IsDB
البنك الإسلامي للتنمية
Islamic Development Bank

Operational Guidelines for the Application to the Science, Technology and Innovation Transform Fund (IsDB-STI TF)

Science, Technology and Innovation Department

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Acronyms and Abbreviations

BoT: Board of Trustees

IsDB: Islamic Development Bank

IsDB-STI Fund: The IsDB Science, Technology and Innovation Transform Fund

LDMCs: Least Developed Member Countries

MCs: Member Countries

NGOs: Non-Governmental Organization

SAB: Scientific Advisory Board

SDGs: Sustainable Development Goals

SMEs: Small and Medium Enterprises

STI: Science, Technology and Innovation

I. Introduction

The Islamic Development Bank (IsDB) Member Countries (MCs) face significant developmental challenges in key social and economic sectors, such as food security, climate change adaptation, high mortality rates due to spread of infectious and communicable diseases, poor education quality, limited access to safe drinking water, shortage in energy and environmental disasters, etc.

The Bank recognizes the vital role of STI to development and the need to provide people and organizations with the resources they need to realize their goals and change the world by harnessing the great potential of Science, Technology and Innovation as strategic drivers for economic growth of their local communities. Thus, the Bank established a special Fund, known as Science, Technology and Innovation Transform Fund (IsDB-STIF) to support its Member Countries in finding practical solutions to their key development challenges through the power of innovation.

In line with President of the IsDB Five-Year Plan, aiming to transform the Bank into a first-class institution of developers by being "Proactive" in offering comprehensive development solutions to its MCs, transform will accelerate science, technology and innovation led solutions that drive inclusive and sustainable development in MCs.

II. Establishment of the Fund

The IsDB Science, Technology & Innovation Fund (IsDB-STIF) was established in July 2017, with an initial target size of five hundred million United States Dollars (US$ 500 million). The Fund Capital shall consist of contributions by the Bank, member countries and non-member countries of the Bank, entities, institutions, foundations, corporates and individuals within and outside member countries.

The Bank, as a Participant, has made an initial contribution to the target capital of the Fund of US$ 100 million and raised a similar amount from the Islamic Solidarity Fund for Development (ISFD), resulting in a total committed amount of US$ 200 million to the Fund's capital. The remaining amount of the target capital (US$ 300,000 million) shall be mobilized from member countries, non-member countries, regional and international organizations and institutions.

Out of the target capital, seventy per cent (70%) shall be maintained as Waqf (endowment) for the IsDB-STI Fund in accordance with the Islamic Sharia'h rules governing Awqaf. The continuation of the Waqf portion shall be conditional on the continuation of the IsDB-STI Fund.

The remaining thirty per cent (30%) of the Fund Capital, in addition to any income resulting from the Waqf portion of the Fund and the investment operations/projects financed under the Fund shall be used for financing operations related to Science, Technology and Innovation aligned with the objectives of the IsDB-STI Fund.

III. Purpose of the Fund

The overall aim of the fund is to support the Muslim World with the power of innovation, facilitate the commercialization of technology, promote joint activities among member countries, research institutions, and ensure the development of entrepreneurship.

More specifically, the objectives of the IsDB-STI Fund are to:

- Support the Muslim World with the power of innovation, especially social innovation to address key development challenges;
- Support and generate public good through facilitating the commercialization of technology developed through sustained partnerships among researchers and entrepreneurs from IsDB Member Countries (MCs) and non-member countries for socio-economic impact;
- Promote joint activities that would lead to innovation and entrepreneurship through the application of science and technology;
- Promote the continuity of and access to the chain of financing from various financing sources such as angel funds at early stages and hedge funds at later stages, in order to allow small innovative SMEs to flourish their own ideas and create new market; and
- Devote a steady and predictable source of funds that is critical for developing STI.

IV. Resources of Operational Utilization of the Fund

The resources of the IsDB-STI Fund available for operational utilization in its activities shall consist of:

- 30% or any other allocation as the non-endowment component of the Fund Capital.
- income from the IsDB-STI Fund Waqf portion;
- funds derived from operations or otherwise accruing to the IsDB-STI Fund; and
- other resources received by the IsDB-STI Fund as per the regulations of the Fund.

