Biotechnology Industry Research Assistance Council

(BIRAC)

(A Government of India Enterprise)

Request for Proposal (RFP)

Grand Challenges India

Funding Opportunity On

The Development of Transformative Sanitation Technologies (TST) for Indian Household and Community Settings

Jointly funded by

Department of Biotechnology (DBT), Ministry of Science and Technology
Government of India

&

Gates Foundation

GRAND CHALLENGES INDIA CALL ON THE TRANSFORMATIVE SANITATION TECHNOLOGIES (TST)

ABOUT GRAND CHALLENGES INDIA

Grand Challenges India (GCI) was born out of the partnership between the Department of Biotechnology (DBT), Government of India and the Bill & Melinda Gates Foundation in 2012, signing a Memorandum of Understanding (MoU), where both parties agreed to collaborate on supporting scientific and technological research innovations to alleviate some of the world's most critical global health and development issues, for the benefit of the people of India and other developing countries. The partnership seeks to identify opportunities to initiate and support research and innovation initiatives and strengthening India's scientific translation research capacity, promoting research and developing scientific and technical solutions. For implementation of the activities under GCI, a Program Management Unit (PMU) was formed at Biotechnology Industry Research Assistance Council (PMU-BIRAC). The GCI PMU has supported a wide-ranging portfolio of projects over the past 12 years, in the form of thematic open calls and targeted programs, in areas such as maternal and child health, agriculture and nutrition, sanitation, infectious diseases, data science, vaccines, and capacity-building initiatives. These efforts align with key priorities of the Government of India, including the National Health Mission, Atmanirbhar Bharat, Swachh Bharat Abhiyan, National Nutrition Mission, Make in India, and Skill India. GCI currently manages 43 programs, ranging from basic science research to proof-of-concept and scale-up innovations across these thematic areas.

Grand Challenges initiatives follow these core principles:

1. Strategic and well-articulated grand challenges serve both to focus research efforts and capture the imagination and engage the world's best researchers.
2. Projects are selected based on national and societal needs and transparent calls for proposals seeking the best ideas.
3. Funders, investigators, and other stakeholders actively collaborate to accelerate progress and integrate advances to ensure these advanced technologies reach to developing country's masses.
4. Projects are selected not only for scientific excellence, but also for their likelihood to achieve the desired impact, and they are milestone-driven and actively managed to that end.
5. Projects and investigators will have to follow global access commitments to ensure the fruits of their research are available to those most in need.

The current challenge is a specialized program under Grand Challenges India (GCI) aimed at promoting safe sanitation. With millions relying on unsafe sanitation systems such as sub-optimally designed and implemented septic tanks and pit toilets under water stress environment, and climate vulnerabilities in urban and rural areas, the Challenge aims to fill a critical gap by enabling safely managed new generation toilets for both household and community use in India. Here, we announce a call on "**The Development of Transformative Sanitation Technologies (TST) for Indian Household and Community Settings**". The call is aimed at development of innovative decentralized sanitation technologies that are designed to operate off-grid, treating waste onsite without requirement of sewer infrastructure and with minimal use of water along with provision of recycling of treated water, which can be deployed in both household and community settings of not only urban high-end consumers but also support low-resource environments like underserved urban slums, rural and remote areas and emergency settings such as disaster relief camps.

BACKGROUND

The access to safe water, sanitation and hygiene is the most basic human need for health and well-being. A robust and sustainable sanitation system thus forms an essential aspect of urban development and planning. Clean water and safely managed sanitation have also been recognized under the subject of dedicated targets within the Sustainable Development Goal (SDG 6), and affects outcome of other SDGs like eradicating poverty and hunger, ensuring well-being, creating sustainable communities. Inadequate sanitation systems create repercussions for overall social well-being and have adverse environmental, economic and health impacts. The most obvious manifestation is the spread of faeco-oral infectious diseases, such as diarrhoea, which has estimated to have caused more than half a million deaths alone in 2016. Investing in better and safe sanitation can thus yield significant economic and social benefits by reducing the incidence of infectious diseases and preventing disability and early death. Better sanitation can also reduce healthcare costs, increase productivity, and lead to better educational outcomes.

