









Application Guide: Initial Innovation Screen Questions

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- This application guide accompanies the second Request for Proposal under the Creating Hope in Conflict: A Humanitarian Grand Challenge
- This application guide is to support prospective innovators (i.e. applicants) in submitting strong applications.
- All completed and eligible applications go through a multi-step review process, including both internal and external review.
- The first step in the application process is the 'Initial Innovation Screen'.

Applicants should **also** review the following key documents before submitting applications:

- Request for Proposal, Creating Hope in Conflict: A Humanitarian Grand Challenge
- Humanitarian Grand Challenge: Barriers Analysis

Available at https://humanitariangrandchallenge.org/

Overview of the 'Initial Innovation Screen'

Note: Approximately 55% of applications failed to pass the Initial Innovation Screen last year

- The purpose of the Initial Innovation Screen is to perform a quick screen of all applications, to select which will be reviewed in further detail.
- Reviewers <u>only</u> look at the <u>first four questions</u> of the application for *Seed* innovations and the <u>first five questions</u> for *Transition-to-scale* innovations.
- Reviewers are a mixture of staff from Grand Challenges Canada (GCC) and staff from organizations that GCC partners with.
- Reviewers come from various professional backgrounds, some with extensive experience in the humanitarian sector, and others with limited humanitarian experience but other subject matter expertise.
- To maximize success, applications should provide direct and clear responses to each of the questions.
- The following pages provide examples to help guide innovators in preparing applications. The examples provided in this guide are from applications received in 2018.

Question #1: What is the problem addressed by your innovation? (500 character limit)

Guidance: Innovators should focus on describing the specific problem that your innovation is solving. Assume that the reviewer has zero background knowledge on either the context or the problem itself. Conclude with how your innovation solves this problem in one sentence. The next question (Question #2) will allow you to describe your innovation in more detail.

- The problem being addressed is too general/large (i.e. "environmental and social issues")
- The proposed innovation is not suitable to the problem that is being addressed
- No background information is provided for the problem identified (i.e. "prevention of diseases")
- Describing the problem in philosophical terms (i.e. "human activity is leading to global crisis")
- Responses that only contain statistics. Though statistics can be powerful, responses should also provide background and link the statistic to their innovation

| | Bad Example | Good Example |
|----|---|--|
| #1 | "1.Prevention of diseases through FREE-ORGAN-SCAN-SCREENING | "Innovation XYZ addresses three problems encountered when |
| | 2.Research activities/programs on causes of rising deaths in sub- Saharan-Africa | delivering surgery in conflict zones and humanitarian crises. 1) |
| | 3. Production of quality effective & affordable natural drugs. | Patient safety - high infection risks in nonsterile facilities. 2) Provider safety - infection risks worsened by inadequate personal |
| | 4. Controlling rising cholera cases by production of quality, effective | protective equipment, as highlighted by but not limited to the |
| | & affordable liquid soaps, detergents & disinfectant." | Ebola crisis. 3) Surgical capacity - facilities are targets of attack and |
| | | teams must be nimble, so minimizing footprint infrastructure and |
| | | simplifying supply chains is key." |
| | "Kibondo district have been hosting refugees almost a decade, | "In 2017 the number of worldwide rotavirus cases catapulted when |
| #2 | whom mainly are coming from countries of Democratic Republic of | over 1-million individuals were infected in war-torn Yemen. |
| | Congo and Burundi. Currently we have Nduta camp catering 150,000 | Prevention strategies are a lower priority in war-torn areas, due to |
| | refugees from DR Congo and Burundi. The presence of refugees has | the effort needed with current detection methods. Further, aid |
| | brought negative impact to environment, social interaction, security | organizations work momentous hours to suppress disease spread. |
| | and frequent disease outbreak in villages neighboring the camp. | Early detection of the rotavirus pathogen in water with a rapid, |
| | Community hosting this camp are left with no social service | portable device would enable proactive remediation strategies. |
| | including water supply" | |
| | "Most human labor on the planet is driven and motivated by a | "Our innovation addresses the global cooking crisis plus related |
| | financial reward system, this inherited system functions as a form of | thermal energy needs like space heating and water sanitation. |
| | financial slavery. The financial oppression created by the system | Those living in conflict regions are often among the energy |
| #3 | coerces humans in doing what they need to do, in order to generate | impoverished. In those desperate situations, almost any |
| #3 | financial income for their survival. The results of this human activity | combustible material may be used as fuel, even if it is dangerous, |
| | is leading to a global crisis. Most disturbingly, the awareness of this | creates harmful emissions, or results in illegal deforestation. |
| | global crisis is now common knowledge, but no solutions are | Innovation XYZ is an energy platform that sources free, renewable |
| | available to solve the problem." | energy in a way that is safe and free of emissions" |

Question #2: What is your proposed innovation? (500 character limit).

