Open Source Development and New Opportunities for Humanitarian Technologists

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Open Source Development

- A new model for development that empowers more people everywhere to tackle global challenges

- "To support an open source development approach, our Agency must serve as a platform that connects world's biggest development challenges to development problems solvers – all around the world."

  - USAID Administrator Dr. Rajiv Shah

USAID Forward

- A large-scale reform agenda to strengthen the Agency by embracing new partnerships, investing in the catalytic role of innovation and demanding a relentless focus on results

- Main focuses:

1) Deliver results on a meaningful scale through a strengthened USAID

2) Promote sustainable development through high-impact partnerships

3) Identify and scale up innovative, breakthrough solutions to intractable development challenges

1) Deliver results on a meaningful scale through a strengthened USAID

As the Presidential Policy Directive on Global Development explained, the United States "cannot do all things, do them well, and do them everywhere." In order to maximize our impact with every development dollar, we have to pursue a more strategic, focused and results oriented approach. That means:

»» Designing country and sector development strategies and projects to better align U.S. Government resources with the priorities of our partner countries;

»» Evaluating projects and publicly reporting on the results so that we can learn what works and what does not;

»» Investing in our own staff by continuing to look for new ways to support our talent; and

»» Being more focused and selective about the countries and areas in which we work to strengthen the impact of our investments.

2) Promote sustainable development through high impact partnerships

In order to achieve long-term sustainable development, we have to support the institutions, private sector partners and civil society organizations that serve as engines of growth and progress for their own nations. We must develop the capabilities of our partners to direct their own development by:

»» Investing directly in partner governments and local organizations where the capacity exists, and strengthening it where there are gaps, so they can provide for their own citizens; and

»» Forging high-impact public-private partnerships with new and existing partners that leverage new resources and expertise to expand the reach and impact of our work.

3) Identify and scale up innovative, breakthrough solutions to intractable development challenges

For centuries, some of the greatest successes in development have come from extending the reach of science and technological breakthroughs to those who lacked access.

At USAID, we have a strong history of partnership with the scientific community that helped pioneer these innovations, from helping usher in the Green Revolution with higher-yielding wheat and rice seeds to helping scale up the use of oral rehydration therapy to save tens of millions of lives from diarrheal diseases.

Today, we're working to capture this legacy by:

»» Supporting the adoption of electronic payment and mobile money systems to dramatically expand opportunity with an eye towards greater gender equality and financial inclusion; and

»» Investing in new technologies and research to source and scale game-changing development solutions. >>>

USAID FROM THE AMERICAN PEOPLE

Use the transformative power of science and technology to deliver more effective, cost-efficient results in global development

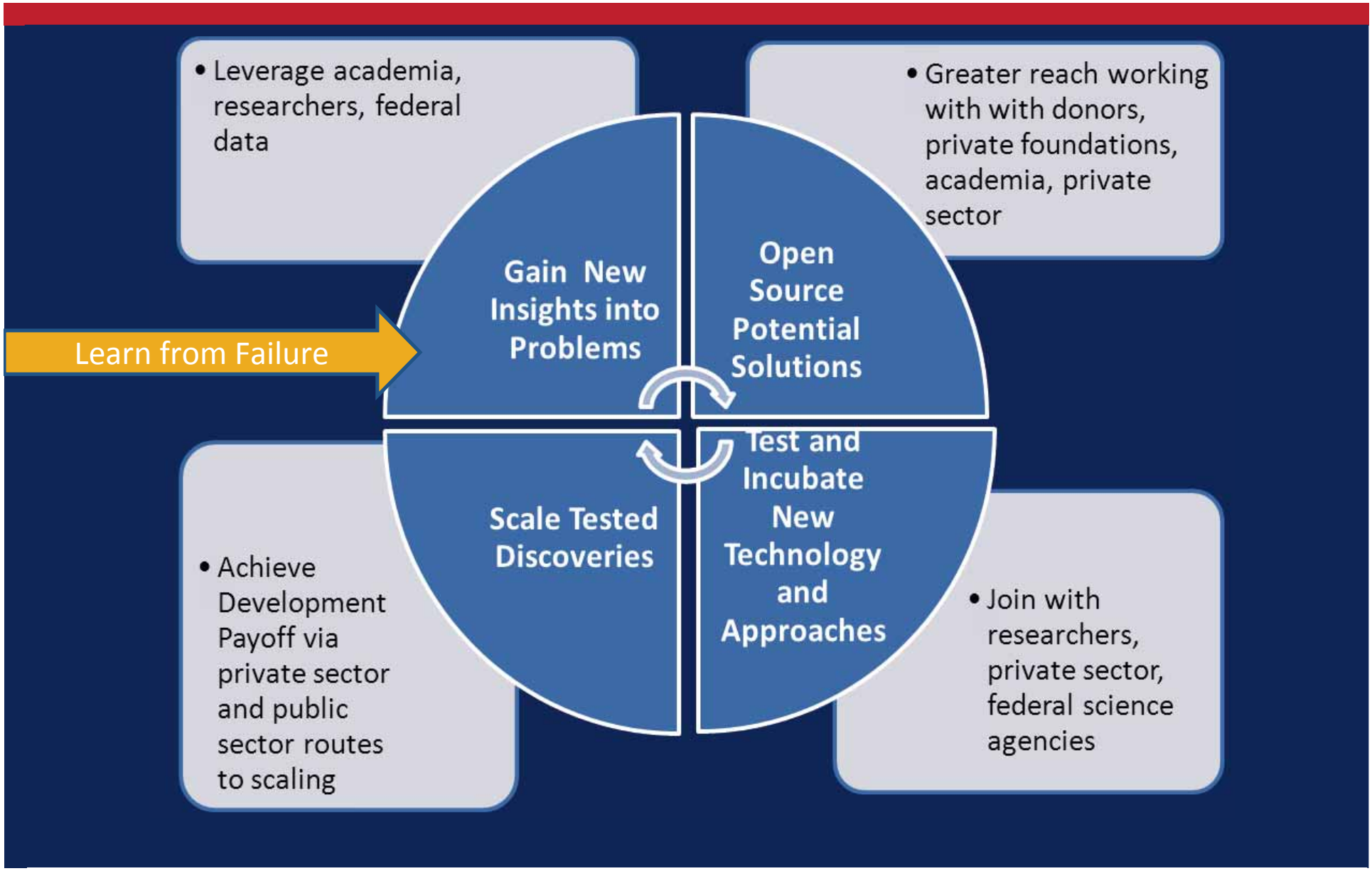
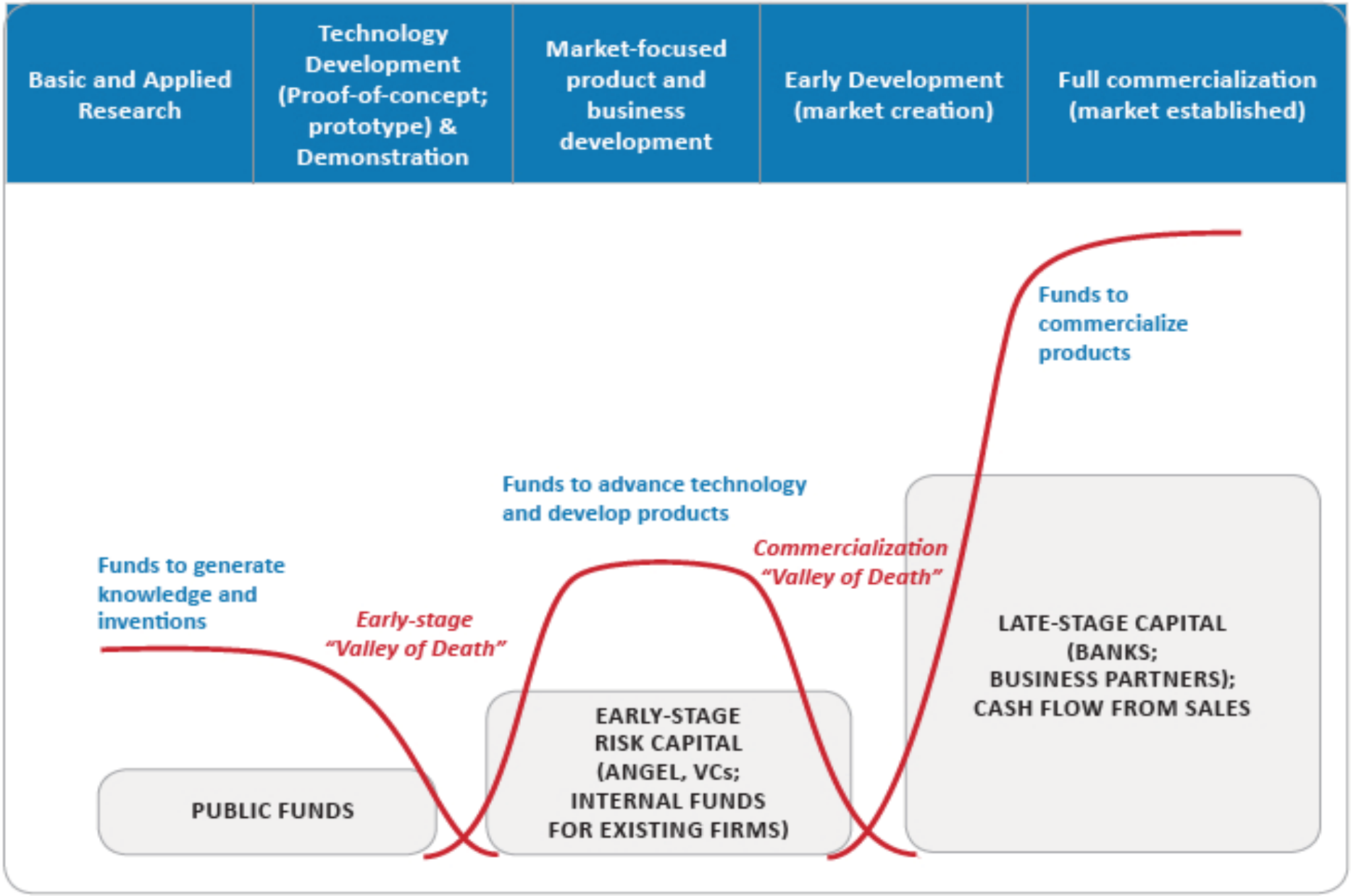