There are many global strategies and treatment options for wastewater management and solid waste management. However, one waste stream that is not adequately managed in developing countries is faecal sludge (FS) — the by-product of on-site sanitation systems (OSS). Existing OSS systems accumulate and store faecal matter over years, as opposed to sewer systems, which allow the continuous transport of faecal matter with used water. Once the OSS storage is full, the waste is emptied and transported to the treatment plant through vacuum trucks. This end-to-end value chain of safe storage, collection, transport, treatment, and reuse or disposal of faecal matter is called Faecal Sludge and Septage management (FSSM). India's FSSM ecosystem is made of highly interdependent parts, of generation, containment, transport, treatment, and disposal/reuse. There are several challenges at different stages of the containment and emptying stage of FSSM value chain, which includes poorly designed, constructed, or maintained septic tanks and soak pits

that leads to overflows of sludge and contamination of surface water and groundwater. Moreover, the citizens are unaware of the details of their septic tanks, like sludge volume, and are unable to provide adequate information for on time and efficient desludging. This lack of awareness also leads to tank blockages and/or overflowing. The above stated issues thus **necessitate the need of development of off-grid/ on-site desludging solutions** for treatment of waste at source, eliminating the issue of sludge storage, transportation, overflow and the problem of groundwater contamination.

THE CHALLENGE

Treatment and management of human waste carrying harmful pathogens represents one of the most critical barriers to achieving a 'Viksit Bharat' through public health and environmental improvements. The exponential increase in wastewater generation poses threat to India's development trajectory, demanding nothing short of a disruptive technological revolution. While progress under missions like Swachh Bharat Mission (SBM) has been substantial, the sanitation ecosystem still lacks **future-ready solutions** that are off-grid, pathogen free, cost effective, and promotes reuse and circularity. Traditional approaches have reached either reached its limits, or remains deeply **under-innovated**, and **unsuited for the scale** and diversity of Indian needs.

Broadly, the Problem Statement of Sanitation pertains to the following issues:

1. Massive Infrastructure Deficit and Dysfunction

- Only 30-35% of urban households are connected to centralized sewerage connections; with Sewage Treatment Plants (STPs) treating <20% of wastewater nationally
- <1% of water is recycled and treated through STPs, creating massive freshwater dependence to maintain sanitation infrastructure.

2. The On-Site Sanitation (OSS) Crisis

- 65-70% of urban population depends on failing OSS systems
- **Infrastructure Failure**: Most septic tanks/soak pits are inadequate, causing overflows and groundwater contamination; faecal sludge management is often unregulated and disposed unscientifically
- **Operational Breakdown**: Transportation of feacal sludge by trucks remain cumbersome, financially unviable, and further challenged by non-mechanical desludging
- **Lack of Awareness**: Citizens unaware of specifications/maintenance; entire Faecal Sludge and Septage Management (FSSM) value chain operates reactively

3. Environmental Catastrophe: Water Quality and Scarcity Crisis

- OSS systems contaminating groundwater (primary drinking source for a large population) is invisible and irreversible
- Urban surface water BOD/COD levels are above limits in most water bodies; groundwater contamination is at crisis levels
- Water scarcity compounded by contamination; cities forced to source from distant locations at enormous cost

4. Technology Stagnation

Despite innovation prowess in various sectors in India, sanitation technologies remain unchanged for decades:

- Incumbent technologies don't comply with prescribed environmental norms
- No significant innovation in waste treatment, monitoring, reuse at point of generation
- Digital transformation tools absent from sanitation management

5. Climate Change Vulnerability and Infrastructure Inadequacy

India experiences extreme weather episodes year after year :

- Septic tanks/soak pits flood during monsoons, causing widespread contamination
- Temperature extremes degrade plastic components, disrupt biological processes
- 64+ million coastal residents face flooding risks; potential damages >₹6 trillion
- Erratic monsoons make traditional planning obsolete; cascading failures overwhelm urban systems
- Infrastructure lacks resilience for compound climate events

