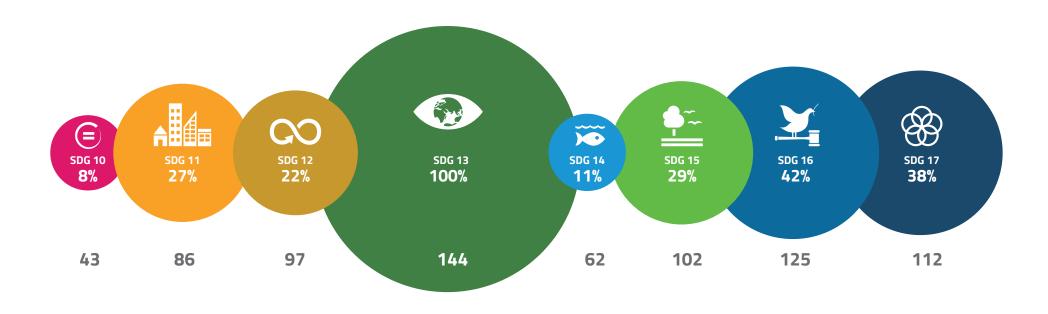
Over a total of 144 countries



The figures represent the approximate percentage of 800 UNDP climate change projects and programmes, active as of July 2016, that make a direct contribution to the 17 SDGs. Only projects and programmes that make a direct contribution to the targets of each SDG, using matching key words, are mapped and counted. Direct contribution means that the projects and programmes explicitly include key terms that link to the targets of each SDG in their project and programme descriptions, indicators, targets and results.

active UNDP climate change projects and programmes

As of July 2016



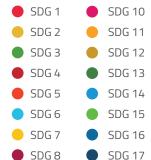
UNDP's climate change portfolio

already contributes to the achievement of the SDGs

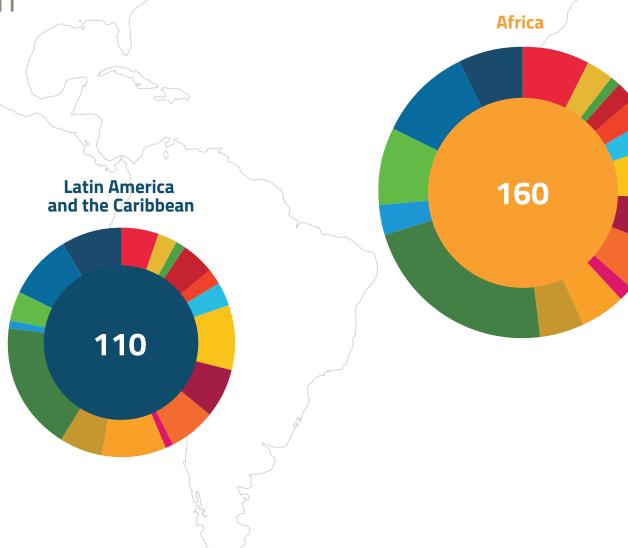
Regional distribution

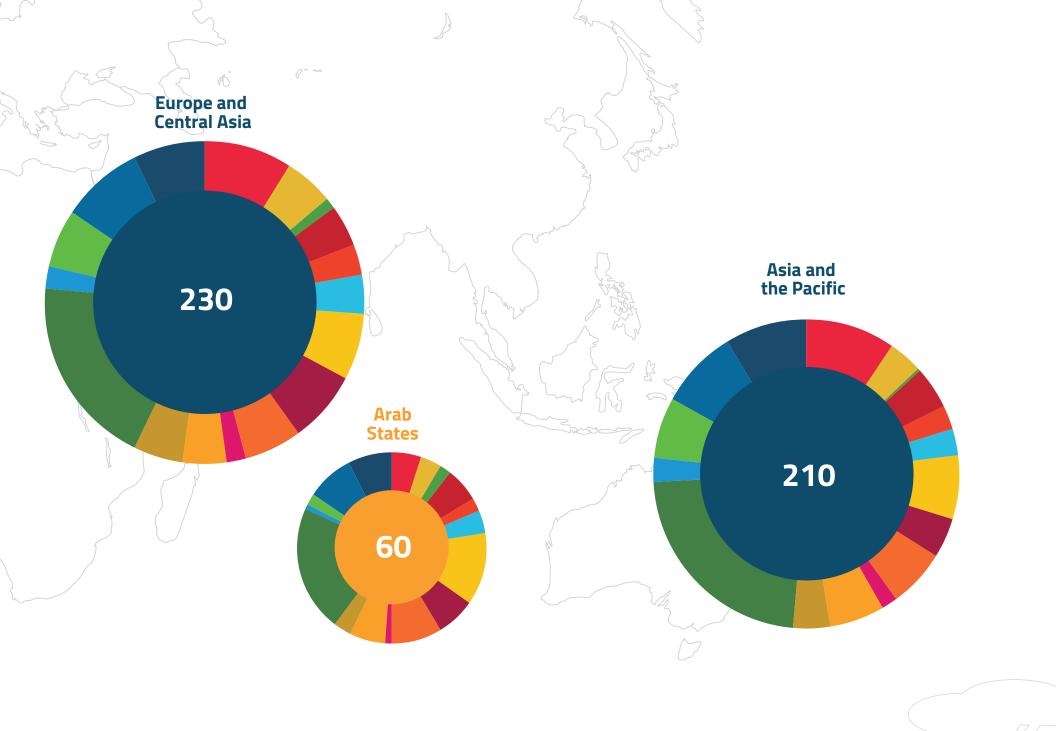


Approximate percentage per SDG



SDG 9







SDG 1 NO POVERTY End poverty in all

End poverty in all its forms everywhere

KEY FACTS

Around 700 million people still live in extreme poverty

today.⁶ Climate change impacts are projected not only to exacerbate the existing poverty situation, but also create new poverty traps.

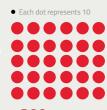
By 2030, 100 million more people

are at risk of falling into extreme poverty due to climate change impacts.⁷

By 2050

the number could rise to 720 million people.8

UNDP's ONGOING SUPPORT



+120 COUNTRIES

+300 PROJECTS AND PROGRAMMES

UNDP's approach to address climate change is inclusive and prioritizes the poorest and most vulnerable, in line with UNDP's vision, contributing to efforts to eradicate poverty and reduce inequalities and exclusion.

KEY INTERVENTIONS







Resilient livelihood and food security Adaptive social protection

Strengthening early warning systems and climate information





Disaster risk Access to reduction and affordable resilient recovery the poor

Access to clean and affordable energy for the poor



SUPPORT IN FOCUS

NIGER

People affected by floods decreased from 32,478 in 2013 to 1,083 in 2015. This resulted from a UNDP-supported programme to set up 15 observatories tracking vulnerability; establish 31 community early warning systems; train 560 community actors and equip them with mobile phones to send warning messages; rehabilitate 4.5 km of dikes; and establish four survey stations with automatic transmission coupled with a probability model to forecast floods.

BANGLADESH

+30,000 poor coastal communities have doubled their income.

The communities have implemented an innovative coastal adaptation model called 'Forest, Fish and Fruit' (FFF). Funded by the Least Developed Countries Fund (LDCF), the FFF is an integrated livelihood approach that employs protective and productive trees and other vegetation, mound and ditch structures and a fish nursery pond to create multiple sources of income and reduce risk from climate change.

YEMEN

+1,500 people living in one of the world's most water-poor communities benefited from 200 fogharvesting units.

The innovative technology, provided with UNDP support including LDCF financing, is a mesh screen that enables communities to collect over 40 litres of water per unit per day, providing drinking water, freeing women and children from hours of travel to collect water, and enabling families to grow crops and develop businesses.