Guidance: Innovators should focus on describing their innovation in simple English or French, avoiding the use of acronyms or jargon. Your response to this question should clearly link the problem from the previous question. Responses should clearly describe what is new/different about your idea, and how these innovative features improve the problem identified in Question #1.

- Proposing projects that have research as the primary objective
- Response describes what will be done, but not what the actual proposed innovation is (i.e. improving water supply via bore hole drilling)
- Response includes several components, with no new/innovative elements (i.e. bore hole drilling and community education)
- Including but failing to clearly describe critical components of the innovation (i.e. linking crypto currency, blockchain, breathing and economic empowerment into a single innovation)

| | Bad Example | Good Example |
|----|---|---|
| #1 | "Advancing vision 2030 by using method of prevention is better than cure to low income poor people whose income is less than 2 dollars per/day meaning they cannot be able to buy medicine. Research programs aiming at reducing the rising death-rate in rural areas of Kenya and Tanzania where poor patients do not afford high costs associated with health-care services. Controlling rising cholera cases through procurement of raw materials production distribution and use of detergents, soaps etc." | "Innovation XYZ rethinks safe surgery by shifting the focus of protection from operating rooms to the incision itself. It is a clear sterile drape that: - inflates with sterile air into an enclosure over the incision - is accessed by providers via arm and material ports - holds a surgical tray inside - fits in a backpack or similar space as a ready-to-use kit for rapid deployment - can be set up rapidly via existing surgical workflows" |
| #2 | "Improving water supply in 11 villages available nearby Nduta Refugees Camp, campaigning hygiene education to community on the proper disposal of solid and waste water from there house by Conducting underground water survey, Bore hole drilling and fitting solar water pump, Construction of water reservoir, Establishing distribution lines and collection point and Formulation of local organs that will enhance sustainability of project." | "We designed a smartphone platform diagnostic device that uses DNA amplification to detect for cholera, at the source, in under 30 minutes. The data is immediately uploaded to a cloud-based server to automate the data logging process. In areas without connectivity, a Wifi hotspot can be used in a central location for data upload. Innovation XYZ is the first and only water-based cholera detection device while automating data logging with time stamped and geographical location information" |
| #3 | "The XYZ project is based on a revolutionary reward system for Breathing, Meditation and Yoga practice using Decentralized Blockchain Technology. The XYZ project is the first of its kind in the FinTech Preventive Healthcare Sector. This new system, rewards long term breathing, meditation and Yoga practice, all activities with scientifically proven health benefits. The projects main goal is to reward practitioners with crypto currency, hopefully valued more than the minimum wage" | "Innovation XYZ collects, stores, and recovers solar energy in portable containers. Users can cook any place and any time with free solar energy, even inside and at night. Innovation XYZ can be used for space heating, thermal pasteurization of water, and food and grain drying. We are working on an accessory to augment the base innovation for very long storage, through rainy seasons. Any task that requires stored, portable heat from a renewable source can be facilitated with the Sun Buckets innovation." |

Question #3: What are the current approaches to the problem and how will your innovation address it more effectively? (500 character limit).

Guidance: Applicants should mention what are the current alternatives are to addressing the problem they are fixing. Responses should focus on which element/features/components of your innovation are better than current alternatives.

- Failure to describe what current/previous approaches to addressing the problem are, and why these current approaches are failing
- The description of current approaches is too broad/philosophical (i.e. replacing current economic systems)
- Responses fail to clearly describe the added value of the proposed innovation. For example, will your innovation improve the speed, quality, and/or cost of a product or service? If so, how?

