



THE ABCs OF IDA—
KEY ACHIEVEMENTS BY COUNTRY

Climate Change



IDA

International Development
Association
WORLD BANK GROUP

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Photography:

Cover, Graham Crouch/World Bank—People in Nowabad Shaspol village in Bamiyan, Afghanistan were provided with solar power panel through the National Solidarity Program (NSP).

p.3, Mali/World Bank—People in rural areas received access to electricity through solar energy in Zantiebougou, Mali.

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p.11, Conor Ashleigh/World Bank—David Vaorete is chairman of the Namatoa Village Nursery, in the Tinputz region in Bougainville, is helping his community recover from the devastating impact of cocoa pod borer in Papua New Guinea.

ABCs OF IDA: CLIMATE CHANGE

Climate change presents a clear, near-term threat to efforts to end poverty. Ending poverty and addressing climate change cannot be considered in isolation. Without rapid, inclusive and climate informed development, climate change could result in more than 100 million additional people living in poverty by 2030.

IDA countries tend to have high exposure and sensitivity to climate shocks, while also exhibiting low adaptive capacity to buffer their economies and communities from climate and disaster risks. For these reasons, climate change is an urgent priority for IDA.

IDA helps countries cope with climate change by bringing new solutions—such as better weather data and forecasting, drought resistant crops, pioneering disaster insurance, and cyclone-resistant houses and warning systems.

IDA also helps countries mitigate

the impacts of climate change by finding innovative ways to harness energy from the sun, wind, and water, to farm with less water and chemicals and with better seeds, and to reduce carbon emissions by helping to make industries more efficient and sustainable.

IDA is focused on producing analytic work and providing technical assistance on climate change and disaster risk management. All IDA country strategies are required to incorporate climate and disaster risk into the analysis of a country's development challenges and priorities.

Addressing the impacts of climate change is one of the greatest challenges of our times, yet IDA's support is yielding results.

In Myanmar, a newly completed combined cycle gas turbine power plant reduced CO₂ emissions per output generated

by 400 gCO₂eq/kWh in 2018. And in Niger, 1.1 million people benefited from flood protection and sustainable land and water management activities increasing their resilience against natural hazards.

These are but a few of the important results IDA is delivering on climate change. See the examples on the following pages to learn more.¹ Be sure to check out our other "ABCs" (achievements by country) of IDA, highlighting our work on gender, governance and institution building, and conflict and fragility, and jobs and economic transformation at <http://ida.worldbank.org/abcs>

¹The countries included in this brochure are currently eligible for IDA support. To learn more, please visit <http://ida.worldbank.org/about/borrowing-countries>



MALI

From 2013–18, **73,736** people in rural areas received access to electricity through renewable energy sources, which prevented **2,008 tons** of greenhouse gas from entering atmosphere.



BANGLADESH

From 2012-17, **16,000** farmers benefited from installing more than **815** solar-powered irrigation pumps.

BANGLADESH

From 2012-17, 3.8 million rural households were provided access to electricity through solar home systems, including 16,000 farmers who benefited from installing 815 solar-powered irrigation pumps.

One million small-scale farmers

benefited from increased market access in 2018 up from 397,600 in 2015. During the same period, 165,683 farmers adopted new agricultural technologies to increase productivity.

BURKINA FASO

From 2014-18, 27,994 people were provided with new or

improved electricity service. The total capacity of installed equipment (242 kW) was replaced with more efficient equipment. During the same period, 16,498 solar lanterns were installed in public schools.

CAMEROON

From 2014-18, the yield of maize per hectare was increased from 1.5 tons to 3.8 tons, while the yield of cassava per hectare was 22.7 tons, up from 8 tons.

From 2017-18, the volume of maize sold was increased by 8,298 tons, and sorghum by 8,231 tons.

From 2014-18, 15,020 farmers adopted improved agricultural technology. During the same period, 7.5 million tons of cassava cuttings and 10,500 tons of bio-fortified cassava varieties were distributed. 7,396 women benefited from labor-saving technologies and equipment. 912 farms adopted bio-fortified varieties.