Figure 1.1: 'Valleys of death' in innovation stages



Source: Ambuj Sagar

Funding Humanitarian Technologies

- **Traditional International Development Funding**
  - Generally a slower process then private funds
  - Low tolerance for uncertainty and failures

- **Venture Capital Funding**
  - Desiring low overhead structure
  - Requiring high ROI
  - Desiring fast turn-over timeframe

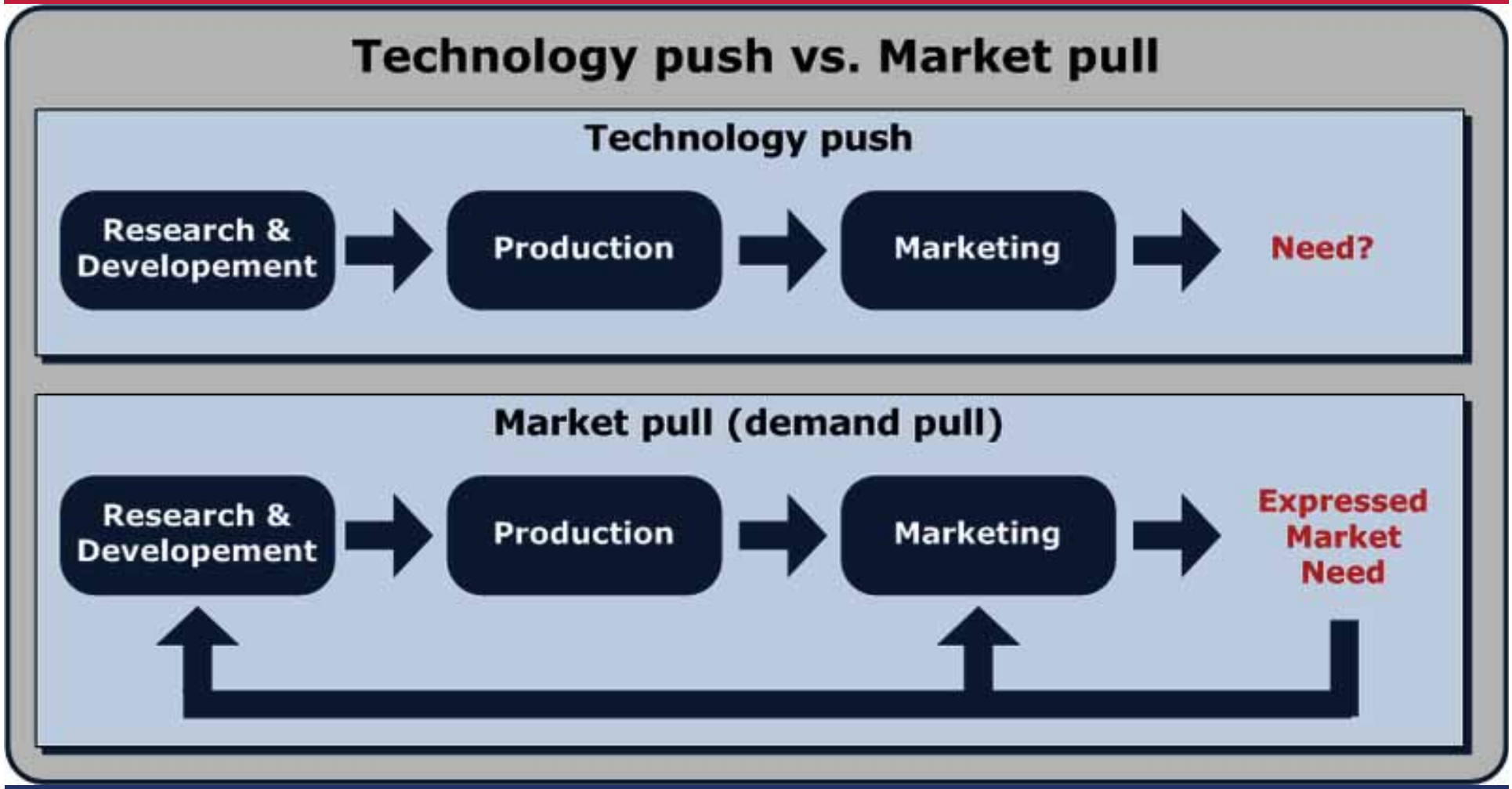
- **Incentive Prizes**
  - Challenge-Driven Open Innovation >>>

Challenge-Driven Open Innovation

- **Results-only financing.** Pay for success.
- **Investment leverage.** Funds invested by competitors typically exceeds what is spent on operating and awarding the prize.
- **Pathway agnostic.** Won't predict which team or approach is best; only desired outcome is specified.
- **Global talent pool.** Attract some of the best minds, increase the number and diversity of actors focused on the problem and help them build skills in the process.
- **Highly publicized.** Educate, inspire, and mobilize the public.
- **Market Stimulant.** Catalyze a market / address a market failure.

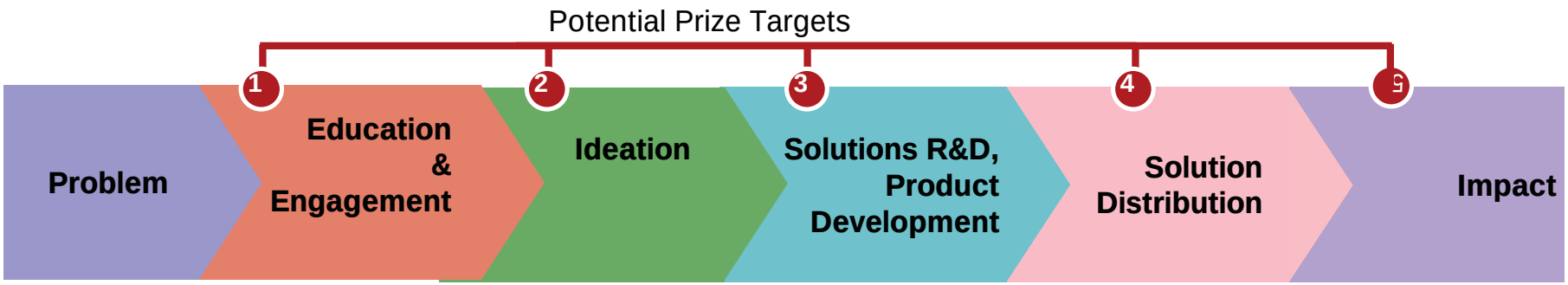
*Adapted from X-PRIZE: Innovation Prizes and Development (2011) and Source: OMB Guidance on the Use of Prizes to Promote Open Government, Executive Office of the (US) President, March 8, 2010. Capturing the Promise of Philanthropic Prizes

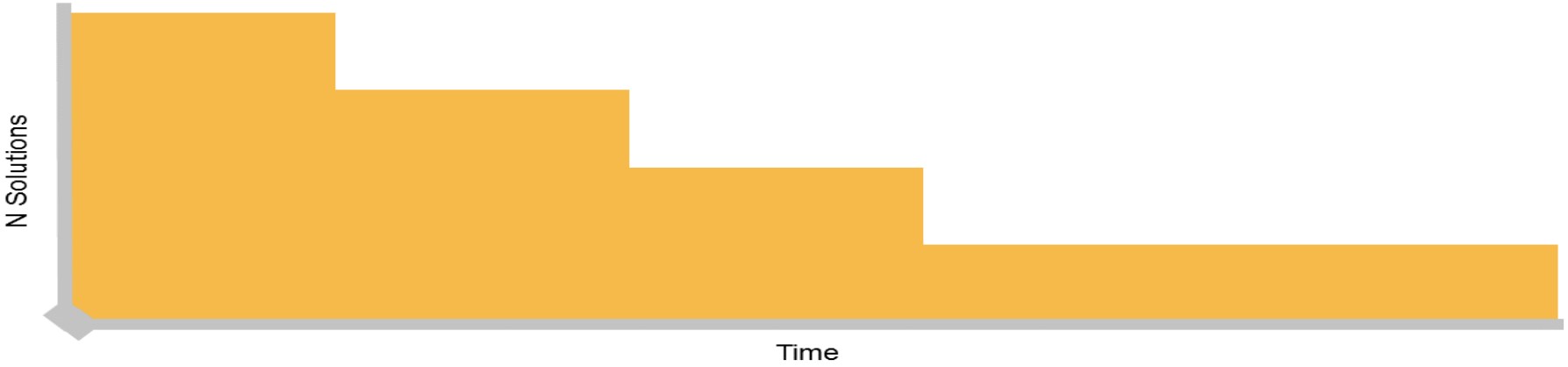
The Push-Pull Strategy



Martin, Michael J.C. (1994). Managing Innovation and Entrepreneurship in Technology-based Firms. Wiley-IEEE. p. 44. ISBN 0-471-57219-5 / Picture: Wikimedia Commons