6. The Compounding Public Health Crisis

- Millions of Indians annually contract waterborne diseases (diarrhoea, cholera, typhoid); children <5 most affected
- Repeated infections drive malnutrition/poverty cycles; poor drainage spreads vector-borne diseases
- Undermines SDG 6 progress and entire sustainable development agenda

NEED TO DEVELOP BOLD SANITATION SOLUTIONS

India has entered a decisive decade for its urbanization and infrastructure future – and sanitation lies at its core. The Transformative Sanitation Technologies (TST) represent a breakthrough in decentralized sanitation technologies by offering a safe, hygienic, and sustainable way to treat waste at source without the requirement of sewer infrastructure, and with minimal

use of water and promote recycling of treated water. Designed to operate entirely off-grid, TSTs treat human waste onsite.

The India TST Challenge as a national challenge thus aims to identify, support, and scale a new generation of indigenous sanitation technologies solutions that are off-grid & decentralized, ensures pathogen-free waste, meets environmental norms, low on water usage, promotes recycling, cost effective, regulation-ready, and built for the realities of India's diverse contexts. The purpose of the program is to spark a wave of design-led, tech-enabled, and context-sensitive sanitation innovations that address critical gaps across the sanitation value chain: from household-level treatment to community-scale reuse systems. With millions relying on unsafe or unmanaged sanitation systems such as septic tanks and pit toilets under water stress environment, and climate vulnerabilities in urban and rural areas, the Challenge aims to fill a critical gap by enabling safely managed new generation toilets for both household and community use.

Within this challenge lies a powerful opportunity to develop a new generation of Transformative Sanitation Technologies (TSTs), to catalyze the development and piloting of working models of advanced, decentralized wastewater management and toilet technologies. The goal is not just to improve toilets, but to embed them in India's broader development vision and reimagine them as closed-loop, resource-recovering, digitally enabled systems that tackle water stress, environmental degradation, and public health risks simultaneously. **Thus, the need is two-fold: to build a pipeline of novel, economically sound, and robust TSTs, and to ensure they are designed for mass diffusion and last-mile deployment.** By supporting innovators through funding, technical handholding, and deployment pathways, the TST Challenge will help create market-ready, regulation-compliant, and relevant products for the Indian ecosystem and beyond. Through the National Challenge of (TST) solutions, India has the chance to leapfrog legacy systems and become a global leader in decentralized, safe and inclusive sanitation innovation - creating models and markets for the world.

DELIVERABLES

The India TST Challenge aims to unlock a new generation of sanitation technologies that are market-ready, regulation-compliant, and designed for rapid scale. By the end of the program, the Challenge aims to deliver at least **three high-impact TST innovations** that are ready for real-world deployment and commercialization. These three innovation tracks include:

TRACK-1: Development of Black Water Household Transformative Sanitation (Toilet) Technology (b-HTST): A Compact HTST System to be Placed Inside Washroom

TRACK-2: Development of Grey + Black Water Household Transformative Sanitation (Toilet)

Technologies (gb-HTST): A Compact Backend HTST System for Complete Household Wastewater Treatment

TRACK-3: Development of Grey & Black Water Community Transformative Sanitation (Toilet) Technologies (gb-CTST): A Community Level, Compact, Hyper-Decentralized STP

The ideal proposal will have:

- Solutions that are novel, economically sound, and robust TSTs, and are designed for mass diffusion and last-mile deployment.
- Solutions that are market-ready, regulation-compliant, designed for rapid scale up for Indian market and globally relevant.
- Products that can address India's urgent and diverse sanitation needs, with potential to scale globally.
- Solutions that are affordable, compact, and scalable across varied geographies, dense urban settlements, peri-urban communities, vertical housing, remote rural regions, and aspirational public infrastructure.
- Closed-loop, resource-recovering, digitally enabled systems that tackle water stress, environmental degradation, and public health risks simultaneously.
- Technologies that are suited for decentralized use across households and communities, waste-free from pathogens following thermal treatment, compact, affordable, and easy to maintain.
- Solutions must go beyond pilot-stage innovation. They must be modular, easily replicable, and adaptable to local environments, including varied soil types, groundwater conditions, user behaviors, and institutional capacities. Teams with demonstrable capability to pilot within 6-9 months. . The applicant should preferably have matured solution and not a lab level solution.
- Solutions that meet or exceed relevant compliance with key national environmental standards, and alignment with global benchmarks (such as ISO 30500).
- Solutions that can be commercialized through direct deployment, licensing, or technology transfer.

