



IN PARTNERSHIP WITH:



Date: June 11-12, 2016

Venue: TUMO Center for Creative Technologies, 16 Halabyan St., Yerevan, Armenia

I. Objective

The Water Ideathon is an initiative of Armenian and American partners that will mobilize a wide array of actors to come up with new ideas to help solve Armenia's water resource management challenges. At the Ideathon, interdisciplinary teams will be given about 24 hours to develop their information technology, policy, or engineering solution to a problem statement centered around water resource management in Armenia. At the end of the 24 hours, teams will pitch their idea to a review panel and one winning team will be selected in each of the four categories:

1. Information technology:
 - A solution that is primarily driven by IT and data.
2. Policy, public awareness, and social enterprise
 - A solution that primarily involves public stewardship, policy reform, use of media, and/or social engineering.
3. Engineering:
 - A solution that is primarily driven by mathematics, design, and empirical analysis.
4. Youth (ages 14-19):
 - A solution falling into any of the other three categories; all team members must be 14 to 19 years old. Note: youth participants are automatically eligible to compete in the other three categories.

II. Problem Statement

Armenia is a small, landlocked country with multiple closed borders and threatened natural resources. Armenia's climate is considered semi-arid and arid, and it is highly vulnerable to climate change. Despite these challenges, Armenia has strong assets on which to build as well as opportunities to leverage, including a large diaspora and a ripe environment for partnerships. The innovation ecosystem in Armenia is flourishing, with growing local talent in the fields of information technology; policy, public awareness, and social enterprise; and engineering, and especially amongst youth.

Agriculture is important to the Armenian economy and 40% of the country's production comes from the Ararat Valley, which is home to 18% of the country's population. Over the last several years, water stressors that include the burgeoning fish farm industry and irrigation requirements of farms have lowered the water table to the point where 32 communities that had access to flowing water now pump it from the ground, which is an energy intensive process. Irrigation is the overall largest consumptive user of water, although fish farms have emerged as a major, inefficient stressor.

Water shortages are exacerbated by an overall lack of water stewardship and a public standpoint that water is an infinite resource. Generally the Armenian public greatly undervalues water and few Armenians are aware that the country and broader region is under heavy water stress, and the level of stress is projected by the World Resource Institute to increase two-fold by 2040.

Armenia's water resources face a number of unique challenges:

1. Information technology:
 - Lack of data, including geospatial data, on water resources, users, and management.
 - Lack of access to existing information and data.
2. Policy, public awareness, and social enterprise:
 - Lack of water stewardship or public understanding that water is a finite resource.
 - Prevalence of public viewpoints that undervalue water.
3. Engineering:
 - Lack of adoption of efficient or advanced water technologies and engineering applications.
 - Inefficient, ageing infrastructure with considerable technical losses amounting to 40% or more.
4. Cross-cutting:
 - High level of pollution and contamination.
 - High susceptibility to climate change and drought.
 - Usage of sewage for irrigation due to lack of irrigation water.
 - Overextraction of groundwater resources.
 - Lack of adequate enforcement or penalties for resource abuse.
 - Substantial commercial losses, including through illegal piping and non-payments.
 - Lack of appropriate or effective water pricing.
 - Lack of transparency in the water sector.
 - Transboundary water issues.

An intervention is needed to stave off the worst impacts of these problems and set Armenia on a path for sustainable water resource management.

The Water Ideathon will serve as a catalyst and incentive for the local Armenian community to direct their efforts to solving challenges in the water sector, as well as elevate the importance of sustainable water management amongst Armenian water consumers.

III. Expression of Interest

USAID is requesting Expressions of Interest (EOI) from interdisciplinary teams interested in participating in the Water Ideathon. **Applicants must submit EOIs to USAID by completing the application form in Google Forms here: <http://goo.gl/forms/uPbVQ1YcUO>.** Applicants must submit EOIs to USAID no later than 11:59pm on May 30, 2016. **EOIs must be submitted in English. PLEASE SUBMIT ONLY ONE EOI PER TEAM.**

Applicants are asked to answer the following questions on the EOI form regarding their idea and team:

Idea:

- What is your idea and how will it address Armenia's water challenges? (limit 2000 characters)
- What communities, groups, organizations, and/or people will benefit from the implementation of your idea? (limit 1000 characters)

Team:

- What is your unique team name?
- What is the name, occupation, and age of each team member? Who is the team leader?
 - Note: teams must have at least 2 members and can have up to 4 members.
- What are the roles of each member?
- Any participants 14-17 years old will be asked to complete a Parental Permission Form by June 9, 2016. Permission Forms will be emailed to all minor participants by June 2.