Prizes & Challenges Continuum





Grand Challenge for Development
(GCD)

- **A problem statement not a solution**
- Removing critical barriers to development through Science and Technology
- Partners are engaged and committed
- Significant funds are committed but not sufficient
- Engage the globe in the solution quest

Solutions will:

✓ Be adoptable,

✓ Be sustainable, and

✓ Achieve scale

✓ Utilize 21st century Infrastructure, Science, and Technology

GCD Design Elements

Evidence Based & Solvable

Role for Science & Technology

Significant Financial Commitment

Multiple Programs, convening,
Experience sharing

Attributes

Design Elements

Leverage Partnerships

1. Founding 2. Other

-Risk reduction

-Models collaborative behavior

-Better outcomes

-Scale and sustain

Catalyze Global Action

-Open, inclusive

-Partners convene

-Influence & incentivize

-Efficient & cost effective

Network Communities

-Platform provision

-Capacity building

-Encourage virality

-Foster trust & collaboration

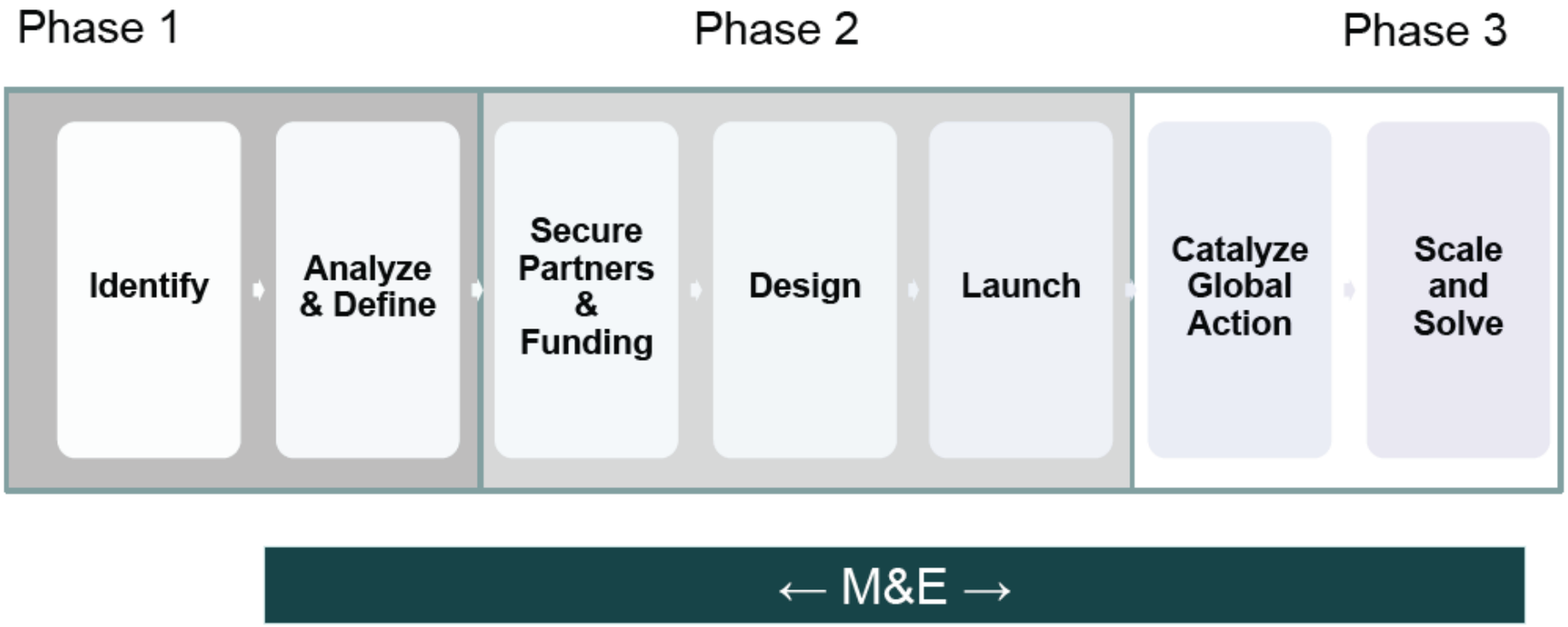
Scale and Solve

-Increase Access

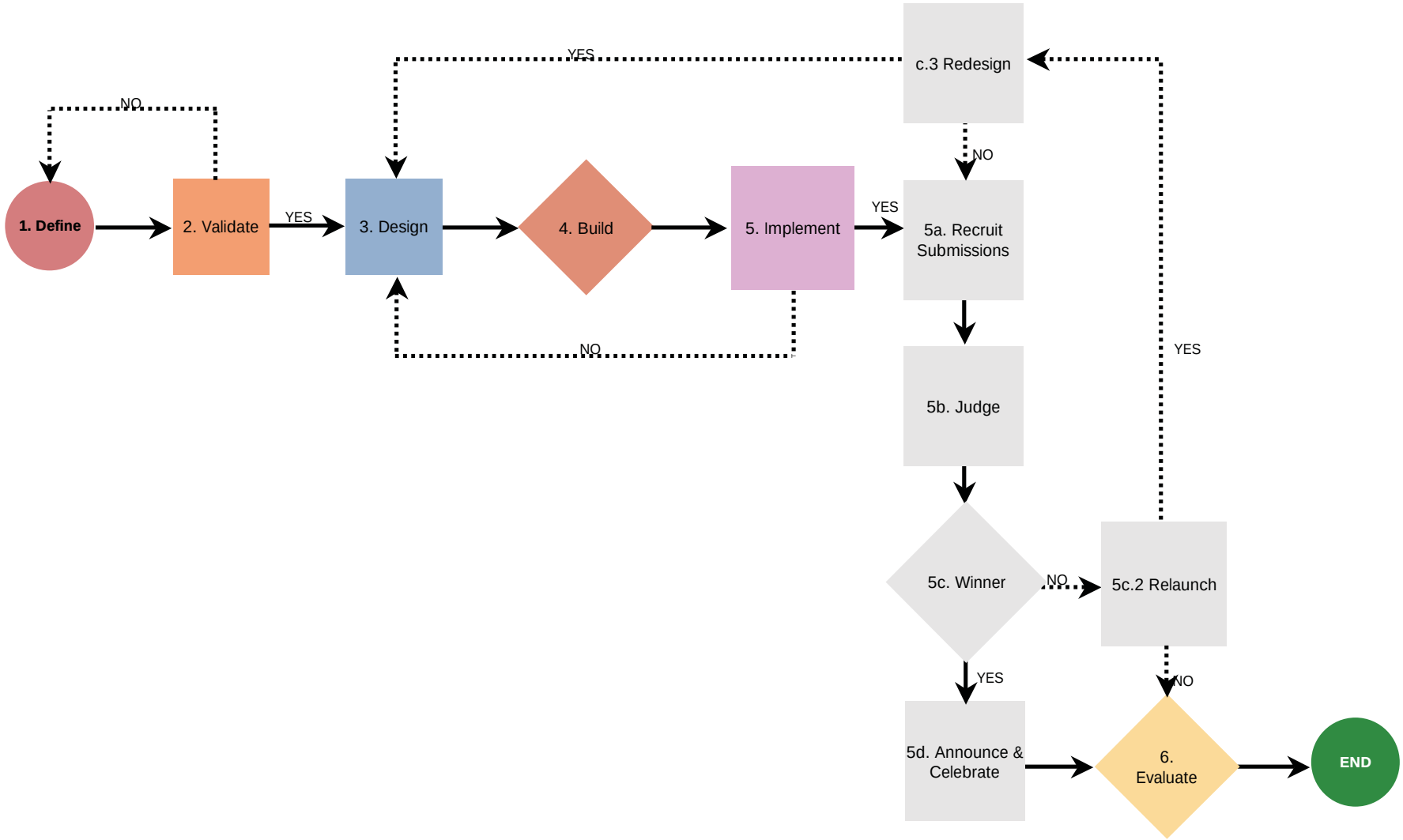
-Mass participation

-Viable BOP supply and demand

GCD Life Cycle



Prize-Challenge Road Map



Challenge-Driven Open Innovation
@USAID

- Grand Challenges for Development (http://www.usaid.gov/grandchallenges)