EVALUATION CRITERIA AND TECHNICAL PARAMETERS

The India TST Challenge will run across defined innovation tracks, following a stage-gate process that rewards progress and potential. Participating teams will move through structured phases, from idea validation to prototyping, piloting, and scale-up. Shortlisted solutions that demonstrate strong technical feasibility, impact potential, and user-centred design will be

selected to advance, with tailored funding, mentorship, and field-testing opportunities provided along the way. Successful products will be commercialized either by participating teams directly or through commercial partners via technology transfer and licensing agreements.

The proposals will be shortlisted under following three categories of TST Challenge technology tracks for deployment at household and community level:

TRACK-1: Development of Black Water Household Transformative Sanitation (Toilet) Technology (b-HTST): A Compact HTST System to be Placed Inside Washroom

In a country where over 70% of urban households depend on septic systems, and millions still rely on unsafe sanitation, the challenge envisions to develop a compact HTST systems placed inside washrooms that offer in-situ black water treatment and recycling enabling:

- 100% in-situ pathogen kill of black water comprising faeces, urine, flush water, anal cleaning water with particles/objects such as toilet papers
- Complete thermal/combustion-based treatment of solids using advanced technologies
- Treated water recycling for flushing purposes within the washroom system
- Residual removal of treated, pathogen-free solid waste extracted and used as manure/soil moisturiser/conditioner
- Compact washroom integration suitable for existing Indian bathroom configurations
- Energy-efficient designs with solar/renewable energy compatibility
- Odourless, sealed operation with zero manual intervention during treatment cycles
- Ability to take shock loads /fluctuation in loads – quality and quantity fluctuations
- Amenable for Indian plumbing practices

TRACK-2: Development of Grey + Black Water Household Transformative Sanitation (Toilet) Technologies (gb-HTST): A Compact Backend HTST System for Complete Household Wastewater Treatment

Where entire households generate mixed wastewater streams, the vision is to develop a compact, backend HTST systems for complete household wastewater treatment (i.e. both black and grey water generated) with comprehensive recycling capabilities enabling:

- Integrated treatment of both black water (toilet waste) and grey water (bathing, kitchen, handwash) streams
- Thermal/combustion-based processing of solids with advanced treatment technologies
- Dual-purpose water recycling:
    - Part of treated water for (re)flushing purpose
    - Remainder for gardening, floor cleaning, car wash purposes

- Solid waste management - residual of treated, pathogen-free solid waste removed and used as manure/soil moisturiser/conditioner
- Backend placement minimizing visual impact while maximizing treatment efficiency
- Water-scarce area optimization functioning with minimal/no fresh water availability
- Household-scale capacity handling complete family wastewater generation
- Low-maintenance operation with periodic manual residual extraction
- Energy-efficient design with renewable energy (solar/electric) or hybrid configurations
- Ability to take shock loads /fluctuation in loads
- Amenable for Indian Plumbing practices and configurations

TRACK-3: Development of Grey & Black Water Community Transformative Sanitation (Toilet) Technologies (gb-CTST): A Community Level, Compact, Hyper-Decentralized STP

A community level compact, hyper-decentralized STPs for public sanitation infrastructure, such as aspirational public toilets, schools, hospitals etc. enabling:

- High-volume treatment of both black and grey water for multiple simultaneous users
- Thermal/combustion OR hybrid thermal/combustion + biological technologies for scalable processing
- Community-scale water recycling:
    - Portion of treated water recycled for flushing
    - Remaining used for gardening, car wash, floor cleaning etc.
- Advanced solid waste processing - solid waste treated and disposed through separate pyrolizer/torrefaction unit/ sludge disinfectant
- Flexible deployment options:
    - Complete solution: Front end toilets + backend treatment system
    - Retrofit solution: Backend treatment system retrofitted to existing public/community toilets
- Community settings deployment: Aspirational public toilets, schools, hospitals, community facilities
- High-throughput design handling peak community usage patterns
- Professional maintenance protocols for sustained community-level operations
- Institutional-grade reliability with renewable energy integration and low emission compliance
- Low footprint for deployment in land-constrained situations.