| | Bad Example | Good Example |
|----|--|---|
| #1 | "Due to poverty, free-screening services will attract many poor locals through organised/scheduled mobile clinics in collaboration with respective stake holders. Distribution of free soaps, detergents and disinfectants will attract many needy poor whose income is less than 2 dollars per day. Doing research on natural drugs is the best solution for the current drugs resistance era. More than 80 per cent use natural medication in Africa-Kenya and Tanzania inclusive. | "Patient safety: current solutions fit rooms and ventilation systems in tents, trucks, etc. Our innovation offers cutting-edge protection, does not rely on electricity/terrain/roads, is low-cost, and minimizes maintenance. Provider safety: unlike scrub gear and drapes, Innovation XYZ fully blocks patient infectious particles, without teams wearing heavy, hot material. As a single item, it also simplifies supply chains. Surgical capacity: Innovation XYZ has minimal footprint and can go anywhere that a provider can" |
| #2 | "The project will be including a partnership approach. The project will commence with a participatory assessment of the current community and schools sanitation projects in the concerned villages where Districts Administration will be fully involved during identification of local constraints, key risks and practices that need improvement. The findings, conclusions and recommendations of these assessments, will allow the partners to jointly plan, implement" | "Innovation XYZ is the first and only water-based V. cholera diagnostic device and the first of its kind to automate the data logging process with time stamped and geographical location information. This platform will enable proactive, rather than reactive, approaches in environmental pathogen detection." |
| #3 | "This project is the fist of its kind. Ultimately the XYZ framework intends to substitute Keynesian economics with Humanitarian Buddhist economics. This will allow for individual financial sustainability by practicing scientifically healthy practices such as yoga and meditation." | "Previous attempts at solar cooking require cooking outside in the sun during the day, and often at low temperatures, similar to a slow cooker. Cooking during the midday may expose users to dangerous situations in war-torn areas. Current solar technologies may also disrespect cooking cultures and traditions by requiring cooking in a box, special pot, or tube. With Innovation XYZ, the user can cook how she likes, using any type of pot or pan, and when it is most safe, including at night." |

Question #4: Describe how your innovation is <u>relevant</u> to vulnerable, hard to reach populations affected by conflict? (500 character limit).

Guidance: Applicants should not focus on re-defining the problem that has been defined in Question #1. Responses should first describe who the target populations are for their innovations, and describe how and why the innovation is relevant to target populations (i.e. conflict-affected communities). Responses should describe how the innovation has been informed by the needs of target populations and how the target populations will access/use the proposed innovation.

- Referencing regions that are not conflict contexts (i.e. "in many parts of Africa")
- Response does not focus on conflict, but tackles other social issues (i.e. "poverty and financial slavery")
- Response fails to describe how target populations will access or use the innovation (Will target populations use it directly? or will NGOs operating in conflict use the innovation to serve target populations?)

| | Bad Example | Good Example |
|----|---|--|
| #1 | "In many parts of Africa, the poor stay at rural areas which is neither served with clean /treated drinking water nor electricity. Government HOSPITALS are sometimes situated several kilometres away so travelling is very difficulty as roads are of muram, clay, muddy .SO my proposed MOBILE CLINICS scheduled to be situated at rural environment to directly serve poor ecosystem is likely to deliver health care to needy through house to house method." | "Innovation XYZ is cost effective, ultraportable, fast-deploying, and of minimal footprint, the biggest requirements for providing surgical care to hard to reach populations affected by conflict or natural disasters. It is optimized and tested for the most common traumatic, general, and ob/gyn procedures relevant to these populations, based on team members' experiences working in Afghanistan, Iraq, Syria, and beyond." |
| #2 | "By improving water supply the community shall gain sustainable and access to clean drinking water and sanitation hence Contribute to improvement of the living conditions of vulnerable groups. Water and sanitation are vital elements for human development and healthy ecosystems. With strong population growth and climate change, pressure on freshwater resources has steadily grown, intensifying competition among its users." | "Innovation XYZ's smartphone platform diagnostic device is designed for deployment to the environmental source by field workers. The majority of global diagnostic testing is done by NGOs; therefore, Innovation XYZ's' innovative technology will be addressing many pain points involved with pathogen detection in vulnerable populations undergoing conflict. A key benefit is that the device eliminates the need for cold chain storage. This makes traveling to conflict regions easier because of simple handling." |
| #3 | "Extreme poverty and inequality is the second biggest problem in the world, been the first the financial slavery system. The priority of the project is to target/reward populations affected by poverty and in conflict areas, by financially rewarding them with cryptocurrency. This will allow for the financial empowerment of the individual and aid in their survival." | "Innovation XYZ do not require fuel, like wood, charcoal, or petroleum-based products that may be inaccessible for hard to reach populations affected by conflict. Only solar radiation is needed to operate Innovation XYZ. |