  - Securing Water for Food (SecuringWaterForFood.org)
  - Saving Lives at Birth (SavingLivesAtBirth.net)
  - All Children Reading (AllChildrenReading.org)
  - Powering Agriculture (PoweringAg.org)
  - Making All Voices Count (MakingAllVoicesCount.org)

  * Upwards of 25-50% of applications are coming out of the developing world

- Prizes & Challenges

  - Tech Challenge for Atrocity Prevention (TheTechChallenge.org)
  - Challenge Slavery - A Campus Challenge (ChallengeSlavery.org/)

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$50 Million over 5 years (~$10M from USAID)

- Afya Research Africa
- Aga Khan Foundation USA
- American Academy of Pediatrics
- Associazione Italiana Solidarietà tra i Popoli (AISPO)
- Board of Trustees of the Leland Stanford Junior University
- Case Western Reserve University
- Catholic Relief Services
- Containers 2 Clinics, Inc. (C2C)
- D-Rev: Design for the Other Ninety Percent
- Eastern Congo Initiative (A Project of New Venture Fund)
- Global Solutions for Infectious Diseases
- Gobee Group, LLC
- Hemacon GmbH
- Idaho State University
- Innovations for Poverty Action
- Institute for Healthcare Improvement
- Institute of Tropical Medicine - Antwerp
- International Centre for Diarrhoeal Disease Research, Bangladesh (ICDDR,B)
- Jhpiego Corporation
- London School of Hygiene and Tropical Medicine
- Lucerna, Inc.
- Mbarara University of Science and Technology
- Nanyang Technological University

USAID FROM THE AMERICAN PEOPLE | NORWEGIAN MINISTRY OF FOREIGN AFFAIRS | BILL & MELINDA GATES foundation | Grand Challenges Canada Grands Défis Canada | UKaid from the British people

USAID
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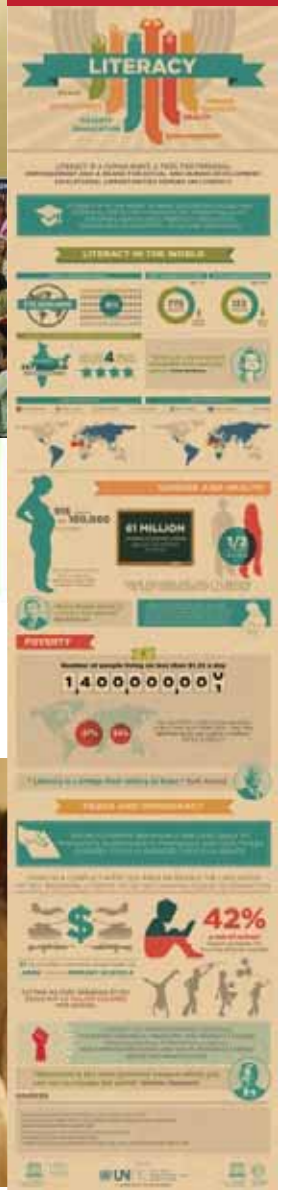
$21 Million over 3 years (~$11M from USAID)

ALL CHILDREN READING:
A GRAND CHALLENGE FOR DEVELOPMENT

USAID FROM THE AMERICAN PEOPLE World Vision Australian AID



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$27 Million over 4 years (~$10M from USAID)

13 Awards

- **5** Cold Storage Solutions
- **3** MicroGrid Solutions
- **2** Irrigation Solutions
- **3** Other/On-Farm Productivity

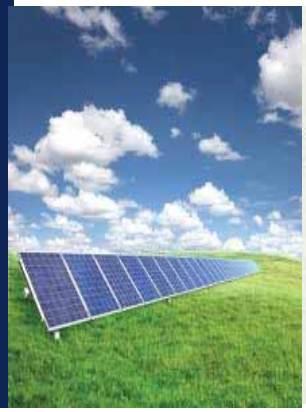
POWERING AGRICULTURE:
AN ENERGY GRAND CHALLENGE FOR DEVELOPMENT

USAID · SWEDEN · Duke Energy. · USDA · OPIC

337 TWEETS | 292 FOLLOWING | 269 FOLLOWERS | Follow

Powering Agriculture @PoweringAg 3h
Thanks 4 RT @gdarmsta! We are excited by amazing work done by Grand Challenges & very excited about latest challenge: @AllVoicesCount @USAID
Details

Powering Agriculture @PoweringAg 13 Dec
Here is an issue we believe is critical. ccafs.cgiar.org/bigfacts/food-...
@PoweringAg is about growing more food & ensuring more food arrives at tables.
Details



We created the Powering Agriculture Community to connect with innovators like you and to provide an interactive forum for you to collaborate.

Submit your ideas, vote and comment

You are critical to these efforts. We want to hear your thoughts. Join the discussion, encourage your friends, partners and colleagues, and be heard! Once you join, we'll keep you updated on new opportunities to participate.

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$50 Million over 4 years (~15M from USAID)

MAKING ALL VOICES COUNT:
A GRAND CHALLENGE FOR DEVELOPMENT

Getting ready for our launch in less than 2 hours! @OmidyarNetwork @SIDA @DFID_UK @USAID #MAVC #AllVoicesCount
All Voices Count @AllVoicesCount 12 days ago

Making All Voices Count: inspired by @opengovpart & helping democracies deliver to their citizens ow.ly/frVoj @allvoicescount #mavc
DFID @DFID_UK 13 days ago

Working on #opengov, anti-corruption & gov transparency? Check out our new grand challenge: @AllVoicesCount: makingallvoicescount.org #MAVC
USAID @USAID 12 days ago

Proud to be part of #MAVC - a $45M partnership w/ @DFID_UK @USAID & @SIDA to promote tech & #opengov bit.ly/SGqx2G @allvoicescount

$45 Million Open Government Challenge Stresses Mobile Tech

Public-private partnership looks to develop Web and mobile technologies for better governance in Africa and Asia.

By **Patience Wait** InformationWeek
December 07, 2012 01:19 PM

The U.S. Agency for International Development (USAID) has launched a competition to develop Web and mobile technologies that can be used to promote open government in sub-Saharan Africa and South Asia.

The competition, called Making All Voices Count, is the result of a public-private partnership among USAID, the Swedish government, the U.K.'s Department of International Development and Omidyar Network, a philanthropic investment firm established by eBay founder Pierre Omidyar and his wife.

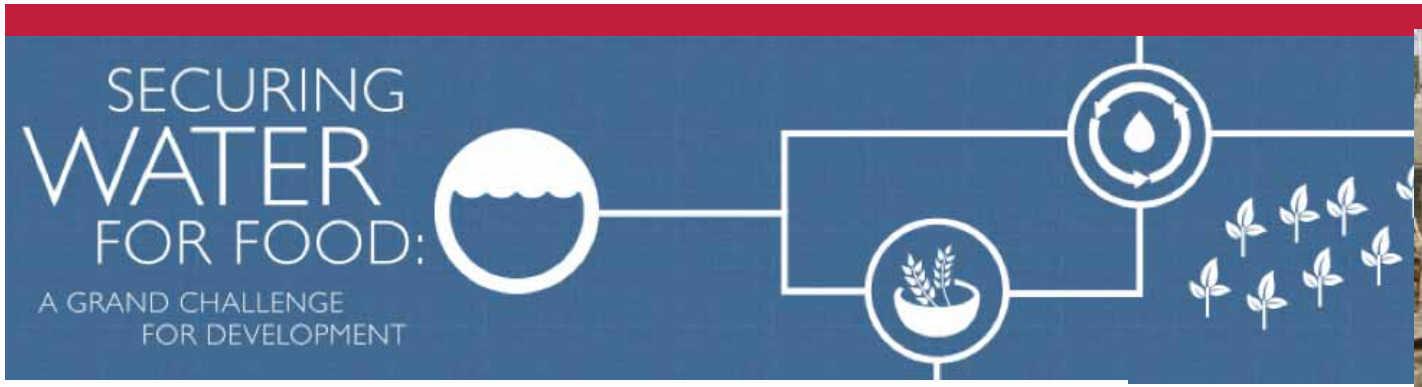
#ALLVOICESCOUNT
HashTracking.com Report

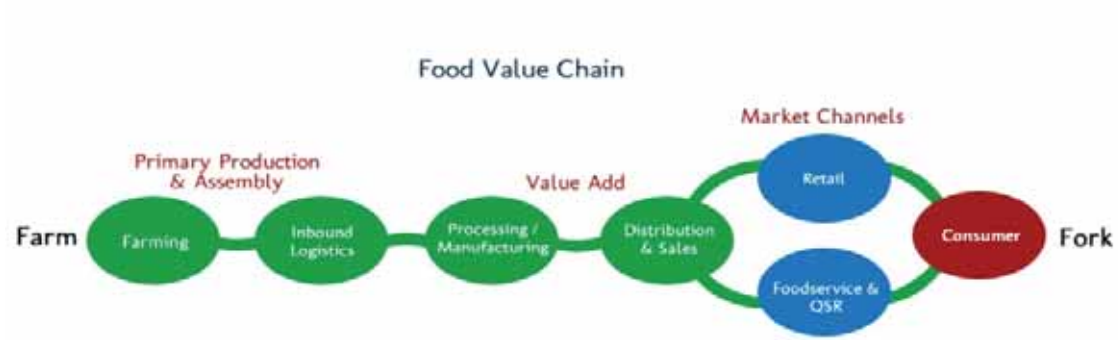
209 tweets generated *2,136,256* impressions, reaching an audience of *710,620* followers within the past 24 hours

BE HEARD.