OTHER CROSS-TRACK TECHNICAL MANDATES

A. TECHNOLOGY ARCHITECTURE PARAMETERS

1. **Thermal/Combustion Technology Requirements:**

- **TRACK-1 & TRACK-2**: Exclusively thermal/combustion-based systems for treating solids/sludge
- **TRACK-3**: Either pure thermal/combustion OR hybrid thermal/combustion + biological technology combinations; sludge should be free from Pathogens.
- All thermal processes must achieve complete waste processing through controlled combustion

2. **Treatment Efficacy Standards:**

- **Disinfection Capability**: Complete pathogen elimination from both blackwater (toilet waste) and greywater (sink, shower, laundry water)
- **Compliance Benchmarks**: Adherence National Environmental Standards and global benchmarks such as such as ISO 30500
- **Water Quality Output**: Treated effluent suitable for reuse applications

B. WATER MANAGEMENT & RECYCLING PARAMETERS

1. **Water Recovery & Reuse Specifications:**

- **Primary Reuse**: Large % of treated water must be recyclable for toilet flushing operations
- **Secondary Applications**: Partial treated water allocation for non-potable uses (irrigation, cleaning, etc.)
- **Water Scarcity Adaptation**: Systems must function in areas with minimal/no freshwater access
- **Closed-loop Design**: Maximize water conservation through internal recycling

C. ENERGY & SUSTAINABILITY PARAMETERS

1. **Power Supply Requirements:**

- **Renewable Energy Priority**: Complete operation on solar/electric renewable sources preferred
- **Hybrid Configuration**: Alternative power & solar combinations acceptable
- **Off-grid Capability**: Energy recovery and less dependence on grid electricity
- **Energy Efficiency**: Low consumption design for sustained operation

2. **Environmental Impact Specifications:**

- **Emission Standards**: Adherence National Environmental Standards

- **Carbon Footprint:** Low carbon footprint vis a vis conventional system
- **Resource Efficiency**: Optimized material and energy utilization

D. ECONOMIC VIABILITY PARAMETERS

1. Cost Structure Requirements:

- **Capital Expenditure**: Low initial investment for end-users
- **Operational Expenditure**: Affordable ongoing maintenance and consumables
- **Total Cost of Ownership**: Competitive lifetime economics vs. conventional systems

2. Maintenance & Operations:

- **Service Requirements**: Minimal technical intervention needed
- **Component Durability**: Extended operational life with standard maintenance
- **User Training**: Simple operation suitable for non-technical users

E. DESIGN & USABILITY PARAMETERS

1. Physical Specifications:

- **Spatial Footprint**: Compact design suitable for Indian residential bathrooms and amenable for Indian plumbing practices
- **Land Constraint Adaptation**: Minimal external space requirements
- **Installation Flexibility**: Adaptable to existing plumbing configurations

2. User Experience Requirements:

- **Indian Plumbing Compatibility**: Integration with standard Indian toilet and plumbing systems
- **Usage Habit Alignment**: Design accommodating Indian sanitation practices and cultural preferences
- **Aesthetic Integration**: Visually acceptable for residential installations
- **Odour Management**: Complete odour elimination during operation and maintenance

F. REGULATORY & MANUFACTURING PARAMETERS

G. Scalability & deployment parameters

1. Market Readiness:

- **Mass Production Capability**: Design for large-scale manufacturing
- **Distribution Network**: Suitability for pan-India deployment
- **Service Infrastructure**: Sustainable maintenance and support ecosystem
- **Technology Maturity**: Proven reliability for commercial deployment

These parameters establish a comprehensive framework ensuring TST solutions deliver effective, sustainable, economically viable sanitation technology suitable for Indian conditions while meeting international standards and supporting domestic manufacturing objectives.

