

PEER Program Overview: History, Purpose, & Future

Annica Wayman, Research Division Chief March 22, 2015 | Lima, Peru



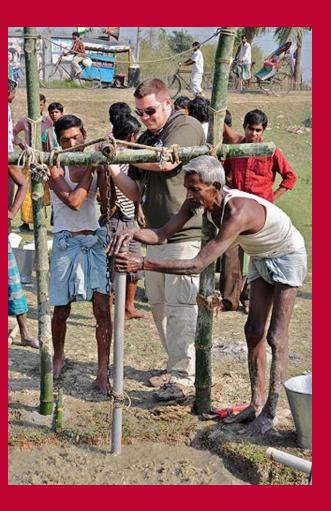
USAID LEGACY

USAID's legacy of developing and implementing innovative breakthroughs—from the seeds of the green revolution, to microfinance, to oral rehydration therapy—has saved lives, created economic opportunity, and advanced human development.

"To support an open source development approach, our Agency must serve as a platform that connects the world's biggest development challenges to development problem solvers — all around the world. We recognize that talent is everywhere, but opportunity is not."

USAID Administrator Dr. Rajiv Shah, Aspen Institute, August 2012

NEED FOR EQUITABLE PARTNERSHIPS



USAID
Funding
Provided
to NSF
Partner in



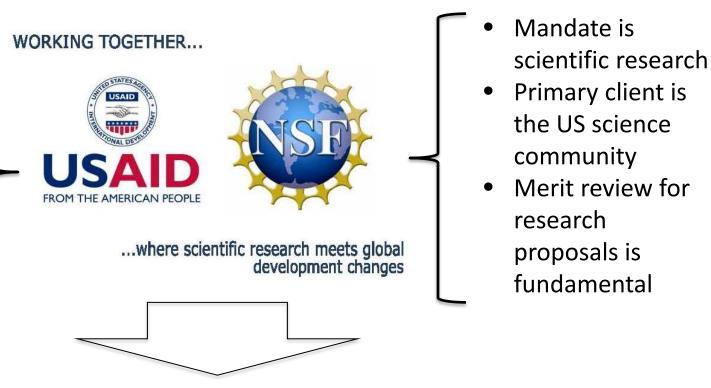
USAID-Focus country



Geohazard Assessment in Bangladesh
Collaboration between Dhaka University & Columbia University

CREATION OF PEER

- Mandate is foreign assistance
- Primary clients are developing countries
- Bureaus, regions, and missions need buy-in



Partnerships for Enhanced Engagement in Research (PEER)

awards grants to developing country scientists conducting development-oriented research in collaboration with USG-funded scientists

Funded by USAID

Implemented by:











Partnerships for Enhanced Engagement in Research (PEER)

Implemented by:









BENEFITS OF PEER

For United States

- Increase global scope & foster international collaborations
- Bolster research effectiveness
- Access local knowledge
- Access resources
 - Facilities
 - Unique ecosystems
 - Geological formations
 - Hydrological regimes

For Developing Country

- Build capacity
- Include international research community
- Develop science diplomacy
- Realize development objectives
 - Inform policy & practices
 - Provide data for evidencebased programs
 - Incorporate new technologies

PEER BY THE NUMBERS



OVER 1000

applications to PEER over 3 years



160 PROJECTS 44 COUNTRIES

PEER projects supported with \$28MM USAID funds



244 MILLION

NSF and NIH resources leveraged by PEER



33%

Female-led PEER projects



OVER 2500

students supported by PEER grants



5.3 MILLION

grants obtained by PEER awardees

PEER BY THE STORIES

Evidence for decision making



Genetic assessment of commercial fish species

Indonesia

Primary: Universitas Udayana, Indonesian Biodiversity Research

Center--IBRC

Partner: Old Dominion University

Development of technology or practice



Assistive technology for deaf and hard of hearing

Morocco

Primary: Ecole National de l'Industrie Minerale (*GCD winner*) **Partner**: Institute for Disabilities

Research and Training, Inc.

Implementation of a solution



Optimization of Seasonal Malaria Chemoprevention (SMC)

Mali

Primary: University of Bamako **Partner**: National Institute of Allergy and Infectious Disease

(NIAID)

Building a network of local scientists and engineers

Strengthening host country research capacity

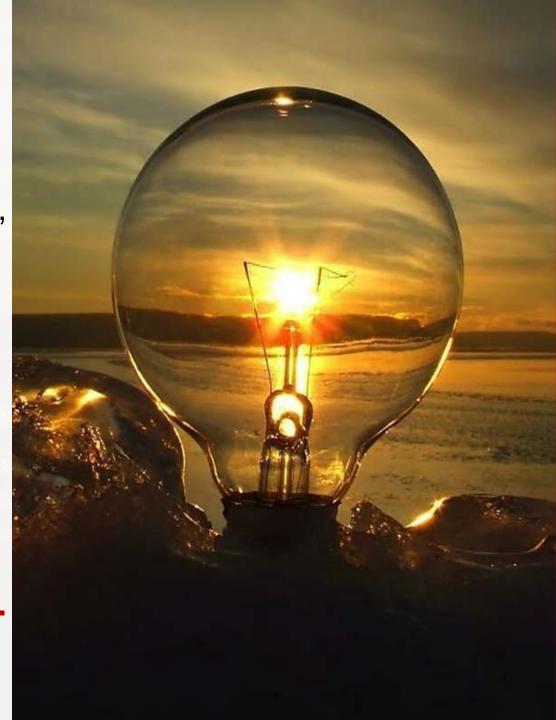
Leveraging major resources of USG science agencies