CHAD

From 2014-18, 168 women received training in renewable

energy sources and 112 women were trained in the operation and maintenance of heavy agricultural machinery.

REPUBLIC OF CONGO

From 2010-18, 1.1 million people in Brazzaville and Pointe Noire benefited from water, electricity, and urban development project. 331,710 people were provided with access to improved water sources and 259,340 people benefited from improved drainage and access to all-season roads.

CÔTE D'IVOIRE

From 2013-18, 47,881 hectares of village plantations were using improved planting material and 222,684 cocoa farmers were trained in good agricultural practices, benefiting 170,984 people.

DOMINICA

From 2014-19, 26,098 people were provided with resilient infrastructure to reduce vulnerability to natural hazards and climate change impacts. For example, 25% of east coast roads

damaged during Hurricane Maria are now rated to be in good or excellent condition. In addition, staff from 11 government agencies were trained to make climate-risk informed decisions to reduce vulnerability to climate change.

ETHIOPIA

From 2017–18, 762 hectares of land were reforested, benefiting 15,240 people.

855,377 hectares of degraded communal land were sustainably revived through landscape management practices in 2018, up from 304,589 hectares in 2013. During the same period, 3.9 million metric tons of carbon dioxide equivalent (CO₂ eq) were captured incrementally in the restored areas.

THE GAMBIA

A commercial agriculture and value chain project increased the rice yield from 2 tons/hectare in 2014 to 4.7 tons/hectare in 2018 and vegetable yield/hectare from 6 tons in 2014 to 9.4 tons in 2018. During the same period, improved market access for

small landholders increased the volume of rice sales by 6,500 tons and benefited 24,990 households.

GHANA

From 2016–18, 467 hectares of agricultural land received improved irrigation and drainage services. From 2012–18, the storage capacity of grains was increased by 15,340 metric tons.

The Ghana Climate Innovation Center was created to support entrepreneurs and SMEs to develop profitable and locally-appropriate solutions to climate change.

From 2016–18, targeted firms involved in climate technology sector increased sales revenue by USD 796,613 and 41,512 households have access to new and improved products and services. 21 firms have access to finance through the Ghana Climate Venture Facility.

GUYANA

From 2014–18, 47,638 people were provided with new or improved irrigation and drainage services, of whom 51% were

women. During the same time, 5,000 hectares of land was protected against the breach of the East Demerara Water Conservancy dam, benefiting 70,000 people. A three-kilometer length of the dam wall was upgraded, and its drainage capacity increased by 5 cubic meters per second.

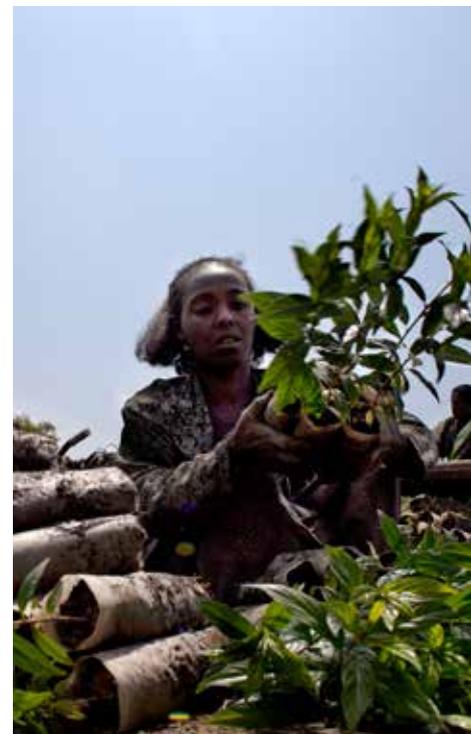
HAITI

From 2015–17, 437,000 children under two years old were fully immunized and the medical cold chain for the entire southern region in the wake of Hurricane Matthew was reestablished.