GEORGIA

+200,000 residents of the Rioni basin were protected from flood risks. With Adaptation Fund financing, activities included eight flood protection constructions, a weather-based insurance scheme, and agro-forestry measures that covered nine hectares and employed some 160 local workers. Flood plain zoning and a policy guidance note were also developed and disseminated for use in other vulnerable river basins in Georgia.



SDG 2 **ZERO HUNGER**

End hunger, achieve food security and improved nutrition and promote sustainable agriculture

KEY FACTS

More than 790 million people

are undernourished.9

By 2050, 120 million additional

children in sub-Saharan Africa and South Asia will suffer from malnourishment and stunting as global temperatures warm by 2°C.10

Up to a 30% loss in crop yields

is expected by 2080 despite changes in agricultural practices, technology and adaptive behaviours. Poor regions such as sub-Saharan Africa and South Asia will be severely affected.11

UNDP's ONGOING SUPPORT



90



+140**COUNTRIES PROJECTS AND**

UNDP assists countries to enhance food security of vulnerable communities by adopting climate-resilient agricultural practices including sustainable farmland and water resource management practices.

KEY INTERVENTIONS

PROGRAMMES





Adopt climate-resilient agriculture practices

Replicate smartfarming technology and practices



Expand crop insurance and access to market and financial services for smallholder farmers



SUPPORT IN FOCUS

SUDAN

+20,000 rain-fed farmers report increases in crop yields by 150%.

Farmers in Sudan have been implementing climate-resilient agriculture practices through financial support from LDCF and Canada. The support includes drought-resistant crops, solar irrigation technologies and climate risk finance mechanisms such as weather-indexed insurance for poor farmers.

ECUADOR

Small producers and farmers, mostly women, are increasing food security.

The farmers are strengthening resilient livelihoods through water supply access, resilient farming techniques and animal husbandry practices, with support from the Special Climate Change Fund (SCCF). The farmers have revived traditional water control using small dams and dikes combined with modern reservoirs and irrigation techniques. They also produce fertilizer and sell organic produce and products.

PHILIPPINES

+2,000 rice farmers benefited from an index-based insurance programme.

The programme aimed to reduce the risk of rainfall variability. Among these farmers in Mindanao, more 100 received fast, same-season insurance payouts that can help them to reestablish their livelihoods within two years.

KENYA, NEPAL, PHILIPPINES, THAILAND, **UGANDA, URUGUAY, VIET NAM AND ZAMBIA**

are benefiting from a joint global support to integrate agriculture into NAPs.

Through the Integrating Agriculture in NAP programme, financed by the Government of Germany, UNDP is working with FAO to help these countries incorporate agricultural sector solutions into to safeguard people's livelihoods, improve agricultural production and boost food security.



SDG₃ **GOOD HEALTH AND WELL-BEING**

Ensure healthy lives and promote well-being for all at all ages

KEY FACTS

Between 2030 and 2050, climate change is expected to cause approximately 250,000 additional deaths per year from malnutrition, malaria, diarrhea and heat stress.12

The direct damage costs to health is estimated to be between \$2 billion to \$4 billion per year bv 2030.13

UNDP's ONGOING SUPPORT

• Each dot represents 10





+40 PROJECTS AND COUNTRIES **PROGRAMMES**

UNDP supports countries to assess and manage climate-related health risks in order to promote healthy lives and well-being of people.

KEY INTERVENTIONS





Strengthen climatesensitive health risk and warning systems Promote clean energy to reduce indoor air pollution



Promote sustainable and green transportation systems



SUPPORT IN FOCUS

BHUTAN

Climate data helps predict climatesensitive health risks.

This innovative approach is implemented through enhancing early warning systems by looking at climate data alongside epidemiological surveillance for climate-sensitive diseases. Six combined health/meteorological centres operate with support from the SCCF and in collaboration with WHO. UNDP is expanding this work in least developed countries in Asia and the Pacific with LDCF financing.

GHANA

Gender-sensitive climate actions are integrated into health sector.

Gender-sensitive actions and implementation mechanisms to address climate change-related health risks have been incorporated into the revised 2014-2017 Health Sector Medium Term Development Plan. This result stems from a comprehensive review of the Development Plan with technical and financial support from UNDP and GEF.

UGANDA

Schools are the focus of efforts to scale up clean energy solutions. The effort, through NAMAs, taps funding sources such as corporate social responsibility, international donors and crowdfunding, seeking sustainable change in the education sector. This support is financed by the European Union through the Low-Emission Capacity Building Programme (LECB).

SUDAN

Renewable energy solutions in hospitals, clinics and medical storage units are being scaled up.

This is implemented through a major Solar 4 Health initiative in collaboration with the AfDB. The aim is to expand the use of solar solutions in the health sector and enhance health services and emergency support for the poor.



SDG 4 **QUALITY EDUCATION**

Ensure inclusive and equitable quality education and promote lifelong learning opportunities for all

KEY FACTS

57 million children still remain out of school today.14

Flood and cyclone damage to education

facilities and the increasing number of heat waves both prevent children from receiving a sustained and adequate schooling.15

Education, training and public awareness

are integral to all climate change responses according to the UNFCCC.

UNDP's ONGOING SUPPORT

Each dot represents 10

+70

+150

COUNTRIES

PROJECTS AND PROGRAMMES

UNDP recognizes that promoting public awareness and strengthening education systems are vital to all climate change responses.

KEY INTERVENTIONS



Integrate climate change into school curriculum, both formal and informal

Build resilient educational systems through improved school conditions and related infrastructure



Promote public awareness and educational programmes



SUPPORT IN FOCUS

KENYA

+1,300 schools are powered with solar solutions.

Installing solar panels in schools is enabling children living in remote, low-income and off-grid communities to regularly attend school. This initiative is undertaken in partnership with Panasonic.

THE OCCUPIED **PALESTINIAN TERRITORY**

Solar solutions have been deployed in four schools.

Located in Gaza City, Jabalia, Khan Younis and Rafah, the schools have a sufficient electricity supply to secure uninterrupted learning time for students. The support, financed by the OPEC Fund for Development, has increased public awareness about the role of renewable energy in building resilience.

MOLDOVA

Three vocational schools introduce biomass energyrelated courses.

New in the 2015-2016 academic year, the courses respond to a high demand for professionals in the sustainable energy sector, which is a key contributing sector to the country's sustainable economic growth and development.

SAMOA

Youth and women promote sustainable micro-enterprises in agro-businesses.

Working with the Youth Climate Action Network of Samoa (Y.C.A.N) and other youth-related organizations, the economywide adaptation to climate change initiative financed by the LDCF engages youth and women to support sustainable microenterprises within agro-businesses with a resilient value chain approach to promote diversified livelihoods.



SDG 5 **GENDER EQUALITY**

Achieve gender equality and empower all women and girls

KEY FACTS

Climate change is exacerbating existing gender equality gaps,

and impacts women in particular, often leading to higher workloads, occupational hazards both indoors and outdoors. psychological and emotional distress and mortality in climate-related disasters.16

Nearly 80 percent of people displaced by climate change are women.17

Women and girls have important roles

to play in contributing to identifying climate risks, adapting to change and creating solutions.18

UNDP's ONGOING SUPPORT

• Each dot represents 10

30%

80%

of all climate change projects contribute directly to advance gender equality and women's empowerment

have gender as a significant and principle objective

UNDP promotes climate change solutions that consider the advancement of gender equality and women's empowerment, a key catalyst to achieving sustainable development.

KEY INTERVENTIONS



Mainstreaming gender equality into climate policies, strategies, planning and budgeting



Gender-responsive climate adaptation and mitigation measures



Gender-responsive climate finance mechanisms



Women's leadership and participation in climate policy decision-making processes at global, regional, national and local levels



SUPPORT IN FOCUS

MOROCCO

+200 women were trained on national actions to reduce GHG emissions.