SWEDEN UKaid USAID FROM THE AMERICAN PEOPLE OMIDYAR NETWORK

- Water reuse and efficiency
- Water capture and storage
- Salinity





- Water reuse and efficiency
- Water capture and storage
- Salinity

SECURING

What will we fund in the first round of the program?

We are looking to source, fund, and accelerate the development of scientific, technological, and business innovations that will enable us to secure water for food. We will fund innovators that exist in two "stages" of the innovation lifecycle:

- **Stage 1, Validation**: This targets innovations that have been verified in at least one market and now need to be tested and adapted to a different developing or emerging market and/or that need input from the industry or potential clients to confirm acceptance and technical viability.
- **Stage 2, Commercial Growth/Scaling**: These innovations need support for commercial growth. This may include efforts to adapt the innovations for larger scale production, market adoption, and distribution.

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FROM THE AMERICAN PEOPLE

THE

TECH CHALLENGE

FOR ATROCITY PREVENTION

Genocide. Mass rape. Ethnic cleansing. These and other mass atrocities threaten our security and offend our conscience. Here in the 21st century, we are now empowered by new technologies that can help prevent these crimes. It is our shared responsibility to act. **This Tech Challenge** will award prize money of up to **$10,000 to the problem-solvers** who develop innovative concept papers and prototypes that help us better respond to the following critical issues.

ENABLERS
CHALLENGE

CAPTURE
CHALLENGE

MODEL
CHALLENGE

COMMUNICATE
CHALLENGE

ALERT
CHALLENGE

HUMANITY UNITED

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CHALLENGESLAVERY

Home | Contest | Discussion | Learn | Partners | About | Community | Blog

Join the movement!

Email

I agree to the Community Guidelines

Create Account

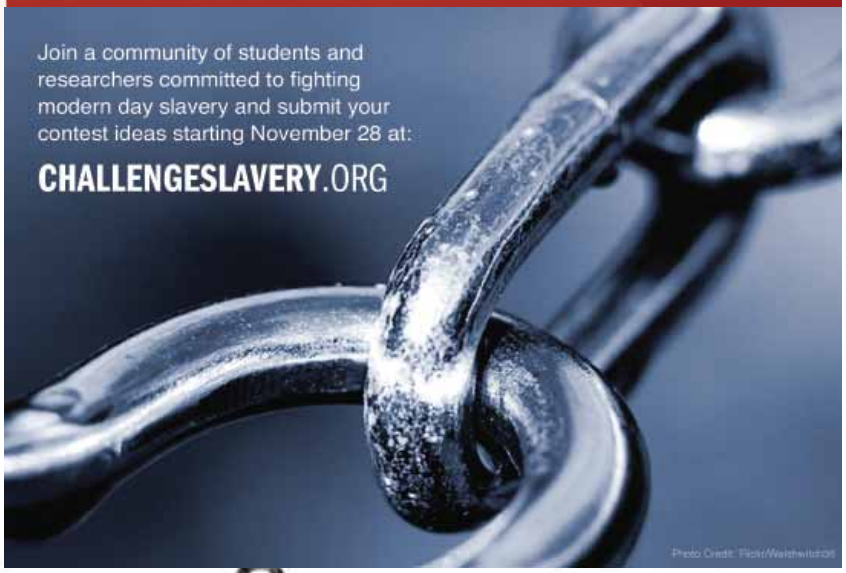
or

FACEBOOK LOGIN

WINNING IDEAS TO COMBAT MODERN DAY SLAVERY!

College and university students worldwide have submitted unique technology ideas to prevent trafficking and provide assistance to survivors.

Campus Challenge community members across the world have voted on their top choices and a panel of experts on trafficking in persons and technology have reviewed the finalist submissions. The **winners have now been selected!**



USAID FROM THE AMERICAN PEOPLE | MTV EXIT END EXPLOITATION AND TRAFFICKING | MADE IN A FREE WORLD Slavery Footprint | FREE THE SLAVES | NOT FOR SALE

Other Programs that Support Humanitarian Technologies @USAID

- LAUNCH - An Innovation / Acceleration Platform

  (launch.org)

- High Education Solutions Network

  (http://www.usaid.gov/hesn)

- The Catalog - USAID's Catalog of Development Technologies

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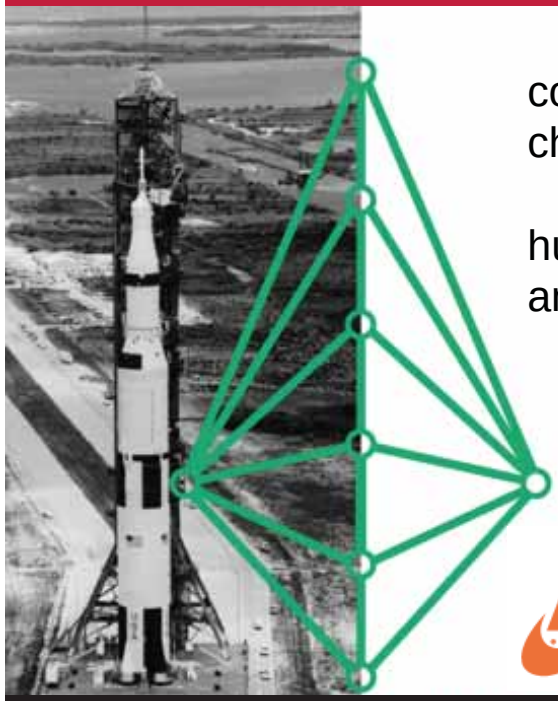
LAUNCH

Collective Genius for a Better World

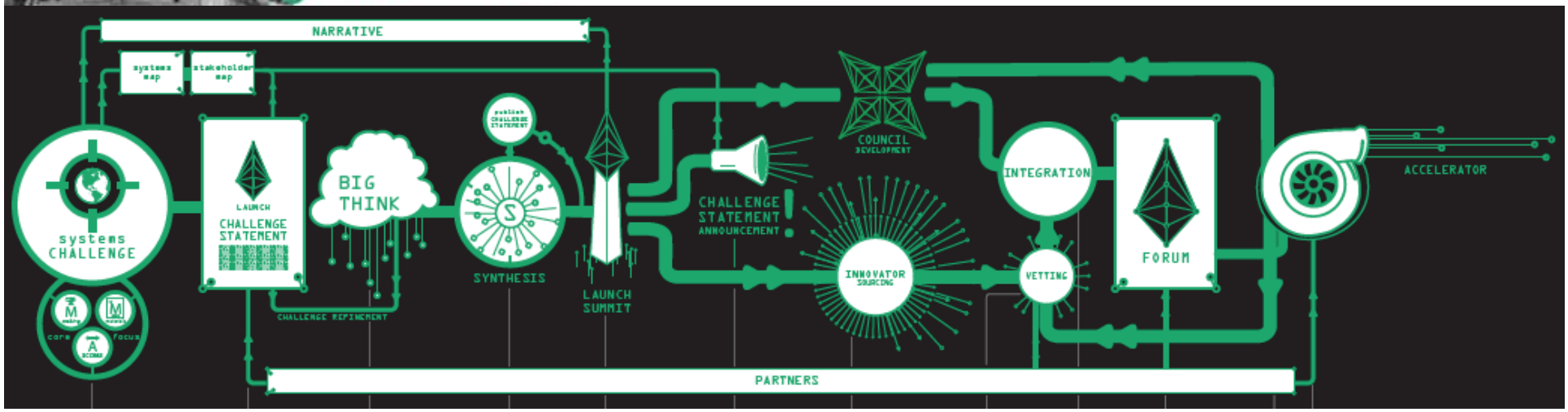


A global initiative to identify and support the innovative work poised to contribute to a sustainable future and accelerate solutions to meet urgent challenges facing our society.

Mission: To maximize human potential by transforming our existing human systems into new ones that are more sustainable, accessible, and empowering.