From 2012–18, 430,000 buildings were assessed for structural damage, and over 700,000 cubic meter of rubble was processed. Major flooding was prevented in earthquake-affected areas by cleaning of canals in Port-au-Prince. More than 70 engineers and 16,000 masons were trained on paracyclonic construction.

KYRGYZ REPUBLIC

From 2013–18, 506,089 hectares of land were provided



ETHIOPIA

From 2017–18, 762 hectares of land were reforested, benefiting **15,240** people.

with irrigation and drainage services, benefiting 2.8 million people.

LAO PEOPLE'S DEMOCRATIC REPUBLIC

The conservation of nationally

protected areas and enforcement of wildlife laws were strengthened. From 2016–18, Lao PDR's score on Protected Area Management Effectiveness Tracking Tool (METT) increased to 5.8. During the same period, 12 wildlife trafficking cases involving CITES1



LIBERIA

From 2012–18, **5,843** hectares of smallholder tree crop farms were rehabilitated or planted.

(Convention on International Trade in Endangered Species of Wild Fauna and Flora) species were referred to national and/or provincial public prosecutors.

HONDURAS

From 2013-18, 214,893 people benefited from the strengthened capacity for disaster risk management at the municipal and national level, including training in drafting disaster management plans for 550 municipal staff. More than 90% percent of the beneficiaries were satisfied with the national government's preparation for future disasters.

KOSOVO

From 2014-18, Kosovo reduced 1,043 tons of fossil fuel used for heating public buildings and saved 264.8 MWh of energy consumption. During the same time, 7,472 people benefited through energy efficiency and renewable energy investments, which prevented 4,699 metric tons CO₂ from entering atmosphere.

LESOTHO

From 2012–18, 74,224 smallholder farming households benefited through diversification and commercialization of horticulture and animal husbandry. 39,369 days of training were provided under a competitive grants program. 89% of the targeted beneficiaries satisfied with the improved performance of agricultural service providers in 2018, up from 15% in 2012.

LIBERIA

From 2012–18, 5,843 hectares of smallholder tree crop farms were rehabilitated or planted: new planting accounted for 530 hectares, 1,214 hectares were replanted, and 4,189 hectares were rehabilitated. Access to technologies and markets were enhanced and a long-term development program for the tree crops sector was created.

MADAGASCAR

From 2015-18, 791 hectares of land was re/afforested through productive safety net activities.

From 2015–18, 208,753 people restored their agricultural livelihoods sustainably after the 2015 floods. 74 primary schools were reconstructed or restored, five health facilities were rehabilitated, and 18 kilometers of roads were reconstructed to improved standards for protection against floods.

From 2016–18, 5.3 million people living in communities that were affected by drought were provided with improved access to food, and 87,750 households received support to restore their livelihoods. During the same period, 7,551 people were provided with improved irrigation schemes and 39,000 cattle were vaccinated.

MALI

From 2013–18, 73,736 people in rural areas received access to electricity through renewable energy sources, which prevented 2,008 tons of greenhouse gas from entering atmosphere.

From 2013–18, 1,820 households were provided with information on climate hazards and adaptation options.

An agriculture competitiveness project increased the output volume of processed mango from 600 tons/year in 2016 to 15,280 tons/year in 2018/19. The volume of processed feed was increased from 147,565 tons/year in 2016 to 350,000 tons/year in 2018.

MAURITANIA

From 2016–18, USD 49.2 million in investments were generated from private investors to promote sustainable management of fisheries. Fresh fish exports had risen to 7,086 tons as of early 2019, up from 936 tons in 2016.

MOLDOVA

The adoption of EU catalogs for seeds, fertilizers, and plant protection products allowed for better quality inputs, reduction in costs, and resulted in more competitive products.

MONGOLIA

From 2013–17, 13,684 people benefited from a rural livelihood and food security program, of



MONGOLIA

60-70% of nomadic herders have electricity through portable and affordable solar home systems.

whom 44% were women. The average household income increased by 74% from livestock and 88% from horticulture products.