The training focused on the development of NAMAs and on the Third National Communication. Women's groups were actively involved in the development of the country's reporting requirements to the UNFCCC and influenced the increase of the gender parity status in high-level decision making bodies such as the inter-ministerial committee for monitoring the low carbon strategy, now with 19 women and 15 men.

SRI LANKA

Women entrepreneurs saw an income increase of 200% per person.

Through using energy-efficient biomass dryers for dried fish, these women increased their monthly income from 15,000 to 40,000 rupees. With FAO and GEF support, the women gained new skills in marketing and an understanding of product diversification, resulting in more income to put into savings.

HAITI

Women are gaining greater voice in water management decision making to adapt to climate change impacts.

With financing from the LDCF and Canada, empowerment activities have enabled women to become active members of watershed management committees, where they have provided new perspectives for adaptation, such as selecting fruit trees for reforestation activities to help address food security.

ETHIOPIA, CAMBODIA AND **PAPUA NEW GUINEA**

National climate guidelines add a gender dimension.

With LDCF financing, Ethiopia has developed gender mainstreaming guidelines for the environment and forest sectors. Cambodia, in partnership with the Gender Global Climate Alliance has integrated gender into climate change strategies and plans in the education, agriculture, water, road and urban infrastructure sectors. In Papua New Guinea, the UN-REDD programme has provided support to develop gender-inclusive national guidelines on Free, Prior and Informed Consent for REDD+ implementation.



SDG 6 CLEAN WATER AND SANITATION

Ensure availability and sustainable management of water and sanitation for all

KEY FACTS

Today, 1.6 billion people live with absolute water scarcity and by 2025 this number is expected to rise to 2.8 billion.¹⁹

For each degree of global warming, projections show approximately 7 percent of the global population will be exposed to a decrease of renewable water resources of at least 20 percent.²⁰

Water scarcity,

exacerbated by climate change, could COST some regions up to 6 percent of their GDP, increasing migration and causing conflicts.²¹

UNDP's ONGOING SUPPORT

• Each dot represents 10

••••

+120 PROJECTS AND PROGRAMMES

78 COUNTRIES

UNDP recognizes that climate change adaptation is closely linked to water and its role in sustainable development.

KEY INTERVENTIONS



Integrated water resources management as a tool to enhance

climate resilience



Climate-resilient access to safe drinking water



Introduction of watersaving and harvesting technologies



SUPPORT IN FOCUS

MALDIVES

Sustainable water facilities are being scaled up on 49 islands.

A water desalination system integrates rainwater and uses solar energy to cut costs, providing better-tasting, cleaner and more affordable water for the islanders of Mahibadhoo, Ihavandhoo and Gadhdhoo. With Adaptation Fund financing, the facilities are run by government-owned water utility companies and are fully self-sufficient during the dry season and able to supply water to neighbouring islands in times of need. The effort is scaling up across 49 islands, with GCF support.

DJIBOUTI

Farmers and pastoralists use enhanced water management practices to reduce climate risks.

Practices including rainwater harvesting seek to reduce climate risks associated with rainfall variability in the mountainous regions facing severe water scarcity. With support from the Adaptation Fund, the project promotes rural community adaptation to climate change. It is also helping develop drought and flood preparedness plans and build capacity to support disaster risk management and reduction.

COMOROS

+20,000 metres of new water pipes reduce water loss from 60% to 5%. New practices and construction of new water infrastructure are solving many water-related issues and enhancing resilience. With finance from the LDCF, efforts seek to increase water security — a vital issue for Small Island Developing States (SIDS). Drip irrigation kits, for example, produce higher crop yields. Water user groups and water management agreements have been established to help ensure sustainability of the infrastructure, and climate change impacts are being integrated into the new national Water Act.



SDG 7 AFFORDABLE AND CLEAN ENERGY

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

KEY FACTS

The energy sector is the largest contributor to climate change, accounting for nearly two thirds of total GHG emissions.

Approximately 40 percent of the emissions reductions required by 2050 to limit global temperature increase to less than 2 degrees Celsius would potentially come from energy efficiency.²²

Doubling the renewable energy

share by 2030 could deliver half of the required GHG emission reduction and create over 24 million jobs worldwide.²³

UNDP's ONGOING SUPPORT

• Each dot represents 10

RENEWAE

+130

+120 ENERGY EFFICIEN +110 COUNTRIES

NT TS

UNDP supports countries to implement riskinformed sustainable energy solutions by catalyzing investments from the public, private and financial sectors.

KEY INTERVENTIONS



Expand access to clean and affordable energy and electricity for the poor



De-risk investment on renewable energy and leverage public-private partnerships



Promote energy efficiency in public, private and consumer sectors



Support sustainable public transport and infrastructure systems



SUPPORT IN FOCUS

ZIMBABWE

+500 community members benefit from a community-managed solar power station. With the solar power station, communities now have access to clean energy sources for irrigation, homes and schools. The station, supported by the UNDP-GEF Small Grants Programme and the European Union, has also enabled owners of small entrepreneur-managed solar energy kiosks to offer battery charging to the community, earning an extra \$600 in the first three months of operation.

BENIN AND BURKINA FASO

200,000 biogas digester systems expect to cut 22,500 tons of CO2 equivalent per year between 2013 and 2041. A multi-country Clean Development Mechanism (CDM) programme of activity is seeking to replace traditional thermal energy generation methods at household level. The CDM programme of activity was designed with support from the MDG Carbon and financed by Australia in partnership with SNV Netherlands Development Organisation. The aim is to improve the quality of life of rural farmers, particularly women, and their livelihoods through exploiting the market and non-market benefits of domestic biogas.

BAHRAIN, KUWAIT, SAUDI ARABIA AND THE UNITED ARAB EMIRATES

National centres of excellence on sustainable energy are being established. With technical and policy support from UNDP, these high-carbon footprint countries are putting in place national policies and public-private partnerships to reduce the carbon footprints and energy intensity of growth in key sectors including buildings, power and transport.

INDIA

Energy efficiency is a priority in 285 secondary steel mills.

The mills are amongst the highest energy-consuming and GHG-emitting industrial sectors. With GEF financing, the intervention has reduced energy costs by 30 percent, translating into savings of about \$15 million per year for the next 10 years, and reduced GHG emissions by 30 percent. The Government of India has recognized this support as a best practice and it is being scaled up to another 1,000 units across the country.

26 — UNDP AND CLIMATE CHANGE —



KEY FACTS

Climate change is estimated to have lowered global

output by 1.6 percent of global GDP, or \$1.2 trillion, in 2010. With the growing rate of climate change impacts, average global economic loss could rise to 3.2 percent by 2030 and up to 10 percent by 2100.24

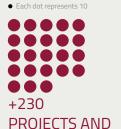
Appropriate emissionreduction policies such as clean transportation, an energy efficiency in industry and buildings can boost the global economy by up to \$2.6 trillion a vear.25

Heat extremes as a result of a warming climate could negatively affect labour productivity in key susceptible sectors and result in more than \$2 trillion of global economic cost.26

SDG 8 **DECENT WORK AND ECONOMIC**

GROWTH Promote sustained, inclusive and sustainable economic growth, full and productive employment and decent work for all

UNDP's ONGOING SUPPORT



+100 **COUNTRIES**

PROIECTS AND PROGRAMMES

UNDP recognizes that future economic growth and sustainable development is predicated on how climate change is addressed.

KEY INTERVENTIONS







Promote sustainable tourism such as ecotourism that promotes conservation and sustainable use of natural resources and creates jobs for local people

Support entrepreneurs and small and mediumsized business enterprises that promote green and environmentally friendly and low-carbon solutions



SUPPORT IN FOCUS

MALDIVES

Tourism operators and local communities partner to make the Maldives more climate resilient.