IV. Process

A. Optional Pre-selection Knowledge Seminar on the Water Sector

USAID and Microsoft Innovation Center (MIC) will host a knowledge presentation on **the social, economic, and technical challenges facing the water sector and water resource management**. The presentation will be conducted by USAID's Advanced Science & Partnerships for Integrated Resource Development (ASPIRED) project. The ASPIRED team will deliver a 30 minute presentation, followed by a 30 minute Q&A session. While attendance is optional, USAID highly encourages all teams interested in applying for the Water Ideathon to attend the seminar. If you will attend, please RSVP to Patrick Meyer at pmeyer@usaid.gov by May 22, 2016.

- Pre-selection Knowledge Seminar on the Water Sector
 - Date: May 24, 2016, 5:00pm-6:00pm
 - Venue: Microsoft Innovation Center, 6th floor conference room, 105 Teryan St.
 - Presenters:
 - ASPIRED technical staff: Lilith Harutyunyan, Aram Gevorgyan, Hayk Petrosyan
 - Language: Presentation will be delivered in Armenian with Armenian and English slides.

At the end of the session, teams will be given the option to sign up for one-on-one consultations with ASPIRED technical staff to discuss their concepts in greater detail. ASPIRED is available for consultations on May 26 and 27.

B. Selection of Semifinalists

Teams must submit their EOIs to USAID no later than 11:59pm on May 30, 2016. The EOIs will be reviewed by a panel composed of USAID and its partners, including MIC, the Enterprise Incubator Foundation (EIF), the Yerevan Impact Hub, the IBM Innovative Solutions and Technologies Center, TUMO Center, National Instruments, and ASPIRED. EOIs will be evaluated on a 100 point scale as follows:

- Approach (40 points)
- Impact and sustainability (40 points)
- Team (20 points)

A maximum of 100 people (approximately 30 teams) with the highest scoring EOIs will be invited by USAID to participate in the Water Ideathon as **semifinalists**.

C. Optional Pre-event Knowledge Seminars

On June 7-9, USAID and its partners will organize three 1-hour presentations to which semifinalists are strongly encouraged to attend. **Presentations will be in Armenian.**

- Knowledge Seminar #1: Information Technology Solutions for a Smarter Planet
Date: June 7, 2016, 5:00-6:00pm
Venue: Microsoft Innovation Center / Armenia National Engineering Laboratory, 105 Teryan St.
Presenters:
 - Artashes Vardanyan, Microsoft Innovation Center
 - Areg Gevorgyan, Business Development Manager, ISTC
 - Arthur Ghulyan, Business Development Manager, ISTC
- Knowledge Seminar #2: Policy, public awareness, and social enterprise
Date: June 8, 2016, 5:00-6:00pm
Venue: Impact Hub, 2, 2/1 Melik Adamyan St.
Presenters:
 - Elina Markaryan or Anahit Tunyan, Coca-Cola Hellenic Bottling Company Armenia on sustainable/responsible business management and the Dow Jones Sustainability Index
 - Impact Hub on social enterprise as a response to social challenges
- Knowledge Seminar #3: Engineering
Date: June 9, 2016, 5:00-6:00pm
Venue: Microsoft Innovation Center / Armenia National Engineering Laboratory, 105 Teryan St.
Presenters:
 - National Instruments

D. Ideathon

i. Logistics

The Water Ideathon will be run in “hackathon-style.” Teams will gather at TUMO Center and have about 24 hours to fully flesh out and demonstrate their proposed idea. TUMO Center will be open for the full 24 hours and teams are encouraged to make maximum use of the Center during this period.

Venue: TUMO Center

Start time: June 11, 11:00 am

End time: June 12, 1:00 pm

Meals and snacks provided by: USAID/Armenia

Drinks provided by: Coca-Cola Hellenic Bottling Company Armenia

Wireless Internet provided? Yes

Media invited? Yes

Computers provided? No. Teams should to bring their own computers, phones, and other necessary equipment to the Ideathon.