MOZAMBIQUE

From 2014–18, 1,728 jobs were

created in conservation tourism benefiting 68,875 people, of whom 34% were women. During the same period, two million hectares of land were brought under biodiversity protection, and USD 4.5 million in income derived from tourism was returned to communities. Law



PAKISTAN

From 2015–18, **840,931** people benefited from restored flood embankments.

enforcement patrols in selected conservation areas were increased from 5,523 in 2014 to 11,642 in 2018.

From 2015–18, 1.1 million people benefited from the restoration of critical infrastructure in a disaster-affected province. 11,700 children were provided with improved school infrastructure; 21,000 people were protected by 10.8 kilometers of rehabilitated dikes; 519,138 people were provided with food aid; and 146,248 people were provided with nutrition supplies.

From 2013–18, the accuracy of flood forecasts in the Zambezi and Limpopo river basins was increased by 65%, along with a 60% increase in the accuracy of temperature forecasts. 29 real-time hydrological monitoring stations were operating in 2018 increased, up from 8 in 2013. 60% of farmers were receiving daily weather forecasts and early warnings in 2018.

From 2012–18, 606,331 people benefited from enhanced municipal capacity for sustainable urban infrastructure and resilience to climate-

related risks. 284,100 people benefited from rehabilitation of a stormwater drainage system.

From 2012–18, 4.8 million people benefited from reduced flooding or erosion through the sustainable land management of 2,674 hectares in Beira and Maputo. During the same period, 287,100 people benefited from flood management interventions, while 70% of dikes and levees were rehabilitated to withstand 50-year flooding of the Limpopo river.

MYANMAR

From 2013–18, 130 MW of conventional thermal energy generation capacity was added to the national grid. In 2015, the National Electrification Plan, implemented through an IDA-supported national electrification project, had strengthened the institutional capacity of relevant agencies. In 2018, a newly completed combined cycle gas turbine power plant reduced CO₂ emissions per output generated by 400 gCO₂eq/kWh.

From 2015–18, 1.1 million

people were provided with electricity through the household connection, 22,924 people through renewable off-grid or mini-hydro sources, and 1.1 million people through hybrid solar mini-grid. During the same period, 14,280 community electricity connections were made. Grid connections accounted for 122 and off-grid or mini-grid accounted for 7,931.

From 2015–18, 25,133 public lighting structures were installed. 22,430 connections were through off-grid or mini-grid and 2,703 through grid network. During the same period, 74.7 kilometers of distribution lines were constructed or rehabilitated. 10,150 transformers were installed.

From 2014–18, 22,252 people benefited through increased crop yields and cropping intensity in selected existing irrigation site in Bago East, Nay Pyi Taw, Mandalay, and Sagaing regions. During the same period, 5,808 hectares were provided with irrigation and drainage services and 3,900 hectares of irrigable area rehabilitated.

NEPAL

From 2012–17, 85,106 farmers benefited from 30 new crop and livestock technologies and 6,580 field trials were conducted before implementation. 46,681 farmers increased their productivity using these new technologies.

From 2014–18, 1 GWh of off-grid biogas-based electricity was generated and 124 off-grid generation plants were created and operated. 473 proposals for construction of large biogas were submitted for investment.

From 2013–18, the Department of Hydrology and Meteorology increased its financial sustainability to 69%, up from 40%. An information management system was in place to stream and archive agriculture relevant hydromet and agromet data. During the same period, 38 hydrological stations were installed, up from 10 in 2013.

NIGER

From 2013–18, 1.1 million people benefited from flood protection

and sustainable land and water management activities increasing their resilience against natural hazards. 12,755 hectares of watershed area and 8,364 hectares of degraded land were protected or restored to reduce flood risks.

In 2018/19, 49.6% of farmers were receiving agricultural information through community rural radios and 33.4% of farmers were using climate information for their production.

From 2016–18/19, 15 communes developed integrated climate-smart investment plans, 58 field schools for farmers were created, and 8,390 hectares of land were put under sustainable land management practices.