Tourism makes up 30 percent of the country's GDP but is threatened by sea level rise, beach erosion and other climate-related impacts that affect this low-lying island nation. With LDCF financing, adaptation measures include pilot projects in conservation of fresh water sources, solid waste management, biodiversity conservation, community rainwater harvesting systems, hydroponics and water dripping systems.

VIET NAM

Five small and medium enterprise (SME) sectors address energy-efficient barriers.

With GEF financing, the initiative aims to widespread use of energy-efficient management practices, operations and technologies in SME sectors including brick, ceramics, textiles, paper and food processing. In 2011, the support resulted in a cumulative energy saving of 171 kilotons and a cumulative CO2 reduction of 704 kilotons. SMEs are essential for Viet Nam's national energy conservation and a key sector for sustainable economic growth as they now account for 95 percent of enterprises.

CUBA

Special zones for sustainable fisheries are being established. One such zone is the Batabanó Gulf, which is not only a major lobster production area but also a key contributor to the tourism sector, the main motor of the Cuban economy. The establishment of such zones has been supported with GEF financing.



KEY FACTS

Climate change has a significant impact on infrastructure systems and can put their operations and reliability at high risk. However, with appropriate climate considerations, cost-saving and potential additional revenues and benefits can be generated.

More than a third of global GHG emissions in

2010 were from the industrial sector – with over half coming from Asia. Through innovative technologies, energy intensity in industrial sectors can be potentially reduced by 20 percent.²⁷

Up to 60 percent in revenue losses could result from designing and building hydro infrastructure in Africa's seven main river basins without factoring in climate scenarios.

On the other hand, if climate consideration is factored in, revenues could potentially increase by up to 120 percent.²⁸

SDG9

INDUSTRY, INNOVATION AND INFRASTRUCTURE

Build resilient infrastructure, promote inclusive and sustainable industrialization and foster innovation

UNDP's ONGOING SUPPORT





+230

PROJECTS AND PROGRAMMES

UNDP supports countries to make their national and local infrastructure systems climate resilient and energy-efficient.

KEY INTERVENTIONS





Promote climateresilient infrastructure Upgrade infrastructure and retrofit industries with energy efficiency and clean, low-emission technologies and industrial processes



SUPPORT IN FOCUS

INDIA

+142 million kilowatt hours of energy savings and 117,000 tons of CO2 reduction were achieved in 2013. UNDP supports implementing energy-efficient measures in the Indian national railway systems. With GEF financing, the support is aimed at developing a long-term energy efficiency and conservation programme to reduce energy consumption and GHG emissions in the railway infrastructure systems. Actions include introducing energy-saving technologies and measures in the railway system and establishing a centre of excellence in energy efficiency. Cumulative indirect energy savings of 4.05 billion kilowatt hours and CO2 reduction of 3.32 million tons is projected by 2020-2021.

CHINA

The rural buildings market is being transformed with energy-efficient technologies and practices.

An initiative with GEF financing started with piloting energy-efficient practices and technologies in 10 brick plants and 10 building projects and has been replicated and scaled up to include 128 brick plants and 45 building projects. Beyond energy savings, this improves the sustainability of the rural brick industry and living standards of rural residents.

GEORGIA

A comprehensive floodplain zoning policy framework is being developed.

The framework aims to ensure that all future development is risk-informed. Developed with Adaptation Fund support, it requires all new building and infrastructure development to draw on disaster and climate risk information, thereby providing a systematic means to address risk. UNDP and the Government of Georgia are currently considering expanding the initiative and making it the template for a national risk-informed policy.



SDG 10 REDUCED INEQUALITIES

Reduce inequality within and among countries

KEY FACTS

Climate change and socio-economic inequality are inextricably linked.

Socially and geographically disadvantaged people who are exposed to persistent inequalities based on their gender, age, race, ethnicities and physical abilities are particularly affected by climate change and climaterelated hazards.²⁹

The richest 10 percent of people in the world are estimated to be responsible for half of total global GHG emissions while the poorest half account for only around 10 percent, yet live overwhelmingly in countries

most vulnerable to climate

change impacts.30

The scale of migration and displacement, both internal and cross-border, is expected to rise with climate change.³¹

UNDP's ONGOING SUPPORT



+65 PROJECTS AND PROGRAMMES

40 COUNTRIES

UNDP's vision is driven by inclusiveness and equality, ensuring actions for all and taking into account the needs of those on the margins of decision-making such as youth, the elderly, indigenous people and people with disabilities.

KEY INTERVENTIONS



Support youth, women and indigenous people, and local communities, in participating in climate change policy development and implementation processes



Support smalleconomy countries such as LDCs and SIDS in accessing finance, human resources and technological resources to implement and scale up adaptation and mitigation actions



SUPPORT IN FOCUS

COLOMBIA, COSTA RICA, HONDURAS, MEXICO, PANAMA AND PERU

Voices of indigenous peoples are empowered in REDD+ readiness processes.

Through the REDD+ readiness processes under the UN-REDD programme, UNDP has helped strengthen participation and empowerment of civil society, indigenous peoples, afrodescendants and campesino leaders. One example is the joint work between indigenous peoples and the government to develop and adopt a Free, Prior and Informed consent (FPIC) policy in Honduras.

COLOMBIA, GUATEMALA, PANAMA AND PARAGUAY

Indigenous peoples are adopting practices and policies to sustainably manage forests and other ecosystems. The support with GEF financing is implemented through communities and organizations across four countries.. In Paraguay, for example, the National Indigenous Institute and other partners are working to conserve and restore the Upper Paraná Atlantic Forest. Both small-scale farmers and large-scale producers in this area are adopting sustainable practices. At national level, revision of the environmental legal frameworks will improve the governance of natural resources.

PACIFIC ISLANDS

Remote rural communities secure 24-hour access to electricity through off-grid photovoltaic systems. Improving access to reliable and environmentally-friendly energy services is a priority for SIDS including the Cook Islands, Fiji, Kiribati, Nauru, Niue, Papua New Guinea, Samoa, the Solomon Islands, Tonga, Tuvalu and Vanuatu. GEF-supported projects installing off-grid solar photovoltaic systems ensure 24 hours of electricity to communities in remote locations. Communities use this energy for safe storage and refrigeration of food; safe storage of life-saving vaccines and medicines; powering medical equipment; and improving access to clean water for cooking, bathing and sanitation.



KEY FACTS

3.5 billion people, more than half of the world's population, live in cities and by 2050, more than two thirds of the world's population – up to 6 billion people - are projected to live in urban areas.32

Urban areas. occupying only 3 percent of the Earth's

land, generate around 80 percent of global GDP and account for more than 70 percent of global energy consumption and energyrelated GHG emissions.33

A high proportion of the world's population most affected by extreme weather events is concentrated in urban centres, leading to significant economic losses and disrupted global business processes.34 More than 80 percent of annual global costs for climate change adaptation are borne by urban areas.35

SDG 11 SUSTAINABLE CITIES AND COMMUNITIES

Make cities and human settlements inclusive, safe, resilient and sustainable

UNDP's ONGOING SUPPORT



0000

+85 **COUNTRIES**

PROIECTS AND PROGRAMMES

Promoting climate risk-informed and low-emission urban development is critical to successful global adaptation and mitigation efforts.

KEY INTERVENTIONS





City flood risk management Sustainable urban transport systems



Energy efficiency in public and commercial building



SUPPORT IN FOCUS

TURKEY

The first energy efficiency incubation centre has created technical labour capacity for the region.

As a model, the centre, located in the Southeast Anatolia Region, was renovated using the international Passive House concept, the first such zero-carbon building demonstrated in Turkey. Due to urbanization, the number of residential and commercial buildings in large cities in Turkey has risen rapidly. The building sector accounted for more than a third of energy consumed and energy-related CO2 emissions in 2008 in Turkey.