NASA, USAID, Nike, and Department of State leveraged $40M in private capital to support emerging innovators in:

Health | Water | Energy | Fabric & Materials System



Higher Education Solutions Network

Creating new relationships with the academic community to leverage the resources, intellectual power and energy of universities and other institutions to address key global development problems:

Institution	Development Lab
Duke University	Social Entrepreneurship Accelerator at Duke (SEAD)
Makerere University	ResilientAfrica
Massachusetts Institute of Technology	The International Development Innovation Network (IDIN) and The Comprehensive Initiative on Technology Evaluation (CITE)
Michigan State University	The Global Center for Food Systems Innovation (GCFSI)
The College of William & Mary	AidData Center for Development Policy
Texas A&M University	Conflict & Development Center
University of California, Berkeley	Development Impact Lab (DIL)

Beyond the 7 lead institutions, the network spans over 75 partners in academia, the private sector, NGOs, foundations and government partners

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USAID
Higher Education Solutions Network

Higher Education Solutions Network

As part of our new Higher Education Solutions Network, our seven lead university partners have formed formal knowledge-sharing linkages with schools and institutions around the world engaging in complimentary research. In doing so, USAID is able to draw upon findings from a global academic and think tank system and apply the best findings to our work—wherever they may be.

Berkeley
UNIVERSITY OF CALIFORNIA

D-Lab
Development through Dialogue, Design & Dissemination

MIT

WILLIAM & MARY

MAKERERE UNIVERSITY

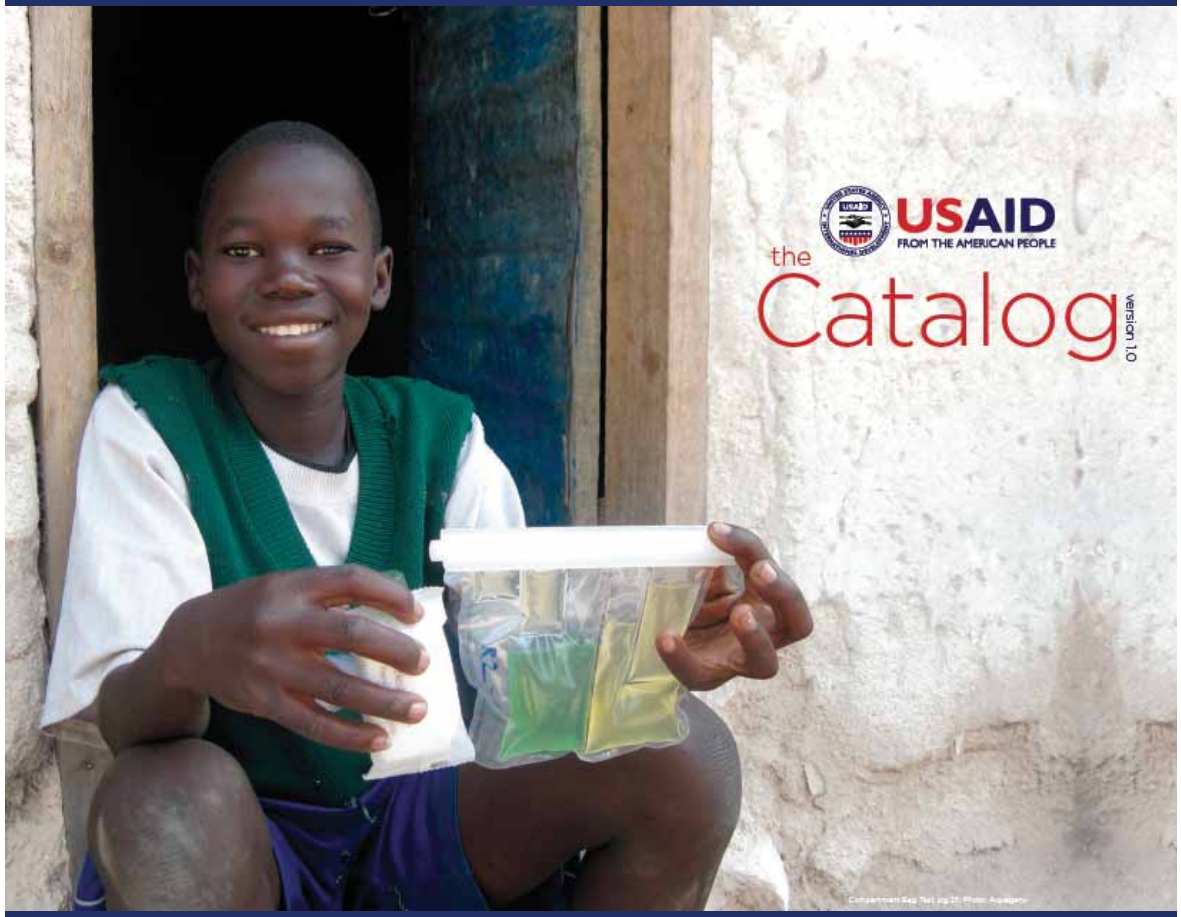
TEXAS A&M UNIVERSITY

Duke | SOCIAL ENTREPRENEURSHIP ACCELERATOR AT DUKE

MICHIGAN STATE UNIVERSITY

The Catalog: Version 1.0
@USAID

USAID's Catalog of Development Technologies



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http://www.usaid.gov/sites/default/files/documents/15396/USAID_The_Catalog_Version_1.0.pdf

AGRICULTURE

The Dutyion Root Hydration System


Photo: Design Technology & Innovation

The Dutyion Root Hydration System (dRHS™) is a subsurface irrigation technology that works by allowing water vapor to permeate through the walls of the pipe. It is installed at root depth and made from a durable material called Dutyion.™ The water supplied to the pipes may be fresh or polluted, i.e. seawater, since only water vapor can escape through the walls of the pipe. The vapor that reaches the roots is fresh water. Gravity is all that is required, since the driving force is the vapor gradient, and the vapor release is directly correlated to level of dryness.

- Makes valuable use of wastewater for plant growth where plants cannot normally be grown.
- Increases carbon capture while increasing the value of desert land.
- Uses water efficiently in places where water is an extremely valuable commodity.

Supported by LAUNCH


Photo: Design Technology & Innovation


Photo: Design Technology & Innovation

The Catalog: Version 1.0
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Same Language Subtitling

EDUCATION

Same Language Subtitling (SLS) is the idea of subtitling the lyrics of television and video in the same language, providing viewers with both auditory and visual recognition of words to increase reading comprehension. SLS has been implemented on several popular Bollywood films' songs on Indian television in 10 languages: Hindi, Bengali, Gujarati, Marathi, Telugu, Tamil, Kannada, Malayalam, Oriya, and Punjabi. The subtitles are designed to change the color of every word in perfect timing with the song to provide automatic and subconscious reading practice to weak readers.

Photo: PlanetFeed and SLS Centre at IIM-Ahmedabad

आँखों में हैं बहारें दिल में फ़िज़ा

"Same Language Subtitling doubles the number of functional readers among primary school children. A small thing that has a staggering impact on people's lives."

President Bill Clinton
September 2009

- **Cost and time effective means** to improve literacy that fits into people's preexisting routines.
- **Large market potential** demonstrated by the more than 300 million weak readers in India alone.
- **Government and private sector support** due to increased television ratings and levels of literacy, resulting in India's Ministry of Information and Broadcasting calling for SLS as a national policy.

Same Language Subtitling in Action

SLS was first implemented on Indian national television in 1999 and currently is used for 10 national languages: Hindi, Telugu, Bengali, Kannada, Tamil, Malayalam, Gujarati, Marathi, Punjabi, and Oriya. SLS reaches more than 200 million weak readers every week in a country with 300 million weak readers and an additional 300 million illiterates. SLS has enormous potential in India, where a booming film industry produces more than 1,000 movies and more than 5,000 music videos every year.

Supported by All Children Reading Grand Challenge for Development

Photo: PlanetFeed and SLS Centre at IIM-Ahmedabad

Fresh Life Toilet and Sanergy Sanitation Services

Fresh Life Toilets provide a holistic approach to development by addressing the critical need for reliable, hygienic sanitation services, while simultaneously generating jobs and renewable energy. Fresh Life Toilets are small-form, modular, hygienic toilets designed for urban slums and sold as franchises to local residents, who run them as small businesses with the help of Sanergy's business support services – which includes branding, marketing and daily waste collection services.

- **Compact size** of 3'x5' fits well in densely-packed urban slums and its cartridges' 30L capacity ensures easy transport of waste.
- **Water-free collection system** captures urine and feces in separate 30L cartridges, reducing odor and preventing both human-waste contact and groundwater contamination.
- **Pre-fabricated, pre-cast materials** are made in a centrally located, controlled workshop by a trained team.
- **Ferro-cement panels** are highly durable, light, and easy to maintain. These qualities ensure durability, equal to or greater than five years, and reduce transportation costs.
- **Cleanliness** is promoted by an epoxy paint, preventing unit staining, while attached hand washing stations promote patron hygiene.

Fresh Life Toilets in Action

Sanergy makes sanitation sustainable in urban slums with an innovative systems-based approach resulting in a sanitation value chain with three major parts: franchise, collect, and convert. Sanergy's team collects the human waste from its network of low-cost Fresh Life Toilets, takes it to a central processing facility, and then converts it into organic fertilizer and renewable energy, which leads to the model's sustainability. While this product will be initially launched in Kenya with planned expansion to urban slums across East Africa, it presents a valuable integrated sanitation model for application in slums worldwide.