NIGERIA

3,102 hectares of land were improved with irrigation and drainage services, benefiting 123,560 people in northern Nigeria in 2018. 186 staff were trained on dam safety and dam management, and 3,644 people adopted improved agriculture technology.

374,206 children ages 6 to 59 months received a dose of vitamin A in 2013, a 2,000 percent increase since 2011.

47,287 children under 12 months in South Sudan received the DPT3 vaccination to protect against diphtheria, pertussis and tetanus in 2013, up from 16,986 in 2011.

PAKISTAN

From 2016–18, 1.2 million people benefited from flood and drought mitigation activities in Sindh province, of whom 50% were women.

From 2015–18, 840,931 people benefited from restored flood embankments, of whom 425,527 were women. During the same period, 150 kilometers of embankments were rehabilitated or constructed.

In 2018, 986,033 people at risk for disasters and climate vulnerability received early warning notifications through mobile short messaging service, up from 50,000 in 2015.

PAPUA NEW GUINEA

From 2010–18, 67,340 smallholder cocoa and coffee farmers improved their livelihoods through a project to help improve productivity, of whom 24,852 were women.

From 2011–18, cocoa yield (kilograms/hectare) among beneficiaries increased to 728 metric tons from 169 metric tons, while coffee yield among beneficiaries increased to 566 metric tons from 382 metric tons. During the same period, 18,321 hectares of coffee and 3,746 hectares of cocoa were applying improved management practices.

RWANDA

From 2016–18, 16,486 people in urban areas were provided with access to all-season roads, and 1,067 hectares of land area were provided with drainage services benefiting 28,720 people.

From 2009–18, 1.3 million people were provided with new or improved electricity service, 100% of the customers were using energy efficient light bulbs.

Productivity in targeted irrigated hillside area increased to USD 5,639 per hectare in 2018, up from USD 492 in 2009. During the same period, the productivity of targeted non-irrigated hillside increased to USD 3,471 per hectare, up from USD 469 in 2009.

SENEGAL

From 2009–18, 3,200 women were trained in sustainable charcoal production techniques, which increased their revenue and improved their family's living conditions. During the same period, the project distributed 306,253 improved stoves benefiting mostly women.

From 2012–18, 144,000 people benefited from reduced flood risks in the peri-urban areas of Dakar. During the same period, 744 hectares of land were protected against recurrent floods through drainage works.

From 2012–18, 83,296 people were consulted through community engagement on an urban flood risk reduction and adaptation to climate change project.

From 2016–18, 531 people were trained in flood risk management, urban climate change resilience, and urban planning.

SOLOMON ISLANDS

From 2015–18, 53,504 people benefited through improved quality of rural infrastructure or services, including from disaster recovery. During the same period, 104 community infrastructure sub-projects were completed, and 11,581 days of agriculture training was provided.

SOUTH SUDAN

From 2017–18, 7,803 tons of food and 465 tons of seeds and planting materials were made available to the beneficiaries of a safety net program. 420,943 animals were vaccinated against common diseases, and 31,386 farm tools were distributed to eligible beneficiaries.

ST. LUCIA

From 2014–18, 10,000 people benefited from the construction of a new Dennery infant school

under a disaster vulnerability reduction project. The previous building was severely affected by Tropical Storm Debbi and Hurricane Tomas in 2013. The National Emergency Management Organization (NEMO) and National Skill Development Centre were rehabilitated to reduce vulnerability to climate-related events.

UGANDA

2,477 hectares of land were brought under improved water resources management in 2018, up from 1,500 in 2017.

VANUATU

From 2014–18, 30,198 people living in remote areas were provided with new or improved electricity service through off-grid or mini-grid renewable sources; 6,034 households were connected generating 75.5 kW of energy; and 338 community electricity connections were installed, generating 3.9 kW.

PAPUA NEW GUINEA

From 2011–18, cocoa yield (kg/hectare) increased to **728** metric tons from 169 metric tons, while coffee yield increased to **566** metric tons from 382 metric tons.



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