HONDURAS

13,000 most vulnerable urban households are protected from floods and landslides.

Steps to reduce risks are protecting households around Tegucigalpa, the capital of Honduras. With support from UNDP through the Adaptation Fund, the assistance includes installing automatic weather stations and rooftop rainwater harvesting systems, and protection of more than 60,000 hectares of forests along the main watershed in which Tegucigalpa is located.

EGYPT

Up to 40 percent in energy savings for lighting and appliance sectors has been achieved.

The savings resulted from expansion of UNDP support, financed by GEF, in key urban areas in Egypt. Support includes street lighting for residential compounds, banks, shops, supermarkets, hotels, resorts, libraries, billboards and private and public administrative buildings. Innovative public-private partnerships with energy-efficient lighting have been scaled up across buildings in banking and other sectors. Support also helps strengthen the regulatory and institutional framework, develops monitoring and enforcement mechanisms, and provides training to public authorities and other relevant stakeholders.



SDG 12

RESPONSIBLE CONSUMPTION AND PRODUCTION

Ensure sustainable consumption and production patterns

KEY FACTS

emissions.36

Households consume nearly a third of global energy use and contribute to one fifth of total GHG

1.3 billion tons of food is wasted every

year while almost 1 billion people are undernourished and another 1 billion hungry. The food sector accounts for around 30 percent of total global energy consumption and accounts for around 22 percent of total GHG emissions.³⁷

The increasing global demand for timber and paper products

has led to unsustainable logging practices and landuse changes, destroying rainforests.

UNDP's ONGOING SUPPORT





+210 PROJECTS AND PROGRAMMES

UNDP supports countries to promote sustainable consumption and production patterns that help mitigate climate change impacts.

KEY INTERVENTIONS







Energy-efficient household appliances



Green commodities and supply chain



Develop green businesses and ecoentrepreneurship and use sustainable consumption and production practices in micro, small and medium Enterprises (MSMEs)



SUPPORT IN FOCUS

MEXICO

+1.7 million hectares of forests have been certified with good management. Another 1.4 million hectares are under consideration for certification through a UNDP-GEF-supported forest certification programme in Mexico. At the national level, the forest programme has established forest certification and biodiversity conservation as priorities. At the local level, indigenous and local communities have joined more than 20 community forest enterprises in adopting new forest management practices and working towards international and national certification standards for the sustainable production of wood.

EGYPT

+700 biogas digester units have been built for rural households.

Engineers and masons trained with support from UNDP and GEF are building biogas digester units. The aim is to remove technical, institutional, informational, financial and other market barriers to biomass energy and to promote sustainable rural development and reduce the negative impacts associated with the use of fossil fuels and the unsound management of agricultural and solid waste. Biogas units have the potential to displace all liquefied petroleum gas usage for more than 8.9 million rural households, and generate emission reductions of over 7.56 million tons of CO2 per year, if every household in Egypt can source the equivalent of 50 kilograms of animal waste per day.

COSTA RICA AND PARAGUAY

Two major meatproducing countries have adopted measures in sustainable animal rearing and meat production. Better practice can reduce CO2 emissions, produce food sustainably and address climate change. For example, wider adoption of existing best practices that combine forestry and grazing, as well as technologies in feeding, health and husbandry, and manure management could help the global livestock sector reduce its emissions.



SDG 13 CLIMATE ACTION

Take urgent action to combat climate change and its impacts



KEY FACTS

emissions.38

Average global temperature increased by 0.85°C from 1880 to 2012 and is expected to exceed an increase of 1.5°C by 2100 with current

Global average sea level rose by nearly 20 cm from 1901 to 2010 while 1.07 million km²

concentrations and ongoing

of ice loss has occurred every decade since 1979. Average sea level rise is predicted as 24 to 30 cm by 2065 and 40 to 63 cm by 2100.39

Global CO² emissions have increased by almost 50%

since 1990, with a sharper increase between 2000 and 2010 than in each of the three previous decades.40

UNDP CONTRIBUTES TO EVERY TARGET OF SDG 13 - HIGHLIGHTS OF SUPPORT

TARGET 13.1 **STRENGTHENING RESILIENCE AND ADAPTIVE CAPACITY**

UNDP is the leading implementing partner in climate change adaptation, with on-the-ground support in

110+ countries Its approach is:



Strengthening climate-resilient livelihoods especially for the

most vulnerable populations



Scaling up adaptation measures in

key sectors



Addressing climate and disaster risks in an integrated manner through

integrated climate and disaster risk governance



Promoting resilient recovery by integrating climate risks and adaptation

and mitigation actions into disaster recovery efforts

TARGET 13.2 INTEGRATING CLIMATE **CHANGE INTO NATIONAL PLANS**



Strengthening national leadership and ownership

is one of the core principles of UNDP's development assistance, including climate change support.

Assisting

+70

countries to integrate and implement comprehensive climate change measures, both adaptation and mitigation, into policies, strategies and planning at national and local levels

TARGET 13.3

IMPROVING HUMAN AND INSTITUTIONAL CAPACITY ON MITIGATION, ADAPTATION AND EARLY WARNING

43

countries supported to submit INDCs and 37 supported for NDC readiness and implementation

18

countries supported in strengthening national **GHG** inventory systems to create a strong foundation for mitigation

countries supported in 42 NAP development and **implementation** processes

1.035

integrated climate change adaptation and disaster risk reduction **plans** put in place in

action and transparency

+ 50 countries

countries supported in low-emission development 25 **strategies** and plans including NAMAs and LEDs

+110

countries supported in sustainable energy

14

underrepresented developing countries across Africa. Asia and the Pacific supported to scale up carbon finance solutions through development of CDM programme of activities and NAMAs. When fully implemented, these actions are expected to **reduce** 40 million tons of CO2 equivalent benefiting over 600,000 households.

76

countries supported to reduce forest**related emissions** by addressing the drivers of deforestation and forest degradation

45

countries supported to improve climate risk information and early warning systems

32 — UNDP AND CLIMATE CHANGE —



TARGET 13.A

ACCESSING AND IMPLEMENTING CLIMATE FINANCE

Catalyzing climate finance is intrinsic to UNDP's climate change support based on three principles:



\$

EQUITY

All countries and every person can benefit from climate finance.

EFFECTIVENESS

Finance must be transformational and maximize multiple economic, social and environmental benefits.



EFFICIENCY

Maximize public finance potential and catalyze more from domestic, international, public and private sources.



countries supported to access to climate grant finance with a total of over\$2.8 billion since 2008 from

various funding mechanisms such as the GEF, the Adaptation Fund, the GCF, and a number of multilateral and bilateral partners



UNDP is an accredited implementing partner of the Green Climate Fund.

To date, UNDP has supported the development of funding proposals from Armenia, Pakistan, Malawi, the Maldives, Pakistan, Sri Lanka, Tuvalu and Vietnam, which have been approved with a total grant amount of \$238 million.



countries supported prepare **to access, sequence, and monitor additional climate finance,** and in particular from the GCF



countries in Asia and the Pacific, Africa and Latin America have been supported on **CPEIR analysis**



Policy support provided on de-risking private sector finance for renewable energy and mapping private sector financial flows related to climate change

TARGET 13.B ENHANCING CAPACITY OF LDCS AND SIDS

48

LDCs +

39

SIDS

supported to access climate finance and implement adaptation and mitigation measures



14 Pacific Island countries supported for the development policies, strategies and regulatory instruments for climate change adaptation



3,385 community projects across **131 countries** supported to implement community-based mitigation and adaptation measures

CLIMATE CHANGE MITIGATION UNDER THE MONTREAL PROTOCOL

UNDP is a key implementing agency of the Montreal Protocol Multilateral Fund for the protection of the global ozone layer. Working in 109 countries with a cumulative budget of \$829 million, the support resulted in the elimination of **66,000 tons** per annum of ozone-depleting substances (ODS) by introducing more environment- and climatefriendly alternatives. Since these ODS also had very high global warming potentials (GWPs), UNDP has simultaneously supported reduction of 4.93 billion tons of CO2-equivalent emissions at minimal additional cost. China, as the largest producer and consumer of ODS, is the largest component of UNDP's ODS-elimination programme and has also reduced the largest amount of CO2-equivalent emissions.