Supported by
Development Innovation Ventures

ENVIRONMENT

The Catalog: Version 1.0
@USAID

SafeSnip


Photo: Novalo Medical Technologies, LLC

SafeSnip is a patented disposable and degradable plastic obstetric device that simultaneously cuts, clamps, and shields the umbilical cord from infection. SafeSnip's symmetric design and multiple safety features prevent misuse and shorten the delivery process by transforming umbilical cord severance into an intuitive one-step procedure.

- Ease of use and cost-effective nature of this product make it a sustainable alternative.
- Allows easy and efficient prioritization of patients and interpretation of clinical data.
- Disposable nature of the product prevents infection from reuse and promotes sterility.


Photo: Novalo Medical Technologies, LLC

SafeSnip In Action

SafeSnip aims to reduce neonatal mortality in developing countries by making the birthing process more efficient, intuitive, and safe. The device utilizes novel locking mechanisms and opposing plastic blades that rely on sheer force to clamp, cut, and shield the umbilical cord, and enclose the umbilical tissue for the first 10-14 days of life. These features allow SafeSnip to safely sever the connection between mother and child while preventing reuse and reducing contamination between deliveries.

Supported by Saving Lives At Birth Grand Challenge for Development


Photo: Novalo Medical Technologies, LLC

Odón Device

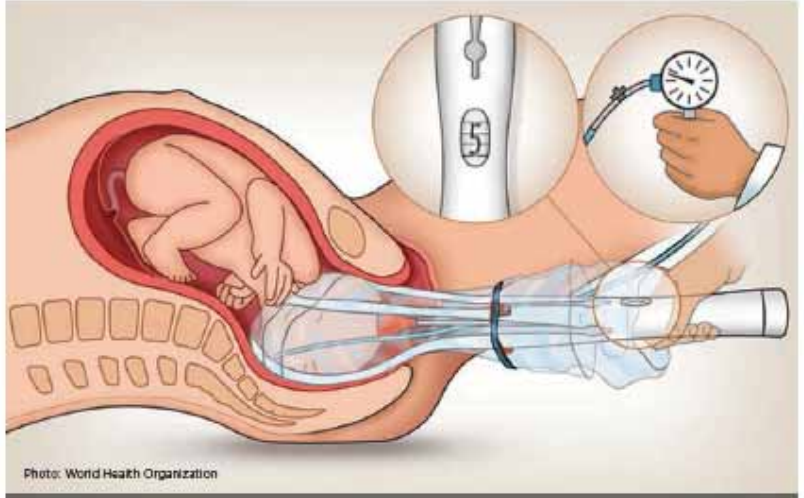
Photo: World Health Organization

The Odón Device is a low-cost, easy-to-use revolutionary development in obstetrics used to facilitate vaginal delivery and designed to minimize trauma to both the mother and baby. The Odón Device is made of film-like polyethylene material and may be potentially safer and easier to apply than forceps and vacuum extractor for assisted deliveries. More than ten percent of deliveries—an estimated 13.7 million births each year—require some form of assistance during the second stage of labor. Access to appropriate care is often limited in developing countries. The Odón Device may be a useful tool for any assisted delivery with a skilled provider: approximately 9 million deliveries each year.

- Reduces risk of fatal maternal and newborn complications due to a prolonged second stage of labor.
- Disposable nature of the product prevents infection from reuse and promotes sterility.

Odón Device In Action

The Odón Device is being tested in a two-phased study in healthcare facilities in Argentina and rural South Africa. Study results will inform future research to assess effectiveness of the Odón Device in reducing negative obstetrical outcomes, including newborn infections acquired intrapartum.

Supported by Saving Lives At Birth Grand Challenge for Development


Photo: World Health Organization

HEALTH

The Catalog: Version 1.0
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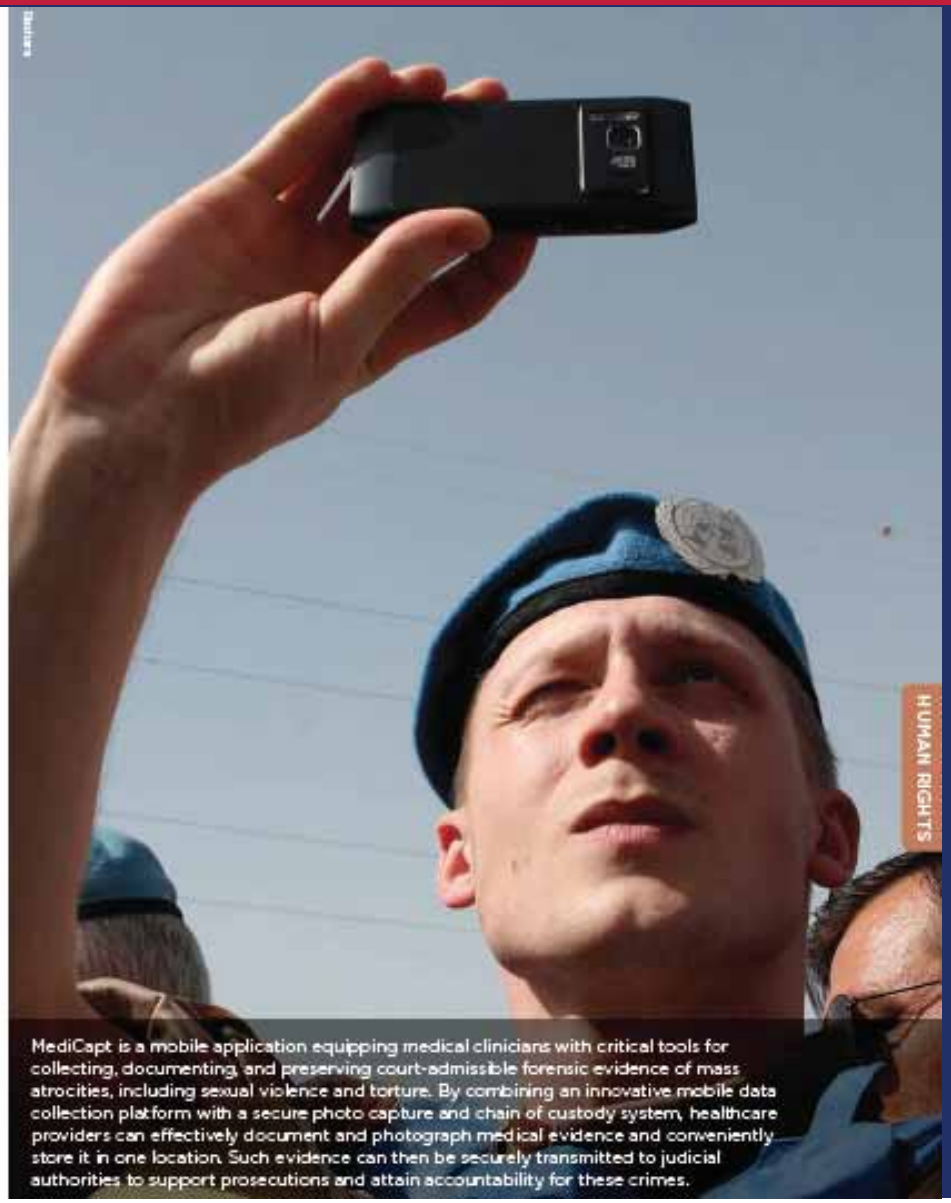
MediCapt

- **A revolutionary tool** to collect evidence of mass atrocities and bring perpetrators to justice.
- **Combines cutting-edge technology** to effectively document and secure court-admissible evidence.

Supported by
The Tech Challenge for Atrocity Prevention



HUMAN RIGHTS

MediCapt is a mobile application equipping medical clinicians with critical tools for collecting, documenting, and preserving court-admissible forensic evidence of mass atrocities, including sexual violence and torture. By combining an innovative mobile data collection platform with a secure photo capture and chain of custody system, healthcare providers can effectively document and photograph medical evidence and conveniently store it in one location. Such evidence can then be securely transmitted to judicial authorities to support prosecutions and attain accountability for these crimes.

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Compartment Bag Test

- **Comprehensive, easy-to-use test** containing a compartmentalized bag, fecal indicator bacteria growth medium, water sampling and mixing container, and disinfecting material.
- **Easy-to-score, visual,** color-change results.
- **Ambient temperature incubation** from 25 to 44.5°C.
- **Quantitative, accurate results** for E. coli in 100 mL sample volume. The Hydrogen Sulfide version of the CBT has also been tested and validated.

Compartment Bag Test in Action
The CBT may be used to directly measure microbially safe water access on a global scale in national demographic and health surveys such as the Demographic and Health Survey (DHS) and the Multiple Indicator Cluster Survey (MICS), and in other drinking water quality assessments. The CBT enables the validation and monitoring of existing water safety projects, supports water safety plans, is usable in disaster settings, and can serve as a health behavior education tool. The CBT also provides knowledge directly to households to empower action when unsafe water is found.

Supported by LAUNCH

"I found the CBT to be easy to use and I had no trouble using this test even though this is my first time. The information provided is important. People should know about their water safety."

