



Climate Change



Satellite image shows monsoon floods inundating Eastern India.

Photo: NASA

FAST FACTS

Overtaking China to become the most populated country on earth, India's population is projected to rise from 1.1 billion to 1.6 billion by 2050.

In 2008, an estimated 826 million Indians were living on less than US\$2 a day.

About 70 percent of Indians live in rural areas and account for 75 percent of the poor.

12 percent of India is flood prone.

Every year the monsoon kills up to 3,000 persons and can affect up to 30 million people.

INDIA'S VULNERABILITIES TO CLIMATE CHANGE

India is particularly vulnerable to climate change due to its geography, population density, and high levels of poverty. The effects of global warming, including an increase in the severity of monsoons, rising sea levels due to melting glaciers, increased frequency and intensity of natural disasters, will most profoundly affect the poor who often rely on climate sensitive livelihoods such as agriculture. Already living on the edge, the ill effects of global warming will exacerbate the plight of these populations that already lack access to adequate health care, shelter, nutrition, sanitation, and energy resources.

Through innovations in clean and renewable energy, agriculture, disaster risk reduction, and better environmental impact analysis, USAID is working with Indian partners to reduce the negative impacts of climate change while achieving development goals.

KEY ONGOING PROGRAMS

Promoting Clean and Renewable Energy

The quest to improve power supply and efficiency, introduce new energy efficient technologies, and advance markets for renewable energy is the core of the USAID/India clean energy program priorities. Success in mitigating greenhouse gas (GHG) emissions through technical assistance and capacity building in India will set the pace and direction for international efforts that have a global impact.

India faces an enormous challenge in sustaining growth while addressing global warming. Strategies to lower GHGs by diversifying into cleaner sources of power are constrained by policy, regulatory, and market barriers. Poor quality coal, low levels of power plant efficiency, and high losses in electricity distribution combine to make the power sector highly carbon intensive. USAID is working with Indian partners to increase viability and efficiency in the power sector, conserve resources, and promote clean coal technologies and renewable energy. USAID focuses on creating demonstrable pilot projects to catalyze change and training for future leaders in the clean energy sector.



USAID works to mitigate the damage caused by yearly floods in India

Photo: USAID

FAST FACTS

India is the world's fourth largest emitter of GHGs.

Two-thirds of India's electricity is produced with high-ash coal, generating global and local air pollution.

Over 400 million people in India have no access to electricity.

One-third of generated electricity is lost in the distribution grid.

One of the largest grain producers, India feeds 17 percent of the world on only three percent of its arable land.

CONTACT INFORMATION

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Agriculture

Declining agricultural productivity in the face of climate change and competition for limited water resources in India could have far reaching consequences. With nearly 70 percent of India's population living in rural areas and around 60 percent of the labor force engaged in agriculture, sustaining increases in agricultural productivity and efficient use of land, water, and energy resources will have a large impact on the livelihoods of hundreds of millions of people. Indian farmers face a difficult task of meeting the food needs of a growing population while coping with decreased areas of arable land, increasingly scarce water supplies, and greater intensity and frequency of extreme weather events. New agricultural technologies and practices can help develop more adaptable crops that produce significantly higher yields while helping to mitigate food shortages and volatile pricing.

USAID efforts focus on the development and dissemination of productivity enhancing technologies and innovations, including conservation agriculture, biotechnology, and supporting research on new crop varieties, including wheat resistant to stem rust and drought and salinity tolerant rice and wheat.

Disaster Risk Reduction

India consistently ranks among the top five countries in the world in lives lost, people affected, and economic impact of disasters. The most frequent disasters are hydro-meteorological in nature. Major rivers flood every year. Drought is a recurring phenomenon. Cyclones threaten 5,000 miles of coastline. The greater frequency and intensity of extreme weather events due to climate change indicate an even greater need for disaster risk reduction to save lives and reduce economic impacts.

USAID is working to build capacity in India for enhanced disaster preparedness and response while linking disaster risk reduction to adaptation to climate change. U.S. disaster experts share expertise with their Indian counterparts about what is needed for a successful, integrated disaster management system, including state of the art tools for better forecasting and early warning for extreme weather events.