V. Beneficiaries of the Fund

The IsDB-STI Fund will support eligible scientists, innovators, SMEs and institutions that need initial funding and growth capital for their ideas/projects. These ideas/projects will result in technologies and solutions that will contribute to the development effectiveness of IsDB Member Countries and Muslim communities in non-member countries.

VI. Operating Principles

The Purpose of these Operating Principles of the IsDB-STI Fund is to provide guidance to recipient/beneficiaries, donors, contributors and participants on how the fund can be utilized.

Utilization of IsDB-STI Fund operational resources shall be in accordance with these guidelines and shall from time to time be adopted by the Board of Trustees, as it may have deemed necessary.

The projects and activities of the Fund will be governed by the following operating principles. IsDB-STI. As such, applications for funding are required to possess the following attributes Support sustainability science ideas/projects with focus on innovations benefiting the Muslim World and having the following attributes:

- Disruptive, transformative and inspiring innovations that are linked to one or more SDGs;
- Feasible innovations having scalable solutions with high impact
- Innovations that are adaptable, replicable, readily diffusible, affordable and accessible
- Diversity in sectors such as education, health, agriculture, water and sanitation and infrastructure

In addition, ideas and projects should also follow the characteristics outlines below:

- Activities and projects of the IsDB-STI Fund will be guided by the needs and priorities of beneficiaries
- The design of projects and activities of the IsDB-STI Fund shall incorporate financial sustainability considerations
- Activities and projects of the IsDB-STI Fund will not lead to any infringement of existing intellectual property rights
- Appropriate system for monitoring and evaluation will be put in place in order to measure attainment of IsDB-STI Fund objectives and improve its future operations
- Activities and projects of the IsDB-STI Fund will be in conformity with the principles of Sharia'h.

VII. Funding Categories

The Transform Fund supports eligible scientists, innovators, SMEs and institutions that need initial funding and growth capital for their ideas/projects. These ideas/projects will result in technologies and solutions that will contribute to the development effectiveness of IsDB Member Countries and Muslim communities in non-member countries by addressing the challenges related to one of the following SDGs: SDG2: No Hunger (food security), SDG3: Good Health and Well-Being, SDG4 Quality Education, SDG6: Clean Water and Sanitation, SDG7: Affordable & Clean Energy, SDG9: Industry, Innovation and Infrastructure.

All modes of finance will be structured and disbursed in full compliance with the Islamic sharia finance guidelines. The Transform Fund will use three modes of financing spread across four eligible categories of projects:

(i) Grant;
(ii) Equity participation; and
(iii) Quasi Equity Participation - Financing provided that is convertible into Equity at a later stage.

The Transform Fund aims to support the below four categories of projects through Grants, Equity Participations and Quasi Equity Participation:

Category	Investment Type	Model of financing	Funding Opportunity (US$)	Eligibility
One	New Ideas with Proof of Concept	Grant	50,000 - 100,000	Scientists and Innovators
Two	Scaling Up of Innovative Projects	Equity Participation / Quasi Equity Participation	Up to 300,000	Registered legal entity*
Three	Commercialization of Technology	Equity Participation / Quasi Equity Participation	Up to 1,000,000	Registered legal company**
Four	STI Capacity Building	Grant	100,000 - 150,000	Registered legal entity

* *Registered legal entity: For any form of an association, corporation, partnership, proprietorship or trust that has legal capacity to enter into agreements, assume and fulfil obligations, bring or be subject to legal claims, and to be held responsible for its actions, and which is registered under the applicable law of the relevant jurisdiction and has legal standing in the eyes of the relevant law and judicial system.*

** *Registered legal company: Is only for companies that are a body corporate or an incorporated business organization registered under the relevant companies act or law of the relevant jurisdiction. It can be any type of company, including and not limited to limited or an unlimited company, private or a public company, but excludes, among other things, sole proprietorship, partnerships, individuals and trusts.*

Grant Opportunities

Grants are mainly offered to support scientists and innovators to develop their innovative ideas into development solutions as well as to support capacity building efforts of entities, such as universities, registered non-governmental organizations, registered private or public companies, SMEs and government organizations, in strengthening the STI ecosystem of MCs.