Mwanza
Tanzania resident


Photo by Aquagenx


Photo by Aquagenx

The Aquagenx Compartment Bag Test (CBT) is an affordable, commercially available microbial water quality test developed by Dr. Mark Sobsey and Dr. Ku McMahan of the University of North Carolina Gillings School of Global Public Health with support from the university and USAID. The CBT quantifies E. coli levels in a 100 mL sample, is portable and self-contained, and does not require electricity, a lab, or special training. It allows for incubation at ambient temperatures and provides built-in decontamination. The CBT can be used by anyone in virtually any setting.

WATER

The Catalog: Version 1.0
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Photo: Human Network International

DataWinners is an online, do-it-yourself data collection service that allows organizations to shorten the time between data collection and better decision making. Organizations use DataWinners to transform inefficient paper forms into digital questionnaires in minutes. Data senders then submit their data using any combination of SMS, smartphone, and web. Incoming data is instantly recorded in a cloud-based database for viewing and analysis. Data administrators can access and analyze data in real time and react rapidly.

"DataWinners modernized our data collection. The Primary School Directors now submit their data more quickly and with fewer errors using their own mobile phones. The Ministry has plans to use DataWinners to collect other education data in Senegal."

Amadou Lamine Ndiaye
Data Administrator
Ministry of Education, Senegal

DataWinners

- **Easy-to-use data collection** with a local telephone number provided for SMS, multilingual support, questionnaire builder, data visualization and export, and unlimited collection potential.
- **Quick collection and analysis** supports better decision making and allows organizations to maximize their resources.
- **Cloud-based technology** allows organizations to access their information in real time.

DataWinners in Action

In Senegal, USAID is supporting the Ministry of Education's use of DataWinners to collect standardized testing results for reading and math from primary schools nationwide. Ministry of Education Data Administrators built their SMS questionnaires in DataWinners and registered more than 9,500 schools and School Directors into the system. Directors were then trained to submit data via SMS using their personal mobile phones. Data is recorded in real time in DataWinners cloud-based database. The standardized test results are easily accessed by data administrators and regional and district officials for verification. Initial results are positive and data collection will be expanded to monitor other Ministry of Education needs, such as quality assurance, teacher absenteeism and student-level data.

Supported by All Children Reading Grand Challenge for Development


Photo: Human Network International

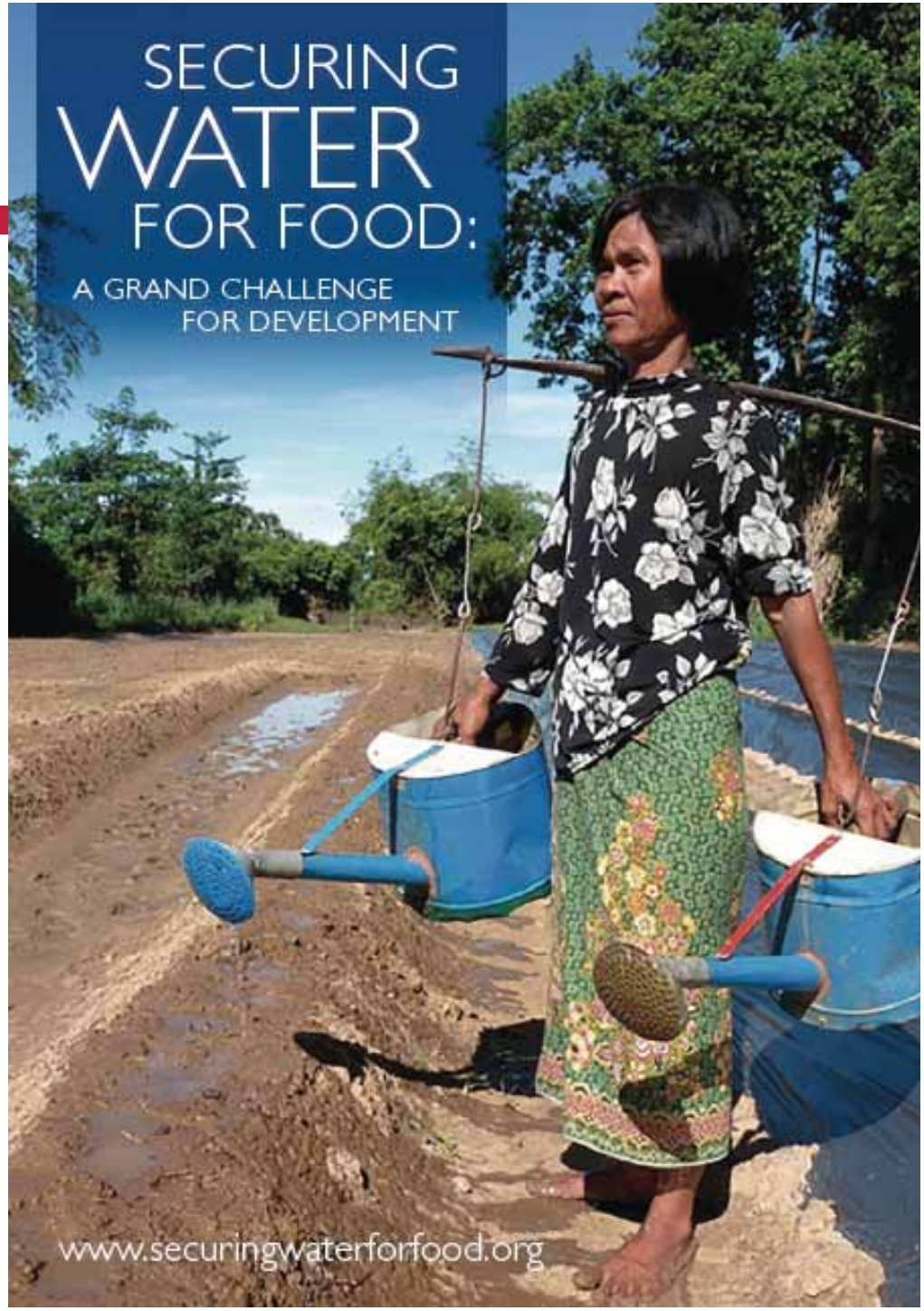

Photo: Human Network International


Photo: Human Network International

CROSSCUTTING

Why ‘Securing Water for Food’?

Water scarcity is one of the most pressing challenges of the early 21st century. Between 2000 and 2050, water demand is projected to increase by 55% globally, meaning that the number of people affected by water scarcity and stress will continue to rise. More than 70% of global water use occurs in the food value chain.



USAID
FROM THE AMERICAN PEOPLE

SECURING WATER FOR FOOD:
A GRAND CHALLENGE FOR DEVELOPMENT

How Do We Help Solve the Problem?

The United States Agency for International Development (USAID) and the Swedish International Development Cooperation Agency (Sida) will work with a group of industry experts to identify and accelerate innovative technologies and market-driven approaches in three areas that are critical to reducing water scarcity to boost food security: 1) Water Efficiency and Reuse; 2) Water Capture and Storage; and 3) Salinity.

USAID
FROM THE AMERICAN PEOPLE

SECURING WATER FOR FOOD:
A GRAND CHALLENGE FOR DEVELOPMENT

Who Will Provide These Innovations?

You. We want to find and support the best entrepreneurs, businesses, and science-and technology innovators that can help secure water for food. Innovators can come from anywhere in the world. Implementation must take place in a developing or emerging country.

USAID FROM THE AMERICAN PEOPLE

SECURING WATER FOR FOOD: A GRAND CHALLENGE FOR DEVELOPMENT

Why Participate?

We will provide funding and acceleration support to 30-40 winners in the first round of competition, based on a rigorous evaluation process.

Join the Securing Water for Food Grand Challenge for Development and help us find the solutions that will **Secure Water for Food**. Visit www.securingwaterforfood.org to learn more.

USAID FROM THE AMERICAN PEOPLE

SWEDEN

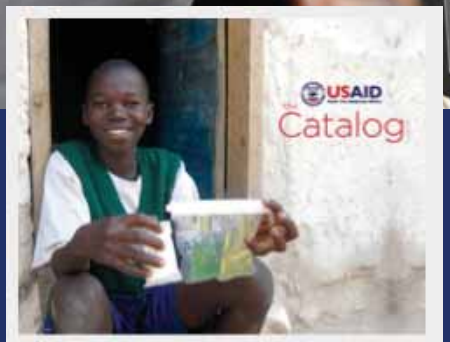
Science, Technology, and Innovation @USAID

THE DEVELOPMENT INNOVATION ECONOMY BY USAID ADMINISTRATOR RAJIV SHAH

SAVING LIVES AT BIRTH: UP FOR THE CHALLENGE

THE DEVELOPMENT VENTURE CAPITALISTS AT WORK

Click the map image above for an interactive map of USAID Science, Technology, and Innovation projects around the world.



The Catalog Version 1.0 (PDF - 15 MB)

http://www.usaid.gov/what-we-do/science-technolog-and-innovation

Open Source Development and New Opportunities for Humanitarian Technologists

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"It always seems impossible until it's done."
- Nelson Mandela