SDG 14 LIFE BELOW WATER

Conserve and sustainably use the oceans, seas and marine resources for sustainable development

KEY FACTS

Over 3 billion people depend on marine and coastal biodiversity for their livelihoods.41

The market value of marine and coastal resources and industries is estimated at \$3 trillion per year, or about 5 percent of global GDP⁴²

Heat is accumulating in the oceans as they absorb more than 90 percent of the excess heat on Earth caused by the greenhouse effect.43

UNDP's ONGOING SUPPORT

• Each dot represents 10





+85 PROJECTS AND COUNTRIES **PROGRAMMES**

+60

UNDP is working to support countries, in particular coastal communities, to sustainably manage and protect marine and coastal ecosystems, as well as adapt their livelihoods to the changing climate.

KEY INTERVENTIONS



Marine and oceans ecosystem-based adaptation and management



Integrated coastal management to enhance climate resilience



Support to SIDS and LDCs in sustainable use of and climate resilient marine resources including fisheries, aquaculture and tourism



Climate-resilient infrastructure to protect from sea level rise



SUPPORT IN FOCUS

SAMOA

Coastal-reliant communities are strengthening resilience to climate risks.

With LDCF resources, UNDP is enhancing the resilience of coastal-reliant communities to climate change risks. Tourism contributes up to 20 percent to the annual GDP, provides direct employment for approximately 10 percent of the workforce, and is focused mainly on the operation of small-scale, communitybased accommodation. Small-scale tourism operations play a major role in contributing to overall national economic growth.

THAILAND

Coastal communities receive support to conserve and rehabilitate critical ecosystems.

With SCCF resources, UNDP has supported mangrove reforestation, pollution monitoring and patrols that prevent illegal fishing and mangrove deforestation. Community-owned rules for the sustainable use of marine and coastal resources also have been established. At the national level, a new National Biodiversity Policy has been included in the 2015-2012 Integrated Biodiversity Master Plan of the Ministry of National Resources and Environment, endorsed by the cabinet and now implemented nationally.

GLOBAL

Working with the global shipping industry to reduce the sector's carbon footprint.

In a business-as-usual scenario, CO2 emissions from shipping could grow from a current 2.5 to 10 percent of global emissions, leading to a huge increase in shipping's contribution to ocean acidification. With GEF resources, UNDP is partnering with IMO to support countries to meet new international shipping energy efficiency obligations. Ten countries are being assisted to undertake legal, policy and institutional reforms. A publicprivate partnership called Global Industry Alliance will promote technology transfer.



KEY FACTS

Around 1.6 billion people depend on

forests for their livelihood, including some 70 million indigenous people.44

Deforestation adds almost 3 billion tons of carbon dioxide into the atmosphere

each year45, while land degradation due to drought and desertification causes 12 million hectares of land loss per year and affects 1.5 billion people.46

Failure to conserve forests would require eliminating all greenhouse gas emissions from fossil fuel use by 2035 to limit warming to 2 degrees Celsius, while properly managed forests would provide 10 to 15 additional years to end fossil fuel use while keeping global warming under 2 degrees.47

SDG 15

LIFE ON LAND Protect, restore and promote sustainable use of terrestrial ecosystems, sustainably manage forests, combat desertification, and halt and reverse land degradation and halt biodiversity loss

UNDP's ONGOING SUPPORT



100 COUNTRIES

245

PROJECTS AND PROGRAMMES

UNDP supports countries to implement action to protect, restore and promote sustainable use of terrestrial ecosystems, sustainably manage forests, combat desertification, and halt and reverse land degradation and biodiversity loss. More than 130 projects and programmes in more than 70 contries are directly linked to forests management.

KEY INTERVENTIONS





Support sustainable forest management Implement REDD+







Strengthen forest governance and promote deforestationfree supply chains



Expand protected areas of high conservation-value forests



SUPPORT IN FOCUS

INDONESIA

A 53% decrease in deforestation rate was achieved.

In six sites, deforestation decreased from 956 hectares to 450 hectares per year in 2015. UNDP has supported the government in its efforts to increase the forest cover areas by 6,561 ha through planting a total of 2,624,550 seedlings and encouraging a shift in cultivation practices.

MOLDOVA

18 communities covering 1,392 ha of community forests and 5.800 ha of community pasturelands have developed pasture and forest management plans.

The initiative, financed by the EU through the Clima East Initiative, includes afforestation of 150 hectares of degraded lands using native climate-resilient species. It has also restored 472 hectares of pasturelands, benefiting more than 20,800 people by improving their livelihoods and reducing their vulnerability to climate change. Estimates predict that within a 20-year period, over 9 million tons of carbon dioxide will have been either sequestered or avoided.

CAMEROON, CENTRAL AFRICAN REPUBLIC, CONGO, DEMOCRATIC REPUBLIC OF CONGO. **EOUATORIAL GUINEA** AND GABON.

240 million ha of tropical rainforests are being protected.

The rainforests represent a carbon sink equivalent to six years of global emissions. Through the Central African Forest Initiative (CAFI), the six central African high forest-cover countries are being supported to promote strategic, holistic and countryled REDD+ and low-emission development investments. The support aims to address drivers of deforestation and forest degradation and promote sustainable development. This initiative a joint partnership between UNDP and key partners including Brazil as a South-South partner.

PERU

is now ready for implementation of RFDD+.

Technical support from UNDP through the UN-REDD Programme prepared Peru to adopt this climate change mitigation approach. UNDP continues to support Peru in the design of financial arrangements for the implementation of activities on the ground within the framework of the \$300 million bilateral agreement with Norway and Germany towards results-based payments for reducing carbon emissions from forested lands..



KEY FACTS

Climate change poses critical threats to national and global peace and security.

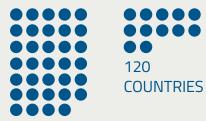
People living in fragile and conflict-affected states are particularly vulnerable due to the absence of infrastructure, institutions, natural and social capital and livelihood opportunities, which are the key foundations to adaptation efforts.

Existing international tensions resulting from food and water disputes, as well as crossborder migration, can be multiplied due to climate change impacts.⁴⁸

SDG 16 PEACE, JUSTICE AND STRONG INSTITUTIONS

Promote peaceful and inclusive societies for sustainable development, provide access to justice for all and build effective, accountable and inclusive institutions at all levels

UNDP's ONGOING SUPPORT



340 PROJECTS AND PROGRAMMES

UNDP promotes responsive, inclusive, participatory and representative decision-making at all levels. UNDP also works to strengthen national and local government institutions and policy frameworks related to climate change that aim to promote effectiveness, accountability and transparency.

KEY INTERVENTIONS



Establish and strengthen national and local government institutions and coordination mechanisms for climate change response



Strengthen governance of climate finance



Support fragile states and post-conflict countries to build resilient recovery and adapt to climate change impacts



SUPPORT IN FOCUS

THE OCCUPIED PALESTINIAN TERRITORY

The first-ever review of climate risks and response options.

The review is being supported by UNDP as an important basis for future climate action. This includes integration of climate risks into crisis recovery efforts, and engaging the potential of solar for community empowerment and resilience-based approaches to development.