RULES AND GUIDELINES

i) Eligibility criteria

This RFP is India-led; the program is open to nonprofit organizations (society, trust and foundation), for-profit companies (including start-ups), government agencies and academic and research institutions. Project cost will be sanctioned to researchers and innovators who are Indian individuals or Indian entities*, we also **encourage partnerships with researchers of national/international expertise**, subject to the call guidelines.

Note: Please read the following carefully to understand the category you will be applying under and the documentation that may be requested should your proposal be selected for further financial due diligence. This call is open to:

- **Companies:** Companies incorporated under the Indian Companies Act, 2013 having a minimum of 51% Indian ownership.

- **Limited Liability Partnership:** Limited Liability Partnership (LLP) incorporated under the Limited Liability Partnership Act, 2008 having a minimum half of the persons who subscribed their names to the LLP document as its Partners should be Indian citizens.

- **Indian institution/ universities/ public research organization:** Academic institutions established in India and having NAAC/ UGC/ AICTE or any equivalent recognition certificate or any other Public/Government supported organization. **Universities, academic institutions, and S&T institutions with any industry partner will be preferred.**

- **Society/ Trust/ NGO/ Foundation/ Association:** Society/ Trust/ NGO/ Foundation/ Association established in India under the relevant Indian Law having at least half of the

stakeholders (partners/ trustees/ members/ associates etc.) as Indians. Industry partnership will be preferred.

- Proposals with co-financing arrangement (from - self, private sector or government entities) in place will be given preference.

***Note:** Experts of the relevant discipline as mentors should be a part of the proposal such as sanitation and thermal engineering professionals, data analytics experts, management experts, M&E experts among others. The evaluation of eligibility shall be based on the status of documents as on the closing date of the call.

- **Collaboration**: GCI encourages collaborations based on the belief that synergies between experts across diverse disciplines are important for the challenges that we seek to address. The project needs to be led by investigators in India. **Global partners may be included, but proposals must demonstrate that 100% of the funding is going to an organization within the Country**. Should you wish to apply as a collaboration, please ensure that **lead investigators involved** should be Indian nationals working within the country in established institutes/organization as per eligibility criteria and are willing to collaborate and share experimental methods data, and resources amongst each other augmenting the abilities to compare and validate local research findings and/or develop interventions/solutions that can have impact at a greater scale. The grant will be released in INR to only Indian organizations and entities.

(ii) Financial support for the challenge

To enable meaningful innovation and real-world deployment, the Challenge will consider proposals for awards of up to INR 60,00,000/-, for each project, provided to the organization, with a term of up to 18 months.

The fund will support:

- Techno-commercial and techno-managerial support
- Funding for research and development of potential solutions
- Funding for prototyping, testing, piloting, and working model

  - ❖ Overall support will be provided for mentoring throughout the innovation lifecycle as well as monitoring and evaluation
  - ❖ Grantees will receive milestone-based grants and technical assistance tailored to their stage of development, ensuring that promising sanitation technologies not only reach the field, but are positioned for commercialization, replication, and long-term impact.
  - ❖ Application budgets should be commensurate with the scope of work proposed.

(iii) Application Process and Instructions:

1. Proposals in the correct format should be submitted through online portal on the BIRAC's website **https://www.birac.nic.in** and follow the link to the registration and submission portal.
2. Click on the 'Call for Proposal' and then 'Current Calls' tab in order to view the call detailed description.
3. Click on the active call under subject-line '**India Transformative Sanitation Technologies (TST) Challenge** to submit your proposal.
4. If you are applying to a BIRAC/GCI scheme for the first time, please note that you will have to register on the portal. **The verification and activation of your new account may take up to 24 hours before you can apply for the scheme.** Please take this into account while applying.
5. If you are already a registered user, then kindly enter your login credential at the below link in order to submit proposal: https://birac.nic.in/login.php
6. Once you register, you will receive an auto-generated link on the registered email id entered at the time of registration.
7. Once logged in, proceed to proposal submission.
8. Any queries related to application process may be sent to user-042.birac@nic.in.
9. Please also ensure that the Proposal Summary document is uploaded based on the format provided. Incomplete proposals will be rejected in the triage round.
10. Prior to initiating the process of application submission, applicant should prepare the following:

