Combating Zika and Future Threats
A Grand Challenge for Development

To stop the spread of Zika and prevent other infectious disease outbreaks, USAID's Center for Innovation and Impact (CII) launched Combating Zika and Future Threats: A Grand Challenge for Development (CZFT) in 2016 via a single open innovation call. The $30 million Challenge called upon the global innovator community to generate cutting-edge approaches to fight the current Zika outbreak and to help strengthen the world's ability to prevent, detect, and respond to future infectious disease outbreaks.

A VISION FOR SUCCESS CZFT maximized social returns by developing a balanced portfolio of innovators, not only incubating early-stage innovators with potential to impact other health areas, but also helping late-stage innovators to scale their efforts.
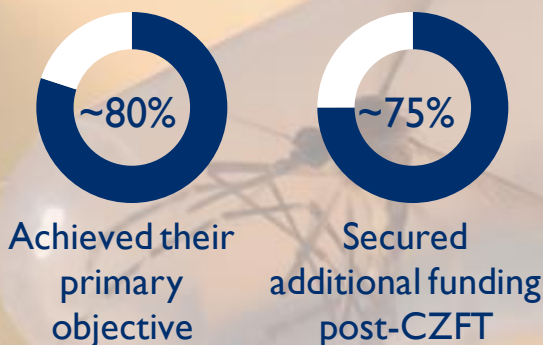
ACHIEVEMENTS AT A GLANCE

1 Provided catalytic funding & support at key stages of development

2 Fostered an environment for innovators to discover & build synergies

3 Built momentum to help innovators secure additional funding

4 Catalyzed adaptation to future threats, including COVID-19

5 Tailored support across innovation stages & types

BY THE NUMBERS

900
Applicants

$30M
Awards

26
Awardees

$100M+
Funds raised post-CZFT

Across all innovators

~80%
Achieved their primary objective

~75%
Secured additional funding post-CZFT

Across late-stage innovators

~60%
Expanded to new geographies

~50%
Adapted innovations to future threats

~40%
Achieved scale to date*

Benchmarks indicate 15-25% of start-ups successfully scale

1. Provided catalytic funding & support at key stages of development

CZFT provided two main types of support to innovators: financial and non-financial.

Financial support: CZFT provided funding (mainly milestone-based) commensurate to innovators' need and stage that enabled them to make major strides in their development. For example, World Mosquito Program (WMP) was able to test the first large-scale deployment of its *Wolbachia*-carrying mosquito intervention in Colombia. Meanwhile, BluSense, an earlier stage innovator, was able to develop and pilot a novel Zika diagnostic technology.

Non-financial support: USAID made a broad range of support available to innovators. CZFT provided various forms of technical assistance, sometimes going into markets with innovators to help establish partnerships and relationships with local stakeholders. External consultants provided human-centered design and business model support.

Photo: USAID

2. Fostered an environment for innovators to discover & build synergies

USAID actively created co-creation opportunities from the beginning of the program, which led to innovators discovering new ways to team and refine their innovations. For example, the International Society for Infectious Disease (ISID) and Imperial College independently applied to CZFT and were selected to attend a pitch session during the selection process. They decided to merge their proposals to co-create a successful innovation to monitor the transmission of infectious disease across international borders.

During CZFT, USAID encouraged WMP and WeRobotics to partner to synergistically test their innovations. WMP supplied mosquitoes to be transported via a WeRobotics' drone release system to a deployment site in Fiji. The combined team successfully completed trials of this novel release technique and demonstrated that synergies realized during the program can benefit both innovators and society.

Photo: USAID

For more information, please refer to the supplemental success stories on WMP, BluSense, and Premise

3 Built momentum to help innovators secure additional funding

USAID conducted advocacy activities to raise awareness of innovators' achievements and progress to potential future donors. Through these efforts, 75% of all innovators in the program were able to secure follow-on funding from a range of sources, including at least 4 innovators who received private funding. For example, Premise extended its funding through a Series D funding round following the program. In addition, USAID's partnership with the Innovative Vector Control Consortium (IVCC) helped 6 vector control and surveillance innovators secure follow-on funding.

4 Catalyzed adaptation to future threats, including COVID-19

50% of late-stage innovators were able to adapt their solutions to areas beyond Zika. Future threats was a fundamental goal of the program and informed innovators' selection. Six innovators adapted their innovations to malaria post-CZFT in at least 4 new countries. Six others developed solutions used during the COVID-19 pandemic. For example, ISID was the first NGO to detect the presence of SARS-CoV-2 in Wuhan. BluSense used its novel diagnostic platform to develop a rapid diagnostic for COVID-19 that has received CE-marking in the EU. Premise turned its data platform into a one-stop-shop of COVID-19 data, helping governments in Africa and Latin America for policymaking.

5 Tailored support across innovation stages & types

USAID supported a wide range of innovators at multiple levels of maturity and across academic, NGO, and for-profit organizations. Successes were seen across all types. WMP and VecTech (who developed a software algorithm to detect Zika-infected mosquitoes in smart traps) were able to make significant commercial progress on their innovations – providing exemplars of academic-origin innovators who achieved scale. CZFT also enabled non-traditional players to tailor their products to global health. Premise successfully pivoted its data platform to the vector surveillance context and secured several follow-on contracts with governments.

The highly tailored support that USAID offered was a key success factor for the program. USAID convened experts in business, vector control, and product design to provide targeted support to innovators.

Overall, CZFT created impact in the near term and better prepared USAID to deal with future threats, including COVID-19. This Grand Challenge demonstrated the value USAID provides by tailoring support to an innovator's specific context to help catalyze product development, build synergies, and secure additional funding, all in service of increasing longer term sustainability.