LEBANON, JORDAN, SUDAN AND YEMEN

Sustainable energy solutions are provided for refugees and communities displaced by conflicts.

In Lebanon, renewable energy solutions are offered to provide lighting and heating in communities hosting Syrian refugees. In Jordan, policy frameworks are developed to integrate solar solutions into the national response to the Syria crisis. In Sudan and Yemen, solar solutions are introduced for communities displaced by conflict.

CHAD, EGYPT, LIBYA AND SUDAN

Cooperation leads to a plan for sustainable use of transboundary resources.

A regional programme focuses on water resources impacted by climate change. With GEF financing, support includes joint management of the Nubian Aquifer, the world's largest fossilized groundwater reserve. A Strategic Action Plan was developed and endorsed by the four countries for sustainable use of the critical resource and prevention of conflicts.

VIETNAM

Strengthening of the Grievance Redress Mechanism (GRM) for REDD+ is being supported.

Through the UN-REDD Programme, support is being provided to enhance the accessibility, accountability, effectiveness and transparency of its implementation at both national and provincial levels. Support in six provinces focuses on grassroots mediators by building their skills to classify types of grievances and disputes received, and to identify the best channels for resolution. Mediators have shown increased empowerment in fulfilling their roles at the grassroots level.



SDG 17 PARTNERSHIPS FOR THE GOALS

Strengthen the means of implementation and revitalize the global partnership for sustainable development

KEY FACTS

The SDGs can only be realized with a strong commitment to partnership and cooperation at all

levels. Sustainable development cannot be achieved without climate change action, and many of the SDGs address the core drivers of climate change.

Partnerships between governments, the private sector and civil society are critical to prevent climate change from rolling back the development gains of the past and preventing further gains in the future.

UNDP's ONGOING SUPPORT



110

COUNTRIES

+300 PROJECTS AND PROGRAMMES

UNDP's approach is to broker global partnerships for sustainable development, using its wide field presence to link countries to technology, knowledge and resources for climate mitigation and adaptation.

KEY INTERVENTIONS





Promote North-South, South-South and triangular cooperation on climate change at regional and national level

Increase mitigation and adaptation technology transfer, capacity building and finance





Enhance policy and institutional coherence and to access and foster multi-stakeholder coordination and partnership for climate change responses

Provide support expenditure reviews of climate finance in public and private sectors



SUPPORT IN FOCUS

LEAST DEVELOPED COUNTRIES (LDCS)

27 LDCs are supported on country-led planning and preparedness for climate change adaptation.

Support is provided through the National Adaptation Plan Global Support Programme (NAP-GSP). Financed by the GEF-LDCF, the programme is the largest coalition among UN agencies including UNDP, UNEP, WHO, FAO, IFAD, UNITAR, UNFCCC and UNISDR and is working with key partners such as the German Government (GIZ), Global Water Partnership and the Global Programme of Research on Climate Change Vulnerability, Impacts and Adaptation (PROVIA).

CHINA, GHANA **AND ZAMBIA**

Renewable energy technology transfers for off-grid rural communities

One example in this programme is China's technology transfer to Zambia focuses on off-grid solutions for communities located far from the power grid. This emphasis on rural electrification allows the part of the Zambian population that is missing out on development opportunities to enhance their livelihoods and quality of life through the provision of clean, sustainablyproduced electricity. UNDP support is being implemented in partnership with Denmark.

UNITED ARAB EMIRATES

The first World Green **Economy Organization** has been established.

Based in Dubai, the organization was established in collaboration with UNDP with an objective to engage the growing role of the UAE as a global partner in development. In recent years, the country has emerged as the world's top provider of official development assistance (by percentage of GDP). South–South cooperation on climate change and sustainable energy serves as a core part of the new global partnership.

CAMBODIA, CAPE VERDE, HAİTI, MALI, NIGER AND SUDAN

The 6 LDCs exchange experiences in adaptive agriculture and water management practices. Under the Canada-UNDP Climate Change Adaptation Facility, countries are learning from each other's national experiences to design and implement adaption approaches to agriculture and water management. As a result, the countries now have improved climate information systems for informed decisionmaking and integrated planning approaches. The knowledge sharing has enabled them to test and scale up climate risk management measures and strengthen capacity to access and manage climate finance.

A partnership approach to deliver climate action



UNDP embraces a partnership approach to delivering climate actions at the local, national, regional and global levels. In addition to working across many key government ministries (such as environment, finance, planning, energy and agriculture), we also work with indigenous and local communities, civil society and the private sector. In addition, UNDP also partners with other UN agencies, international financial institutions (IFIs), financial instruments of global conventions, donors and development agencies, and academia and think tanks, to the extent possible, as illustrated below.

Bilateral donors: Australia, Austria, Belgium, Canada, Denmark, European Commission, Finland, France, Germany, Japan, Netherlands, Norway, Spain, Sweden, Switzerland, United Kingdom, United States

UN agencies: FAO, ICAO, IFAD, IMO, UNEP, UNFCCC, UNISDR, UNITAR, UNWOMEN, WHO, WMO

Civil Society/Research: APAN, AIT, CCCCC, CCAP, Ecofys, ECN, GAN, GFCS, GGCA, GGGI, Grantham Research Institute, GWP, IEA, IGES, International Partnership on Mitigation and MRV, IRI/Columbia University, IRENA, IUCN, LEDS Global Partnership, New Climate Institute, OECD, ODI, OECC, RIMES, SNV, WIN, WRI and many other national and local organisations at the country level

IFIs and banks: Asian Development Bank, African Development Bank, Central American Development Bank, Inter-American Development Bank, Islamic Development Bank, KfW, OPEC Fund for International Development, World Bank Private sector: Collaboration at global and regional level include Arab Union for Investment, Atmosfair, Barefoot Power, BP Technology Ventures Inc., Coca-Cola, China-Africa Business Council, d.light, Differ, Dubai Carbon Centre of Excellence, Envirofit International, MENA Clean Energy Business Council, Nuru Energy, Panasonic, Saudi Energy Efficiency Center, SolarNow, Sompo Japan Nipponkoa Group, ToughStuff and many others at the country level

Financial instruments of global conventions: Adaptation Fund, Global Environment Facility, Green Climate Fund, Least Developed Countries Fund, Special Climate Change Fund

Scaling-up support

UNDP commits to providing long-term support to significantly scale up climate change action, build resilience and pursue zero-carbon, equitable and inclusive growth and sustainable development.

ZERO-CARBON GROWTH



Implement Nationally Determined Contributions. Helping countries turn national targets into concrete actions is key. This work includes the planning and delivery of climate change initiatives, as provided through the mechanisms of the UNFCCC, such as formulating and implementing NAMAs and LEDs.



Integrate Zero-carbon Development. UNDP supports developing countries to integrate climate change into development planning across all sectors at the national and subnational levels.



Deliver Sustainable Energy. This includes closing the energy access gap, including through on- and off-grid electricity access, promoting energy efficiency and conservation, and increasing the global share of renewable energy. The creation of an environment conducive to private sector investment, through energy market transformation and de-risking investment, underpins these efforts.



Reduce Emissions through Protecting Forests. UNDP supports efforts to protect against deforestation and forest degradation while also reducing emissions and promoting sustainable livelihoods.

ADAPTATION AND RESILIENCE



Strengthen Integrated Adaptation Policies, Plans and Strategies. UNDP helps countries use the tools of the UNFCCC, including NAPAs and NAPs, to strengthen climate adaptation for resilient development. This also includes strengthening adaptation actions emerging from NDCs.



Advance Cross-sectoral Adaptation Action.
UNDP works to scale up climate- resilient livelihoods for the poor and vulnerable, support small and medium enterprises to reduce exposure to climate risks, improve climate information and early warning systems, and expand ecosystem-based adaptation solutions and resilient infrastructure.