    - **Executive summary**: A brief summary of the proposal that includes background, a concise problem statement that proposal will address, primary objective and proposed approach to achieve, and impact of the solution.
    - **Proposal information:** The proposal clearly defining the scope of work, problem statement, the idea, novelty of innovation, current stage of development (to achieve proof of concept for your idea, including limited field testing/validation), rationale, methodology and implementation plan, deliverables and expected outcomes.
    - **Path to Impact**: A description of how the proposed work will have an impact in advancing the field of sanitation technologies and possible translational value.
    - **Description of Scalability** in Indian market, global relevance.
    - **Organizational Capacity:** feasibility and available infrastructure and resources needed to execute the proposed work.

(iv) Schedule

Call opens- 25th August 2025
Call closes – 10th October 2025
Shortlisting/finalizing the proposals – 10th November 2025
Award announcement- 30th November 2025

(v)Evaluation methodology

- The **India TST Challenge proposals** will be initially screened by the Grand Challenges India (GCI) along with stakeholders' team for eligibility. If the application is found to be incomplete or not complying with the provisions described in the RFP, the application will be considered ineligible. The GCI and stakeholders' team will make assessments and recommend shortlisted applications for further review and evaluation to the Scientific Advisory Committee (SAC), comprising of national and international subject matter experts.
- **The Scientific Advisory Committee (SAC):** Proposals that meet the eligibility criteria will be submitted to SAC for further review and evaluation. The selected projects will be monitored and mentored regularly by SAC constituted by GCI. The SAC will invite the grantees for interaction and/or written clarifications when it is beneficial to ensure that any outstanding questions are resolved before concluding the full review.
- As applicable, the technical and financial due diligence processes (site visits) of the shortlisted applications will be carried out by GCI.
- A final decision on applications to be funded will be made by the Competent authority based on the recommendations of the Scientific Advisory Committee (SAC).
- Reporting of Progress: On Successful completion of each Milestone, the applicant will be required to submit a detailed Milestone Completion Report (MCR) as per the prescribed format. The MCR will be assessed by the Scientific Advisory Committee (SAC) for its completion. On recommendation of the SAC, the next Milestone budget will be released.

(vi) Allowable Costs:

- **Indirect Cost/Non-Recurring Budget:** Equipment and Accessories (Upto 30% of proposed cost) list of equipment's, if required and justification in relevance to the project activities (Quotations supporting proposed equipment and accessories)
- **Direct Costs/Recurring Budget (Realistic figures):** up to 60% of proposed cost inclusive of Manpower, Travel, Outsourcing, Research Contingency (In case any activity to be outsourced)
- **Project/Institute Overhead:** Up to 10 % of recurring cost

***Note:** Justifications to be provided for roles of each aspect of manpower involved, consumables proposed, travel (Local and International in case if any), research contingency and trainings. Budget heads without cap will be considered on case-to-case basis and based on call specifics by Scientific Advisory Committee (SAC).

(vii)Warranty

The GCI Applicants shall warranty that the statements and particulars contained in the full proposal and supporting documents are correct. They have to further warrant that they are under no contractual restrictions or legal disqualifications or any other obligations which would prohibit them from undertaking the present Project, entering into any Agreement in this regard.

(viii)Project Intellectual Property

The initiative is guided by the Memorandum of Understanding on the collaboration between the Department of Biotechnology, Govt. of India and the Gates Foundation signed on July 18, 2012. As a part of this MOU fair and transparent processes will be established to ensure that projects and investigators funded under initiatives make global access commitments to ensure the fruits of their research are available to those most in need. This will include, but not be limited to, the ability to license any technology developed under this agreement to manufacturers in India subject to these global access commitments and to the relevant provisions of the Indian laws including specific requirements on licensing under the Patents Act 1970.