Category I: New Ideas with Proof of Concept
This category supports innovative and practical ideas with a Proof of Concept▫ that need initial funding/seed money for pilot project interventions/ development solutions. The solution should have a clearly articulated path to the development of a self-sustaining business or a plan to develop a partnership with an existing business. Some of the funds could be used to help set up a company and develop or refine the strategy. Such candidates are eligible for receiving a grant ranging from US$ 50,000 up to US$100,000, subject to meeting the following criteria: (a) innovativeness, (b) potential impact, (c) doable and practical, (d) replicable and scalable (f) patentable with commercial potential, and (f) sustainable.

▫ *Proof of Concept: A demonstration in principle with the aim of verifying that some concept or theory has practical potential.*

Judging of these applications will be based on the following detailed criteria:

a) Innovativeness: Please describe clearly your idea and the challenge you are proposing to address highlighting how you consider it to be an innovation or creative. Innovation can be a completely new approach or a significant improvement to an existing approach. How is this different from other approaches? Why is your approach an improvement?

b) Impact and Outreach: How can your idea have an impact to solve a challenge in IsDB Member Countries (MCs) or non-MCs related to one of the following SDGs: No Hunger (food security), good health and well-being, quality education, clean water and sanitation, affordable & clean energy, industry, innovation and infrastructure. Whom will your idea help? How will impact be measured? How many people will be positively impacted in the short, medium and long term?

c) **Doable and Practical:** Is your idea scientifically sound? What do we need to practically implement it? Does the technology needed to implement your idea exist? Please be specific in how you will carry out the work. What is the specific step by step plan? Please complete the milestone and deliverable table. Please complete the high-level budget table (*in pages 11 & 12*), linking the milestone activities and deliverables to the proposed budget.

d) **Sustainable:** The idea, when eventually turned into a product or service, must demonstrate a self-growing potential in terms of continuing its expected impact. Please describe how the eventual product or service will maintain itself, survive and grow in the marketplace.

e) **Replicable and Scalable:** Can the idea be scaled up and replicated in IsDB MCs (especially in LDMCs) without the need for a major reinvention or adjustment? Will the product or service be able to work in other geographies and settings or is this a one-off effort? Will the product or service be able to scale and reach more and more people? How?

f) **Patentable with Commercial Potential:** Does your idea has a potential for patenting? Simply explain how you see your idea developing in future into commercial product or service? Please describe your plans for patenting and/or trademarking the ideas or work. The idea must have a potential for patent protection and development into a commercial product or service with an expected benefit.

Category 4: STI Capacity Building
IsDB member countries require immediate and intensive Capacity Building (CB) support in STI to meet the sustainable development goals. Projects eligible for funding in this category must meet one or more of the following criteria: • producing critical mass in STI human resources (including researchers and STI policy makers), • strengthening institutional capacity for research and improving science education, • enhancing knowledge and expertise in spinning-in, adapting, and spinning-out existing technologies and improving scientific cooperation, • formulating and implementing adequate STI policies that support all the above efforts. Candidates under this category are eligible for receiving funds **up to US$150,000.** Applications will be judged and scored by the following criteria (a) needs assessment and value proposition, (b) innovativeness, (c) potential impact, (d) implementation plan, e) scalability, and (f) sustainability.

Judging of these applications will be based on the following detailed criteria:

a) Identification of STI Capacity Building Challenges (assessments/needs): Please identify what key STI capacities already exist in a particular IsDB MC (with priority given to LDMCs) and what additional capacities will be needed (at the three levels - individual, institutional and enabling environment) to address a specific development challenge related to one of the following SDGs: No Hunger (food security), good health and well-being, quality education, clean water and sanitation, affordable & clean energy, industry, innovation and infrastructure ?