Address Climate and Disaster Risks: UNDP commits to identifying and incorporating the management of climate risks with disaster risk reduction (DRR) into all governance, planning, implementation and monitoring.



Instill Risk-informed Disaster Recovery.UNDP integrates climate change into disaster recovery efforts to build back better and more resilient communities that can plan for and withstand future disasters and climate shocks.

Four underpinning principles that cut across the support are:

Strengthening capacities

Catalyzing finance

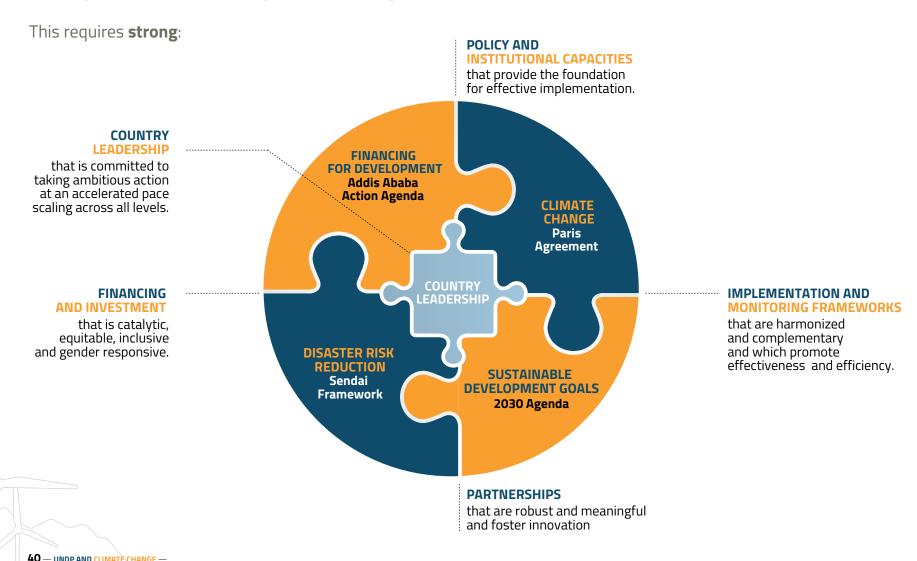
Leveraging partnerships

Promoting social inclusion and gender equality

Putting the pieces together

- connecting the 2015 landmark global agendas

Achieving zero-carbon and climate-resilient sustainable development requires effective integration of the global agendas set in 2015. Implementation of these agreements is a driving force for achieving the SDG targets.

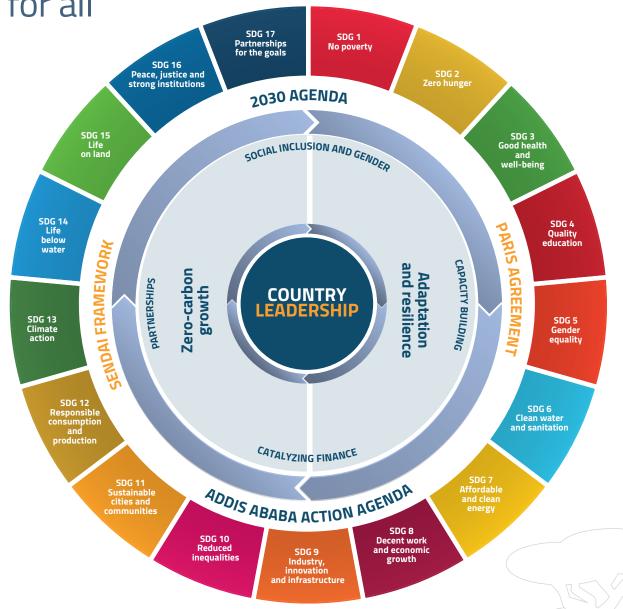


A vision towards a zero-carbon and climate-resilient sustainable development path for a sustainable, equitable

and prosperous future for all

UNDP is an established partner providing support to countries to identify linkages and joint opportunities for the implementation of policy and programmes that can both meet and aim to exceed the aspirations of national climate pledges and development goals.

UNDP believes that an integrated approach, driven by a country's leadership, is necessary to transition towards zero-carbon and climate-resilient sustainable development.



ACRONYMS

AfDB	African Development Bank	NAMAs	Nationally Appropriate Mitigation Actions
AIT	Asian Institute of Technology	NAPA	National Adaptation Programme of Action
APAN	All Partners Access Network	NAPs	National Adaptation Plans
BUR	Biennial Update Reports to the UNFCCC	NDCs	Nationally Determined Contributions
CCAP	Centre for Clean Air Policy	ODI	Overseas Development Institute
CCCCC	Caribbean Community Climate Change Centre	OECC	Overseas Environmental Cooperation Center
CDM	Clean Development Mechanism	OECD	Organisation for Economic Co-operation and Development
CO2	carbon dioxide	REDD	Reduced emissions from deforestation and forest degradation
CPEIR	Climate Public Expenditure and Institutional Reviews	RIMES	Regional Integrated Multi-Hazard Early Warning System for Africa and Asia
ECN	Energy Research Centre of the Netherlands	SCCF	Special Climate Change Fund
FAO	Food and Agriculture Organization of the United Nations	SIDS	Small Island Developing States
FAO	Food and Agriculture Organization of the United Nations	SNV	Netherlands International Development Organisation
GAN	Global Adaptation Network	UNDP	United Nations Development Programme
GCF	Green Climate Fund	UNEP	United Nations Environment Programme
GEF	Global Environment Facility	UNFCCC	United Nations Framework Convention on Climate Change
GFCS	Global Framework for Climate Services	UNISDR	United Nations Office for Disaster Risk Reduction
GGCA	Global Gender Climate Alliance	UNITAR	United Nations Institute for Training and Research
GGGI	Global Green Growth Institute	WHO	World Health Organization
GRM	Grievance Redress Mechanism for REDD+	WIN	World Network for Indigenous and Local Community Land and Sea Managers
GWP	Global Water Partnership	WMO	World Meteorological Organization
HFC	hydrofluorocarbon	WRI	World Resources Institute
ICAO	International Civil Aviation Organization		
IEA	International Energy Agency		
IFAD	International Fund for Agricultural Development		
IGES	Institute for Global Environmental Strategies		
IMO	International Maritime Organization		
INDC	Intended Nationally Determined Contributions		

IRENA IRI

IUCN

LDCF

LDCs

LEDs

International Renewable Energy Agency

Least Developed Countries Fund

least developed countries

International Union for Conservation of Nature

Low-Emission Development Strategies and Plans

International Research Institute for Climate and Society

FND NOTES

- 1. Based on approximate resources earmarked from 2008 until October 2016
- 2. Based on active UNDP programmes as of July 2016
- 3. These results are compiled from the following UNDP reports: 1) 2015 UNDP-GEF Annual Report, 2) 2015 UNDP Annual Report to the Executive Board, 3) Mid-term Review of the UNDP Strategic Plan, 4) UN-REDD 2015 Annual Report, 5) 2015 Result-Oriented Annual Reports (ROARs) of UNDP Regional Bureas and Country Offices, 6) UNDP Integrated Result and Resource Framework 2015 Results, 6) Annual Report on the implementation of the UNDP Gender Equality Strategy 2014-2018 and inputs from UNDP colleagues in HQ and Regional Offices.
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- **5.** Support under a Joint-Partnership between the UN-REDD and UNDP-GEF Small Grants Programme
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ABOUT UNDP

UNDP partners with people at all levels of society to help build nations that can withstand crisis, and drive and sustain the kind of growth that improves the quality of life for everyone. On the ground in nearly 170 countries and territories, we offer global perspective and local insight to help empower lives and build resilient nations.



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