THE LAB IS THE NEXT EVOLUTION OF USAID

Using the power of science, technology, innovation and partnerships, the Lab supports development goals, with a two-part Mission:

Produce breakthrough development innovations

Accelerate the transformation of the U.S. development enterprise



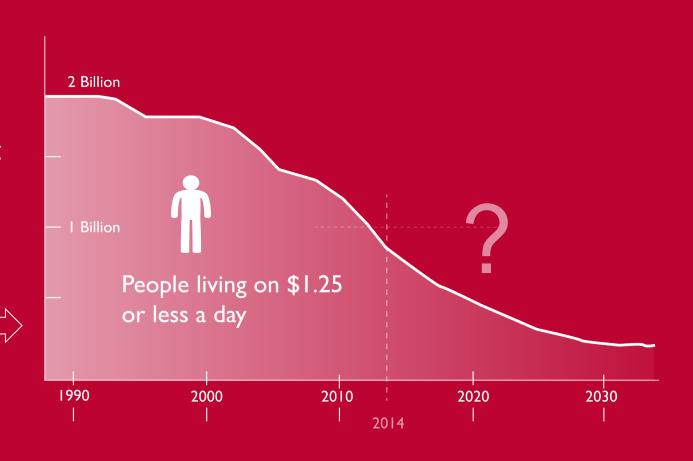
Selected STIP Programs and Capabilities

Six programs which embody key principles of a STIP approach to development:

Program	Summary
Grand Challenges for Development	Open innovation approach to crowdsourcing science & technology driven solutions to specific evidence-based development challenges
Development Innovation Ventures (DIV)	Global competition, rooted in venture capital investing approaches, to providing staged-financing to evidence-based development innovations
Higher Education Solutions Network (HESN)	Network of 7 "development labs" which harness the power of leading universities to apply science, technology and engineering approaches to development challenges
Partnerships for Enhanced Engagement in Research (PEER)	Providing support for researchers in the areas of food security, climate change, water, biodiversity, disaster mitigation, and renewable energy
Mobile Solutions	Tapping the power of mobile technology to advance and accelerate development
Global Partnerships / Global Development Alliance (GDA)	Building "shared value" partnerships with the private sector which advance market-based solutions to development challenges

POSSIBLE

Extreme poverty has been cut in half over the last 20 years



USAID Mission:

We partner to <u>end extreme poverty</u> and to promote resilient, democratic societies while advancing our security and prosperity.





PEER Science

Examples of Successful Proposals

Earthquake-generated landslide hazard in Lebanon

PI: Dr. Grace Abou-Jaoude, Lebanese American University US Partner: Dr. Joseph Wartman, University of Washington

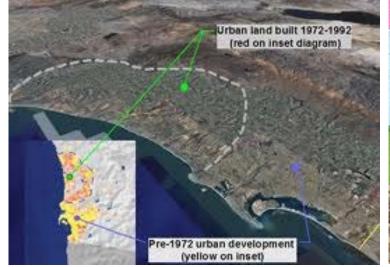


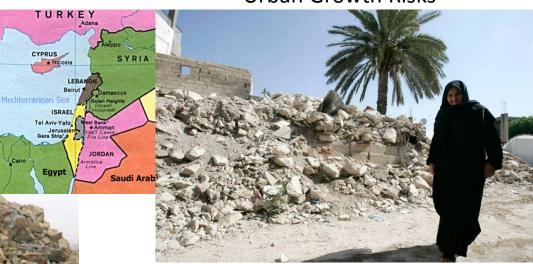


Los Angeles Earthquake Slide Risk

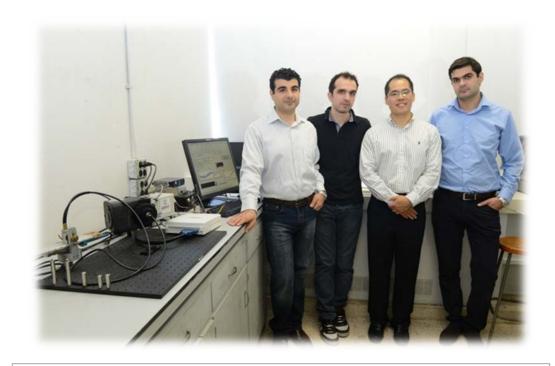
And Urbanization







What does success look like?



Detecting and treating pollutants in water

Dr. Antoine Ghauch

American University of Beirut, Lebanon

Partners: Richard Luthy at Stanford University, National Instruments

Technical Innovation

Research Capacity Patent Application Small Business

ACCELERATING PROGRESS

- Pratt Pouch: HIV antiretrovirals requiring no refrigeration
- Mero Gao Power: Solar powered microgrids
- bCPAP: Low cost device to deal with infant respiratory failure
- > Odon device: Assisted delivery device
- Sproxil: Text-based 911 service to identify counterfeit drugs
- Mobile financial services: Paying police and teachers through mobile phones





JOIN US

- Share: Help us identify the most critical challenges, and share knowledge on what is working, and why.
- Solve: Brainstorm, invent, and test game-changing solutions. The lab
 is a space where we come to succeed... Or stop and try again.
- Scale: How do we replicate success? Seek sustainable business models and partner to grow reach to hundreds of millions by 2030.

PARTNER: JOIN THE U.S. GLOBAL DEVELOPMENT LAB AND BECOME PART OF THE SOLUTION.