To this end, project IP means intellectual property generated during the conduct of the Project by the GCI applicants, but excluding the intellectual property generated before initiation of this Project and any IP generated outside the scope of this Project even during the term of this Project. The ownership and control of the intellectual property shall remain with the GCI cost recipient(s), or other collaborating organizations or institutions as agreed with the cost recipient, subject to any applicable local policies and the collaborative process described above, including arrangements between the cost recipient and other individuals or institutions.

GCI cost recipient(s) agree to conduct and manage the Project and the resulting products, services, processes, technologies, materials, software, data or other innovations (collectively, "Funded Developments") and any IP that arises in the manner that ensures "Global Access." Global Access requires that:

1. The knowledge and information gained from the Project be promptly and broadly disseminated.
2. The Funded Development is made available and accessible at an affordable price to people most in need within developing country.

Establishing suitable Global Access agreements among the GCI cost recipients will be a condition of receiving funding.

GCI cost recipients commit to meeting the following criteria at a minimum:

1. For successful tools/technologies that have been supported through field testing, the projects under this agreement must apply for regulatory approval in India as well as for international certification to ensure that successful innovations/tools/technologies supported through the GCI are available at affordable costs to those most in need. BIRAC and the Foundation will support successful projects through introductions to third party manufacturers, as well as introductions to relevant technical experts for the next phases. This could include contracts for local manufacturing etc.
2. For projects where novel tools/technologies methods have shown promising results, BIRAC and the Foundation will work with the projects and investigators on a clear development pathway to ensure that the investments made through the GCI are supported for public health benefits.
3. During the term of this Agreement and for 5 years after, GCI recipient will submit upon request annual intellectual property reports related to the Funded Developments, Background Technology, and any related agreements using the PMU-BIRAC's templates or forms, which we may modify from time to time.

(ix)Confidentiality

During the tenure of the Project, GCI-BIRAC will undertake to maintain strict confidentiality and refrain from disclosure thereof, of all or any part of the information and data exchanged/generated from the Project for any purpose other than purposes in accordance this RFP. Please note that all proposals, documents, communications and associated materials submitted (collectively, "Submission Materials") will become the property of BIRAC and will be shared with other funding partners or potential funding partners.

Number of applications received and the countries from which they originated will be published. The proposals will be subject to confidential external review by independent subject matter experts and potential co-funders, in addition to in- house analysis.

(x)Research Ethics and Regulatory Approvals

GCI Cost recipient(s) shall be responsible to obtain all the necessary requisite approvals, clearance certificates, permissions and licenses from the Government/local authorities for conducting its activities/ operations in connection with the Project.

(xi)The fund disbursement and project implementation shall be governed by the specific funding agreement that will be duly executed.

(xii)Dispute resolution and Arbitration:

In the event of any dispute or difference between the Parties hereto upon or in relation to or in connection with this RFP, such dispute or difference, shall be resolved amicably and in good faith

by mutual consultation.

If such resolution is not possible, then the unresolved dispute or difference whatsoever arising between the Parties out of or relation to the construction, meaning, scope, operation or effect of this RFP or the validity the breach thereof or in respect of any defined legal relationship associated therewith or derived therefrom dispute shall be submitted for arbitration to International Center for Alternate Dispute Resolution (ICADR), an autonomous organization working under the aegis of the Ministry of Law & Justice, Department of Legal Affairs, Government of India. The Authority to appoint the arbitrator(s) shall be the ICADR. The Arbitration under this Clause and provision of administrative services by ICADR shall be in accordance with the ICADR Arbitration Rules, 1996. The award made in pursuance thereof shall be binding on the Parties. The venue of arbitration shall be New Delhi and the arbitration proceedings shall be conducted in English Language. The provision of this Clause shall not become inoperative notwithstanding the Contract expiring or ceasing to exist or being terminated or foreclosed.

Contact us:

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