b) Innovativeness: Please provide your proposal, articulating clear and specific capacity building objective(s) with suggested activities♦. Please clarify how these activities are expected to address the identified capacity gaps/challenges. In doing so, kindly highlight the innovation and creativity behind the proposed capacity building intervention describing how your intervention is expected to boost STI capacities in MCs to address one of the above-mentioned development challenge(s). How is this different from other capacity building efforts? Why is this an improvement?

c) Impact and Outreach: Please specify key outputs and outcomes of the proposed capacity building intervention, demonstrating its impact on the various elements of the STI ecosystem? How will impact be measured? How many people or institutions do you expect to impact directly and indirectly in the short, medium and long term? What sort of capacity changes would the intervention provide?

d) Estimated Cost & Implementation Plan: Please list all proposed activities, its expected deliverables and estimated cost for each activity as well as the proposed financing plan reflecting the amount requested from the Bank and the contribution of other donors. *The plan should describe how the various stakeholders in the recipient country will be engaged. Please note that IsDB support under this category will not cover the total cost of the proposed capacity building intervention, as it is considered a contribution to the total cost.*

   Please complete the milestone/deliverable template and the budget template in Page 8.

e) Sustainability: Please describe how the effort will last beyond the life of this grant. What special measures will ensure the continuity of its impact/results in the long term?

f) Scalability: Please describe how the effort will efficiently grow over time. How is this embedded in the plan?

♦ *Activities can include the following:*

Soft Components:

- ✓ *On-the-job training on areas related to STI policy formulation, patent development and application, commercialization of technology, absorption of technology, IP rights, etc.*
- ✓ *Organizing regular interactive workshops to share experience and learn from institutions with advanced knowledge in the STI field and policy formulation;*
- ✓ *Recruitment of experts to undertake specific assignments (e.g. delivery of intensive training in STI areas, preparation of analytical studies in STI, developing STI strategy & policy documents, etc.)*
- ✓ *Creation of institutional networks and scientific exchanges platforms.*

Hard Components:

- ✓ *Procurement of advanced research equipment, laboratory facilities and software to support technology incubators, research centres, etc.*
- ✓ *Establishment of regional sustainable development centers/networks that could be linked by effective communication networks with senior scientists and engineers serving as advisors and mentors in critical fields.*
- ✓ *Acquisition of technology (including purchase of copyrights), etc.*

Equity/Quasi Equity Investment Opportunities

Equity investments are made to legally registered private sector companies that were founded by scientists and innovators (Start Ups), whereas those companies require equity capital for commercialization and scaling up of their innovation under Category 2 and 3. The company sells shares of ownership (stock) to the IsDB in exchange for the funds. The IsDB Transform Fund then becomes part owner in the company. The IsDB may choose to sell its shares (exit) at a later date. A second category of investment is a "quasi-equity" investment. This is in the form of a convertible sharia compatible debt. The debt can be converted into equity (shares of the company) at the discretion of the IsDB. This allows a less mature company to receive funds before it is ready and capable of distributing shares.

Category 2: Scaling Up of Innovative Projects
This category is open to applications from companies with successfully piloted products or services which need additional capital to refine, replicate and/or scale up the product/service in MCs, especially in LDMCs. Companies are eligible for up to US$300,000 in the form of equity participation by the Bank, subject to the following criteria: (a) innovativeness, (b) potential impact, (c) replicability and scalability, (d) patent position, (e) business plan and market opportunity, and (f) sustainability. Selection criteria also includes (i) strength of the management team; (ii) attractiveness of the business; and (iii) exit potential.

Category 3: Commercialization of Technology
This category is designed to support companies which have successfully scaled up an innovative product or service in one or several MCs and requires additional capital for expanding the commercial reach. Such candidates/institutions are eligible for up to US$1,000,000 as equity participation by the IsDB, provided that their projects match the following criteria: (a) business plan and market opportunity, (b) innovativeness, (c) potential impact, (d) replicability and scalability, (e) patent position, and (f) sustainability. Selection criteria also includes (i) strength of the management team; (ii) attractiveness of the business; and (iii) exit potential.