Security: TUMO has 24 hour security.

ii. Youth Team Logistics

Any participants 14-17 years old will be asked to complete a Parental Permission Form by June 9, 2016. Permission Forms will be emailed to all minor participants by June 2. Parents of minors are invited and encouraged to visit TUMO during Ideathon hours if they wish to check on their children.

iii. Side Presentations

During the Water Ideathon, there will be a number of technical side-sessions open to all event participants:

- Ideathon presentation #1: How to develop an action plan and deliver a pitch
Time: June 11, 2:30-3:30 pm
Room: TUMO Center, Room TBD
Presenter: Startup founder TBD
- Ideathon presentation #2: Developing social enterprises around problems
Time: June 11, 5:00-6:00 pm
Room: TUMO Center, Room TBD
Presenter: Social enterprise specialist TBD
- Ideathon presentation #3: What's next? How to take your idea to the next level
Time: June 11, 9:00-10:00 pm
Room: TUMO Center, Room TBD
Presenter: Kolba Lab Tenant TBD

iv. The Pitch

Pitches can be delivered in Armenian or English. Pitches are to be no more than 5 minutes and teams will not be allowed to continue pitching past the 5 minute mark. Prior to the pitch, teams will be provided a list of questions that they are strongly encouraged to answer during the pitch. PowerPoint or Google Slides are allowed, however slides must not have bulleted text; slides can have pictures and diagrams only.

Judges panel composition (TBC):

- USAID/Armenia
- USAID ASPIRED Project
- Impact Hub Yerevan
- IBM ISTC
- Microsoft Innovation Center
- Coca-Cola Hellenic Bottling Company Armenia
- ANEL/NI

The judges will award prizes as discussed in the next section.

v. Ideathon 24 Hour Schedule

	Milestone
June 11, 2016	
11:00 am	Launch of Ideathon: welcome announcements by USAID Patrick Meyer & Jeff Paretchan
1:00 pm	Lunch provided
2:30 pm	Ideathon presentation #1
5:00 pm	Ideathon presentation #2
7:00 pm	Dinner provided
9:00 pm	Ideathon presentation #3
11:00 pm	Snacks provided
June 12, 2016	
8:00 am	Breakfast provided
9:00 am	Pitches start
1:00 pm	Winners announced at Award Ceremony

V. Awards

Final award packages will be announced prior to the Ideathon in early-June 2016. Below is an illustrative list of possible award packages for all team members of winning teams:

Information technology

- Total cash prize of 300,000 AMD from EIF (split between team members)
- 12 weeks of incubation at MIC or ISTC including desk space and access to hardware and software
- Subscription to IBM Bluemix cloud computing platform and free usage of IBM Bluemix services
- 3 year service of Microsoft BizSpark for hosting apps and solutions on MS Azure cloud
- Mentorship with ISTC team on data analytics, cloud services (Bluemix), and IBM Watson Analytics
- Possible additional prizes to be announced in early-June

Policy, public awareness, and social enterprise

- Total cash prize of 300,000 AMD from AGBU (split between team members)
- 12 weeks of membership at Impact Hub Yerevan including desk space
- Mentorship with Impact Hub management on social engineering and entrepreneurship
- Mentorship with Coca-Cola management on marketing, sustainability, and water sector
- Possible additional prizes to be announced in early-June

Engineering

- Total cash prize of 300,000 AMD from Unicom (split between team members)
- 12 weeks of incubation at Armenia National Engineering Laboratory including desk space
- 100 hours of mentorship with international engineering expert
- Engineering software and/or hardware from National Instruments
- Possible additional prizes to be announced in early-June

Youth (ages 14-19):

- Possible additional youth-specific prizes to be announced in early-June
- Reminder: youth participants are automatically eligible to compete in the other three categories

VI. Follow-on Roundtable Discussions

After the Ideathon, USAID will host, on a monthly basis, three follow-on roundtable discussions to bring together the winning teams, USAID technical staff and other Ideathon partners to discuss potential for further development of the winning teams concepts and designs.

VII. Overall Timeline

Date	Description
May 16	USAID issues a call for Expressions of Interest (EOI)
May 24	Pre-selection Knowledge Seminar on Water Resource Management
May 30	Applicants submit EOIs to USAID no later than 11:59pm
June 2	Selected teams are invited as semifinalists to participate in the Water Ideathon
June 7	Pre-event Knowledge Seminar #1: Information technology
June 8	Pre-event Knowledge Seminar #2: Policy, public awareness, and social enterprise
June 9	Pre-event Knowledge Seminar #3: Engineering
June 11-12	Water Ideathon
July 15	Follow-on Roundtable Discussion #1
August 19	Follow-on Roundtable Discussion #2
September 23	Follow-on Roundtable Discussion #3

VIII. “Fine Print”

By participating in this competition, participants certify that concepts and designs they submit are their own and are not taken or copied from any other person or entity (unless expressly attributed as such). Participants further agree that USAID or other sponsors of the Ideathon are free to use, in whole or in part, concepts or designs submitted in the competition for future development activities.

USAID reserves the right to make modifications to this document, event logistics and details, and award packages at any time.