The equity investments opportunities (Category 2&3) will first be evaluated based on the following detailed criteria:

a) Business plan/model and market opportunity: Please describe your business model/plan. The plan should include information on the market opportunity, cost vs benefits, cash flow model, profit margin etc. We have included a link to a cash flow model template if needed. Please complete the milestone and deliverable template as well as the high level budget template (*in Pages 11 & 12*). Please upload your business plan slide deck if you have one. The web has various free resources on how to write a business plan: (e.g.https://www.forbes.com/sites/davelavinsky/2014/01/30/how-to-write-a-business-plan/#5e7d4ab07d04)

b) Innovativeness: Please describe your project, highlighting the innovation and creativity behind it (including any technology involved)? Describe how your project addressed a specific development challenge in one of the IsDB Member Countries or non-MCs related to one of the following SDGs: No Hunger (food security), good health and well-being, quality education, clean water and sanitation, affordable & clean energy, industry, innovation and infrastructure. Innovation can be a completely new approach or a significant improvement to an existing approach. How is this different from other approaches? Why is your approach better?

c) Impact and Outreach Please specify key outputs and outcomes of the project that demonstrate a clear impact on the community? What are the type(s) and number of beneficiaries that benefited from the project? What sort of social changes did the project bring out or expected to bring out to them? How will impact be

measured? How many people do you expect to impact directly and indirectly in the short, medium and long term?
The proposal must impact a development challenge in any IsDB Member Country (MC) or non-MC (with priority given to LDMCs) related to one of the following SDGs: No Hunger (food security), good health and well-being, quality education, clean water and sanitation, affordable & clean energy, industry, innovation and infrastructure.

d) Replicability and scalability: Can the activities of the project be easily replicated, transferred or adapted to other environments/countries, benefiting especially Least Developed Member Countries? How? Will the product or service be able to scale and reach more and more people? How is this embedded in the plan?
The core functions and activities of the project should be adaptable to new environments and easily replicated and scaled in other MCs.

e) Patent positions: Please describe any existing patents and trademarks. Please describe your patent strategy going forward.
The technology involved in the project must have registered patent status or registered trade mark, protecting others from using, offering for sale or selling it, etc.

f) Sustainability: How would your project ensure the continuation of its effects/results (benefits and services)? How will the company grow and reach profitability? How will it maintain a healthy balance sheet? *The project must include mechanisms that ensure its continuity and self-growth in the long term, independent of the initial funding*.

Based on the criteria above, the highest scoring opportunities will then undergo a second evaluation based on three perspectives: (i) the strength of its management team; (ii) the attractiveness of the business; and (iii) the exit potential. More specifically, the, equity investments will be by the following criteria which are ranked by importance.

Rank	Criteria
1	Financial and personal commitment of the management
2	Degree of leadership ability demonstrated in the past
3	Track record relevant to the venture
4	Innovativeness of the product
5	Ability of the management to evaluate and manage risks
6	Expected return on investment over a five-year period
7	Familiarity of the management with the targeted market
8	Scalability of the business
9	Exit strategy
10	Alignment of interest with the investors

Pease note that the IsDB-STI Fund participation in the projects should have definite exit timeline and should be agreed upon with the project owners. IsDB-STI Fund should have the right to appoint a non-executive board member / observer in the beneficiary institution if deemed necessary, with the right to advise the company management on the commercialization of the technology, and also have the right to request periodic reports and updates from the company/project owners.

In addition to the above-mentioned criteria under each category, all applications will also be evaluated on the clarity of the budget, the deliverables and the milestones. The high-level budget should be linked to activities (people, travel, capital equipment, materials and other direct costs, contractors, subawards).

		Year 1	Year 2	Year 3	Total	Details
Management Component						
	Personnel					
	Travel					
	Materials					
	Equipment					
	Contractors					
	Other					
	Sub-total					
Technical Component						
	Personnel					
	Travel					
	Materials					
	Equipment					
	Subcontractors					
	Other					
	Sub-total					
Total						

High level milestones should be listed and linked to the deliverables.

Deliverable	Description	Major Milestone	Description	Start Date	Completion Date
Management					
Deliverable 1		Milestone 1			
		Milestone 2			
		Milestone 3			

Deliverable 2		Milestone 1			
		Milestone 2			
		Milestone 3			
Deliverable 3		Milestone 1			
Technical					
Deliverable 1		Milestone 1			
		Milestone 2			
		Milestone 3			
Deliverable 2		Milestone 1			
		Milestone 2			
		Milestone 3			
Deliverable 3		Milestone 1			

VIII. Applying for Financing under the Fund

Eligible scientists, innovators, NGOs, private companies, research institutions which need funding support under one of the four categories must apply to the STI Transform Fund by completing the online application form available at the IDB portal "Engaging and transforming communities" (accessible through the link: https://www.isdb-engage.org).

IX. Selection Process

Preliminary Screening: The proposals will be initially reviewed and scored by a set of independent external SDG experts in coordination with the STI Department. During the screening process, the IsDB may contact the applicants (if required) and the STI Department may also seek the opinion of the relevant Departments and entities within the IsDB Group. The screening process will result in a shortlist of applicants under each of the funding categories.

Evaluation and Selection of "Semi-Finalists": The shortlisted applications will then be evaluated and scored by the members of the Scientific Advisory Board (SAB) against the qualifying criteria described under each funding category. Subsequently, the top scoring proposals will be designated as "Semi-Finalists."

Preliminary Diligence: "Semi-Finalists" will be contacted to provide additional information and clarification regarding their proposals.

Final Evaluation and Selection of "Finalists": The SAB will subsequently meet as a group and discuss the semi-finalist proposals in order to choose a subset which will be designated as the "Finalists."

BoT Approval to Move Forward: The Finalist's proposals will be forwarded to the Board of Trustees (BoT) for consideration. The BoT, will decide whether the STI Department can proceed to the final diligence and negotiation step for each individual proposal.

Final Diligence and Negotiation: Grant finalists that receive approval from the BoT will complete the diligence process and a grant agreement will be generated. If and once a grant agreement has been signed and countersigned, the Finalist will then be designated a "Transform Winner." Funds will then be forthcoming. Equity investment finalists will continue along the due diligence and negotiation process. If and when an equity deal is signed and closed, the equity investment finalist will then be designated a Transform Winner." Investment funds will then be forthcoming.

X. Disbursement of the IsDB Financing

For Grants, disbursements will be effected in tranches as per the IsDB rules and procedures and in accordance with the signed TA (Grant) Agreement. In certain circumstances, the Grants may be disbursed in one tranche upon fulfillment of specific pre-disbursement conditions. For Equity participations and Quasi-Equity Participation, disbursements should be executed in accordance with the terms and conditions of the agreement signed between the IsDB-STI Fund and the project owner.

XI. Post Disbursement Management and Monitoring of Operations

a. Grants

The IsDB-STI Fund team will perform ongoing monitoring and evaluation in order to ensure that the grant efforts meet the agreed targets and objectives and produce the required outputs. Analytical evaluation exercises of the grants could be carried out through independent evaluation by the IsDB-STI Fund focusing mainly on completed operations or on completed parts of an ongoing operation.

The beneficiary of the Grant will be mandated to provide the IsDB-STI Fund with semiannual activity report on the use of the Grant and milestone achieved via using the IsDB-STI Fund grant allocation. The IsDB-STI Fund may request the activity report to be submitted earlier, with breakdown in the grant allocation at any point of time.

b. Equity Participation

The IsDB-STI Fund's Team should review the company's activities on a quarterly basis, as well as performing a valuation of the companies on an annual basis. The IsDB-STI Fund's Team may require special veto rights with regards to major internal changes in the company and venture, which would affect the interest of the IsDB-STI Fund in the venture.

c. Quasi-Equity Participation

The IsDB-STI Fund's Team should review the company's activities on a quarterly basis. The IsDB-STI Fund Team should also perform a valuation exercise of the companies one year before the maturity of the Loan. The exercising of convertibility of Loan into Equity in the company/venture will be based on full legal, financial, and compliance due diligence, which is to submitted to the IsDB-STI Fund management, and the IsDB-STI Fund Board of Trustees for review and decision.